21st September, 2026

To,
The Board of Directors,
HD Fire Protect Limited
O-611, 6th Floor, Runwal R Square Opp. Veena Nagar,
L. B. S. Marg, Mulund West,
Mumbai City, Mumbai, Maharashtra,
India, 400080 **(the "Company")**

Re.: Proposed initial public offering of equity shares of face value ₹ 5 (the "Equity Shares") of HD Fire Protect Limited (the "Company") through an offer for sale of Equity Shares by certain existing shareholders of the Company (the "Offer")

Dear Sir/ Ma'am,

We refer to your e-mail dated 11th July, 2026 regarding the content provided to you, for your internal use, by Crisil Intelligence, as part of your subscription to its following industry research report(s) *("**Report**")*:

Crisil Intelligence – Assessment of the market for fire protection equipment in India, with focus on fire suppression released in Mumbai in September, 2026.

As requested by you, we accord our no objection and give consent for including our name and details as an independent research provider and for reproduction of the relevant content from our Report, and/or extracting or utilizing, whole or part of the Report (including any addendum or corrigendum thereto) ("**Material**"), in the the red herring prospectus ("**RHP**") and the prospectus to be filed with the Registrar of Companies, Mumbai I at Mumbai , and subsequently with the Securities and Exchange Board of India ("**SEBI**") and the stock exchanges where the equity shares of the Company are proposed to be listed ("**Stock Exchanges**"), or any other governmental or regulatory authority or any other document to be issued or filed in relation to the Offeror any other document to be prepared issued or filed in relation to the Offer in India (collectively referred to as the ("**Offer Documents**"), including any international supplement or preliminary or final international offering documents for distribution to investors outside India, research reports, publicity or other materials, marketing material, statutory advertisements, investor/roadshow presentations, analyst reports or press/media releases prepared by the Company or its advisors or the book running lead managers (including their affiliates) (collectively along with the Offer Documents referred to as the ("**Offer Material**") in relation to the Offer subject to the following conditions:

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(c) if the Material consists of any charts/graphs, the relevant texts explaining such charts/graphs in the Report shall also be reproduced 'as is'; and

(d) the following section regarding Crisil Limited's Crisil Intelligence division shall also be included in its entirety in the Offer Documents along with the Material, at the relevant places:

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For the preparation of this report, Crisil Intelligence has relied on third party data and information obtained from sources which in its opinion are considered reliable. Any forward-looking statements contained in this report are based on certain assumptions, which in its opinion are true as on the date of this report and could fluctuate due to changes in factors underlying such assumptions or events that cannot be reasonably foreseen. This report does not consist of any investment advice and nothing contained in this report should be construed as a recommendation to invest/disinvest in any entity. This industry report is intended for use only within India.

For the sake of clarity, this consent letter does not provide the right to the Company to refer to us as an 'expert' as defined under Section 2(38) of the Companies Act, 2013, in any of the Offer Documents.

You hereby agree and undertake not to misrepresent, make any changes to or tamper with the Report, or present any part thereof, out of context or in violation of applicable laws and regulations. Further, you acknowledge and agree that Crisil does not have any liability or responsibility for the Offer Documents or any part thereof except to the extent of any information disclosed in the Offer Documents that is sourced from the CRISIL, in which case CRISIL Limited's liability will be as per the terms of our engagement letter dated 11th July, 2026.

We consent to the technical proposal covering the scope dated 19th May, 2025 the Report and the Material being disclosed (a) in the "Material Contracts and Documents for Inspection" section of the Offer Documents, and (b) being kept open for inspection by members of the public as a material document in connection with the Offer from the date of the RHP till the date of closing of the Offer. We further give our consent to upload the Report on the Company's website and being made available to the public on such website until the listing of Offer, pursuant to the Offer and such web link to the Report being disclosed in the Offer Documents.

We confirm that information contained in the Material have been obtained or derived from publicly available sources and interaction with industry participants, which we consider as reliable and after exercise of reasonable care and diligence by us. We confirm that we have, where required, obtained requisite consent or duly acknowledged the source(s), that may be required from any governmental authority or any other person in relation to any information used by us in the Material.

Subsequent to the listing of the Offer, if you wish to use our name/details in relation to the Material and/or wish to use the Material, in full or part, in relation to the Offer or in any corporate presentation, press release or advertisement, you may do so after providing us with a prior written notice of 7 (seven) days.

We confirm that we are an independent agency and are not, in any manner, related to the Company, its directors, its key managerial personnel, or the book running lead managers appointed in relation to the Offer ("**Book Running Lead Managers**"). Neither the Company, nor its directors, its key managerial personnel, or the Book Running Lead Managers, are related parties to us as per applicable law as on the date of this letter. We also confirm that, we are not and have not been engaged or interested in the incorporation, promotion or management of the Company.

We agree to keep strictly confidential, this letter and the non-public information relating to the Offer until such time that: (A) such disclosure by us is approved by the Company; or (B) such disclosure is required by law or regulation, in which case prior intimation shall be given to the Company; or (C) such information is already in the public domain or comes into public domain through no fault of ours.

This letter may be shared by the Company, with the Book Running Lead Manager(s) and advisers concerned in relation to the Offer.

This letter may be delivered or furnished to any governmental or regulatory authority, as may be required. Further, we also authorize you to deliver this letter of consent to SEBI, the Stock Exchanges and the RoC pursuant to the provisions of Section 26 and 32 of the Companies Act, 2013 and rules and regulations made thereunder. Further, we consent to submitting this letter on the online repository of the stock exchanges in compliance with SEBI circular dated December 5, 2024 (SEBI/HO/CFD/CFD-TPD-1/CIR/2024/170).

We represent that our execution, delivery and performance of this consent have been duly authorised by all necessary action (corporate or otherwise).

For **CRISIL Limited**

Dharmendra Sharma
Head – Business Development

Cc:

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IIFL Capital Services Limited *(formerly known as IIFL Securities Limited)*
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Legal Counsel to the BRLM	**Legal Counsel to the Company**
Chandhiok & Mahajan, Advocates and Solicitors C-524 Defence Colony, New Delhi 110024	**Trilegal** One World Centre, 10th Floor, Tower 2A and 2B Senapati Bapat Marg Lower Parel, Mumbai 400 013 Maharashtra, India

Crisil
Intelligence

Assessment of the market for fire protection equipment in India, with focus on fire suppression

September 2026

Crisil
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Global macroeconomic overview

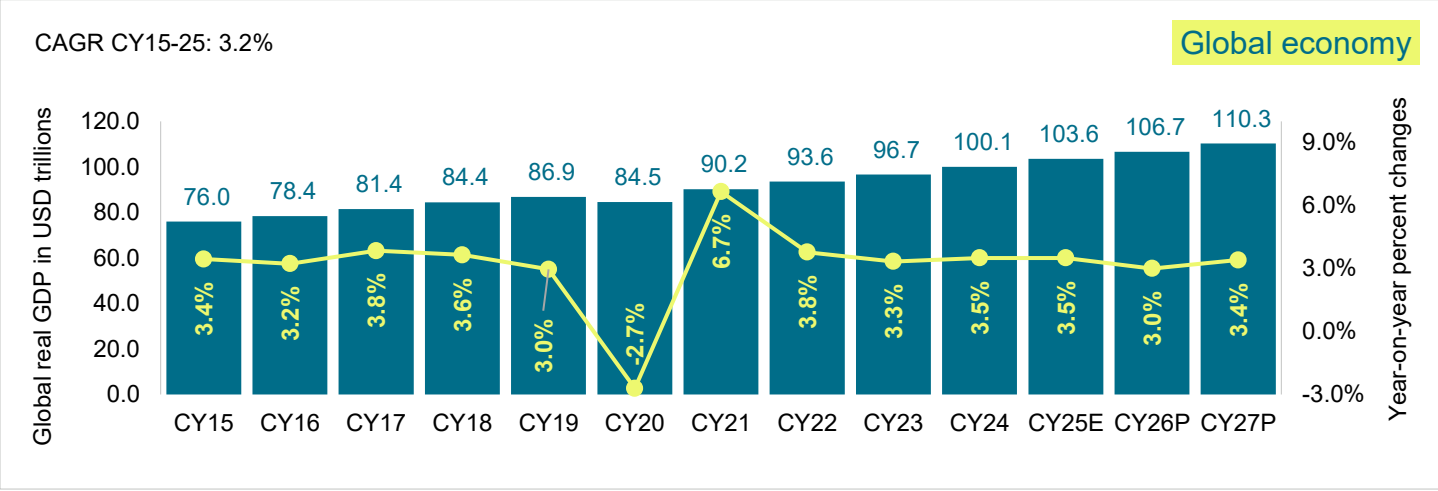
Global GDP to grow by 3.0% in CY26 and 3.4% in CY27

According to the World Economic Outlook: July 2026 Update published by the International Monetary Fund (IMF), the global economic environment is currently being influenced by two contrasting developments with varying implications across countries. On one hand, the ongoing conflict in the Middle East has created a negative supply-side shock, affecting commodity markets and trade flows. On the other hand, rapid advancements in artificial intelligence (AI) and its increasing adoption across industries have strengthened the global technology cycle, providing a positive impetus to economic activity. While the magnitude of these effects differs across economies, the IMF projects global GDP growth at 3.0% in 2026, rising to 3.4% in 2027. The improvement reflects the expected support from technology-driven investment and demand, which is anticipated to partly offset the adverse economic consequences of the Middle East conflict. Global headline inflation is forecast to increase from 4.1% in 2025 to 4.7% in 2026, largely due to higher energy and food prices, before moderating to 3.9% in 2027.

The IMF's projections are based on the following assumptions:

- Maritime trade through the Strait of Hormuz is expected to resume gradually from mid-July, with conditions normalising and returning broadly to pre-conflict levels by March 2027.
- Existing trade policy measures, including those initially introduced as temporary arrangements, are assumed to remain in place throughout the forecast period.
- Geopolitical tensions and policy-related uncertainty are expected to stay elevated through 2027.
- The momentum of the AI-led technology cycle is assumed to moderate over time, with no additional external boost to productivity growth.

Global real GDP trend and outlook, CY15-27



Note: E: Estimated, P: Projection

Source: IMF, World Economic Outlook Update, July 2026; Crisil Intelligence

The balance of risks to the global outlook remains skewed to the downside. Potential upside factors include a faster-than-anticipated stabilisation of energy markets, stronger investment in technology and innovation, renewed international cooperation leading to lower trade barriers, and the implementation of structural reforms that enhance long-term growth prospects. Conversely, downside risks arise from the possibility of a resurgence or escalation of the Middle East conflict, which could prolong commodity price volatility, disrupt global supply chains, tighten financial conditions, intensify trade fragmentation, and place further pressure on inflation while dampening economic growth. In addition, a correction in the expectations surrounding technology-led growth could weaken investment sentiment and adversely affect economic activity.

Among regions, Emerging & Developing Asia is the fastest growing

The IMF's WEO report classifies 197 economies from all geographies in the world into two broad categories, i.e. Advanced Economies and Emerging Market & Developing Economies.

Year-on-year real GDP growth of regional economies, 2016-27P

Real GDP growth (year-on-year percent changes) as per IMF

	Estimates										Projections	
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
World	3.2%	3.8%	3.6%	3.0%	-2.7%	6.7%	3.8%	3.3%	3.5%	3.5%	3.0%	3.4%
Advanced Economies	1.8%	2.6%	2.3%	1.9%	-3.9%	6.1%	3.1%	1.7%	1.9%	1.9%	1.7%	1.8%
Emerging Market & Developing Economies	4.3%	4.8%	4.6%	3.8%	-1.8%	7.0%	4.3%	4.4%	4.5%	4.5%	3.8%	4.5%
Emerging & Developing Asia	6.8%	6.6%	6.4%	5.4%	-0.5%	7.8%	4.7%	5.6%	5.5%	5.6%	5.0%	4.8%
Emerging & Developing Europe	1.7%	4.3%	3.7%	2.6%	-1.7%	7.2%	0.5%	3.6%	3.8%	2.0%	1.9%	2.1%
Latin America & the Caribbean	-0.8%	1.4%	1.1%	0.2%	-6.9%	7.5%	4.3%	2.3%	2.4%	2.4%	2.4%	2.7%
Middle East & Central Asia	4.1%	2.6%	2.5%	2.1%	-2.2%	4.7%	6.4%	2.6%	3.1%	3.7%	0.7%	6.5%
Sub-Saharan Africa	1.2%	2.8%	3.2%	3.0%	-3.1%	3.9%	4.4%	3.8%	4.2%	4.5%	4.3%	4.5%

Source: IMF's World Economic Outlook – July 2026 Update, Crisil Intelligence

Advanced Economies

Advanced Economies represent 43 economies including the US, Japan, the UK, Canada, and 21 economies from the Euro area. Growth for Advanced Economies is projected at 1.7% in 2026 and 1.8% in 2027. However, outcomes vary within the group. Net energy exporters are partly cushioned by favourable terms-of-trade effects, whereas net energy importers experience a more pronounced drag from higher energy prices unless they are lifted by technology-related activity.

United States

For the US economy, growth is projected at 2.3% in 2026 and 2.2% in 2027. Activity is supported by fiscal policy, accommodative financial conditions, and continued technology-related business investment and productivity strength, with only limited impact from the war given the country's net energy exporter status.

Euro area

Growth is projected at 0.9% in 2026 and 1.2% in 2027, reflecting a sizable negative carryover from the first quarter, drag from higher energy prices, notwithstanding some fiscal cushioning measures, and weak consumer confidence.

Emerging Market and Developing Economies

Emerging Market and Developing Economies represent 154 out of the total 197 economies including India and China. For the group, growth is projected to slow to 3.8% in 2026 before recovering to 4.5% in 2027. For economies within the group, growth will reflect differences in commodity dependence, geographic exposure, remittances and tourism receipts, sensitivity to financial conditions, and position in the global technology value chain.

China

China's growth in 2026 is projected to slow to 4.6%, as higher global oil prices, together with protracted uncertainty and structural headwinds, are expected to weigh on activity. In addition, inflation is expected to rise from low levels.

India

India's growth in 2026 is projected at 6.4%, supported by strong momentum in private consumption and services activity.

India is the fastest growing among the world's largest ten economies

On the basis of nominal GDP for 2025, the world's largest economy is the US, followed by China at the second position, while India ranks sixth. Among the ten largest economies by nominal GDP recorded for 2025, India's economy has grown at fastest rate since 2021. Furthermore, according to IMF's WEO– July 2026 update, India is expected to sustain its lead in 2027.

Year-on-year real GDP growth of the world's largest economies by 2025 nominal GDP, 2016-27P

Top 10 economies by 2025 nominal GDP	Real GDP growth (year-on-year percent changes) as per IMF											
	Estimates										Projections	
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
US	1.8%	2.5%	3.0%	2.6%	-2.1%	6.2%	2.5%	2.9%	2.8%	2.1%	2.3%	2.2%
China	6.8%	6.9%	6.8%	6.1%	2.3%	8.6%	3.1%	5.4%	5.0%	5.0%	4.6%	4.1%
Germany	2.2%	2.8%	1.1%	1.0%	-4.1%	3.9%	1.8%	-0.9%	-0.5%	0.2%	0.7%	1.0%
Japan	0.7%	1.6%	0.8%	-0.3%	-4.3%	3.6%	1.3%	0.7%	-0.2%	1.1%	0.6%	0.7%
UK	2.2%	3.0%	1.6%	1.3%	-10.0%	8.5%	5.1%	0.3%	1.0%	1.4%	1.0%	1.3%
India	8.3%	6.8%	6.5%	3.9%	-5.8%	9.7%	7.6%	7.2%	7.1%	7.7%	6.4%	6.7%
France	0.7%	2.3%	1.6%	2.1%	-7.6%	6.8%	2.8%	1.6%	1.4%	0.9%	0.6%	0.9%
Italy	1.2%	1.6%	0.8%	0.4%	-8.9%	8.9%	4.8%	0.9%	0.8%	0.5%	0.5%	0.5%
Russia	0.2%	1.8%	2.8%	2.2%	-2.7%	5.9%	-1.4%	4.1%	4.9%	1.0%	1.1%	1.1%
Brazil	-3.3%	1.3%	1.8%	1.2%	-3.3%	4.8%	3.0%	3.2%	3.4%	2.3%	2.4%	2.2%

Note: For India, data and projections are presented on a fiscal year basis, with FY 2024-25 (starting in April 2024) shown in the 2024 column
Source: IMF's World Economic Outlook – July 2026 Update, Crisil Intelligence

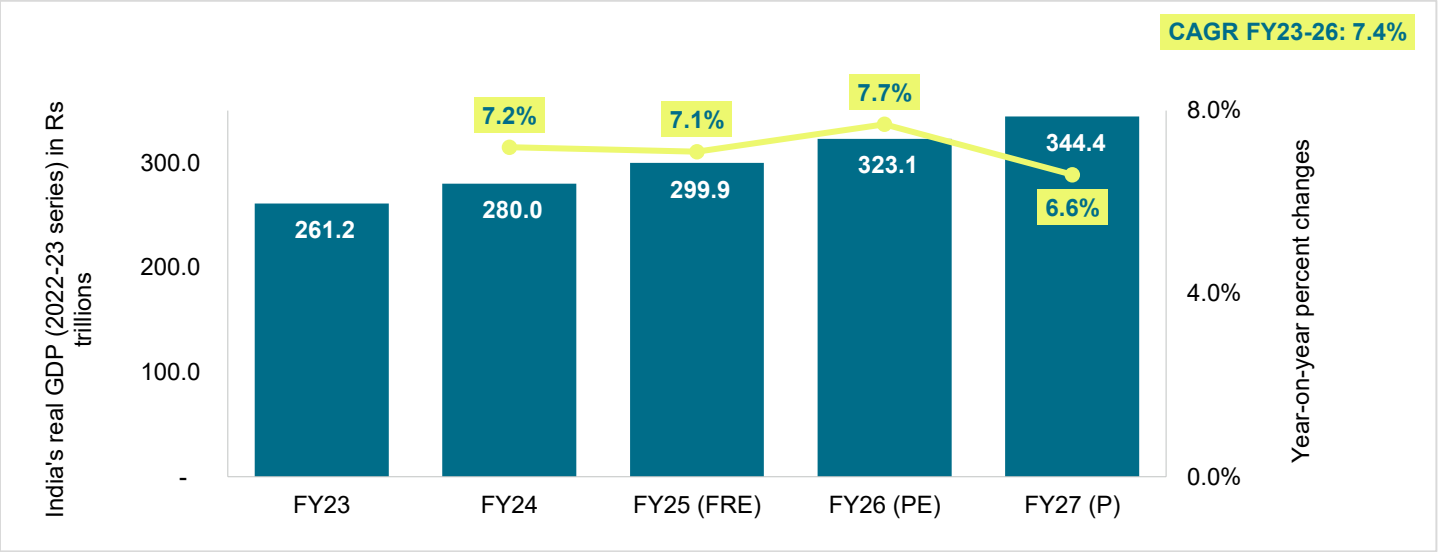
Macroeconomic overview of India

Crisil: India’s GDP to grow by 6.6% in FY27

In February 2026, the Ministry of Statistics and Programme Implementation (MoSPI) released a new series of national accounts estimates with FY 2022–23 as the base year, as it represents a recent normal year following the COVID-19 pandemic. This revision was undertaken to capture the structural changes that have occurred in India's economy and to leverage the availability of comprehensive data across various sectors. Consequently, the new series not only improves estimation methodologies but also incorporates the latest data sources, thereby enhancing both the coverage and accuracy of the national accounts.

Under the new 2022–23 series, India’s real GDP increased from Rs 261.2 trillion in FY23 to Rs 323.1 trillion in FY26, recording a CAGR of 7.4% during FY23–FY26. Furthermore, according to the Provisional Estimates (PE) released by the National Statistics Office (NSO), India’s real GDP grew by 7.7% in FY26. The primary drivers of this growth were the secondary and tertiary sectors, which expanded by 8.8% and 9.3%, respectively. The Manufacturing; Trade, Repair, Hotels, Transport, Communication & Services Related to Broadcasting and Storage; and Financial, Real Estate & Professional Services sectors recorded double-digit growth in FY26.

India's real GDP (2022-23 series) trend and outlook, FY23-27P



Note:
FRE: First Revised Estimates, PE: Provisional Estimates, P: Projection (based on Crisil’s forecast)
Source: Ministry of Statistics & Programme Implementation, Crisil Intelligence

CRISIL's forecast for India's GDP growth in FY27 stands at 6.6%, factoring in the downside risks that have begun to materialize as the West Asia conflict persists beyond two months. Given India's significant trade, investment, and remittance linkages with the region, which supplies 45-50% of India's crude oil and 65% of its LNG imports, and receives around 13% of India's merchandise exports, the nation remains susceptible to prolonged instability there.

The region also accounts for around 8% of India's FDI inflows and nearly 38% of its remittances, driven by the 9.3 million strong Indian workforce in the Gulf Cooperation Council.

Consequently, beyond the direct conflict impact, India faces pressures from global supply chain disruptions, elevated freight and insurance costs, weakening export demand, El Niño driven subnormal monsoons, and the manufacturing sector's reliance on imported inputs.

Crisil's projection for India for FY 2027

Macroeconomic variables	Forecast for FY27
Real GDP growth	6.6%
CPI inflation	5.1%
Current account balance (% of GDP)	-2.2%

Source: Crisil Intelligence

Private consumption continues to anchor India's economic growth

India's Private Final Consumption Expenditure (PFCE) recorded a CAGR of 6.4% during FY23–FY26, with growth accelerating to 7.7% in FY26. Consumption growth was underpinned by the positive impact of GST rate rationalisation, stable employment conditions, improving real purchasing power, sustained rural demand supported by robust agricultural performance, and a gradual strengthening of urban consumption driven by the rationalisation of direct and indirect taxes.

India's PFCE at constant prices (2022-23 series), FY23-26

	FY23	FY24	FY25 (FRE)	FY26 (PE)
PFCE (in Rs. Trillions)	149.2	157.9	167.0	179.9
Share of PFCE in GDP	57.1%	56.4%	55.7%	55.7%

Note: FRE: First Revised Estimates, PE: Provisional Estimates
Source: Ministry of Statistics & Programme Implementation, Crisil Intelligence

Inflation is expected to firm up in FY27 but stay within RBI's upper tolerance limit

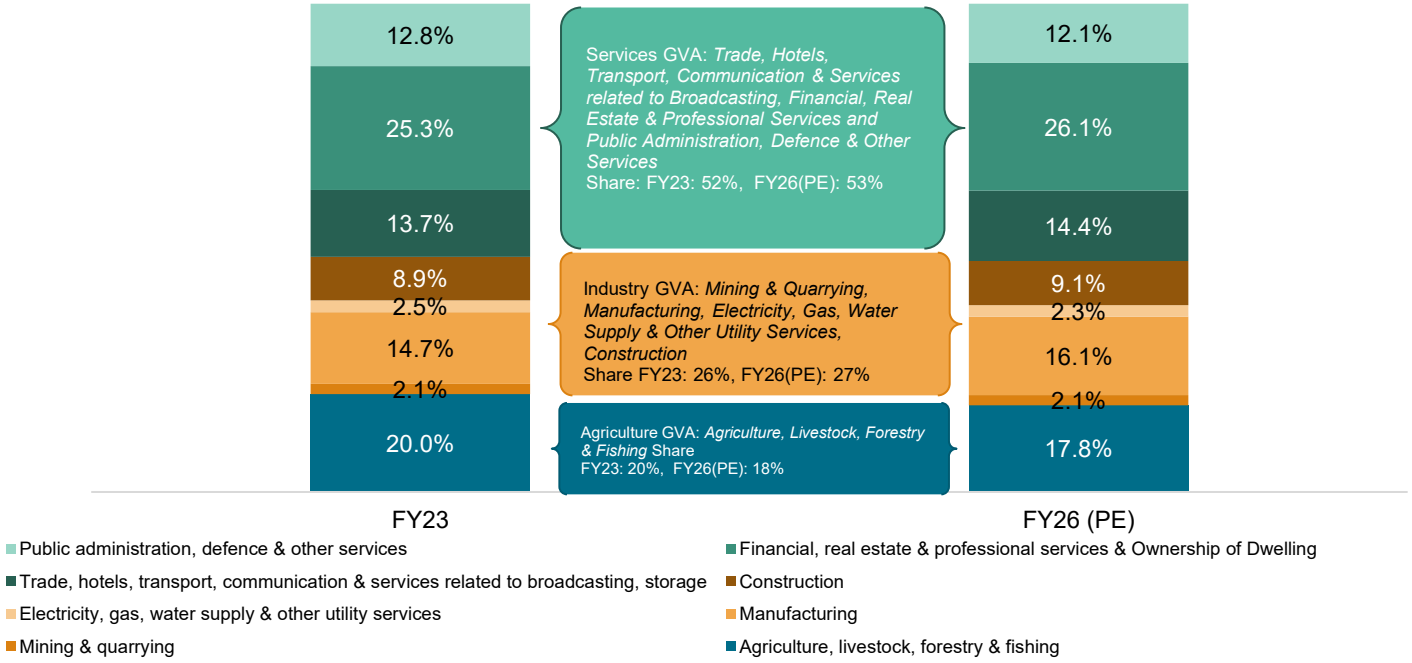
Notwithstanding the PFCE momentum, the pace of consumption growth will be shaped by the evolving inflation trajectory in the coming fiscal. Crisil estimates CPI-based inflation to firm up and average 5.1% in FY27, compared with 2.0% in FY26, though it is expected to remain within the Reserve Bank of India's upper tolerance limit of 6%. This upward trend is driven primarily by elevated crude prices, which, despite easing from their recent peak, remain high on a year-on-year basis and continue to keep retail prices of petrol and diesel elevated throughout the year. It is further compounded by producers gradually passing on the rise in energy, input, and transportation costs to consumers, which bears on real purchasing power and push core inflation higher. Adding to these pressures, the disinflationary support from GST rationalisation measures is expected to diminish in the near term, even as the depreciation of the rupee continues to push up the imported component of inflation. Nonetheless, with inflation projected to remain within the RBI's tolerance band, the broader consumption trend is expected to hold steady.

Share of industry GVA improved to 27% in FY26

Within overall gross value added (GVA), the industry (secondary) sector registered the highest growth over FY23 to FY26(PE), while the services (tertiary) sector continued to command the largest share. The industry sector, which comprises manufacturing; electricity, gas, water supply and other utility services; and construction activities, stood at Rs 81.0 trillion in FY26(PE), compared with Rs 61.8 trillion in FY23, thereby registering a CAGR of 9.4% between FY23 and FY26(PE). Consequently, its share increased from 26% in FY23 to 27% in FY26(PE).

The services sector, meanwhile, accounted for ~53% of total GVA in FY26(PE) and recorded a CAGR of 8.1% over the same period. The primary sector grew at a CAGR of 3.6% between FY23 and FY26(PE), with its share moderating from 20% in FY23 to ~18% in FY26(PE).

GVA break-up (fiscals 2023 and 2026)



Note: PE: Provisional Estimates
Source: MoSPI, Crisil Intelligence

Fundamental growth drivers of GDP

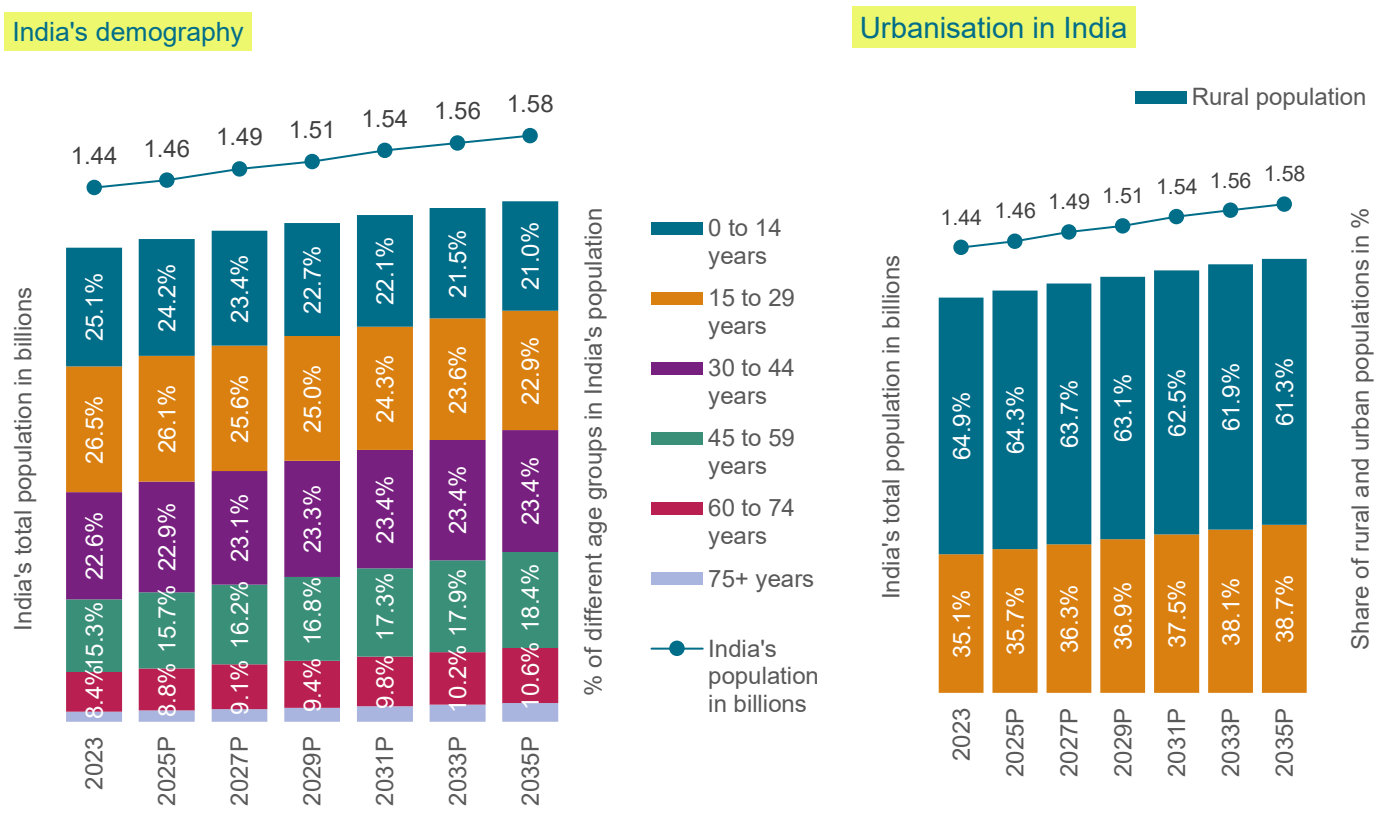
India has the potential to reap demographic dividends amid rising urbanisation and expanding working age population

According to the World Population Prospects 2024 (WPP 2024), India's population increased from 1.1 billion in 2001 to approximately 1.4 billion in 2023, registering a CAGR of around 1.4% during the period. Going forward, India's population is projected to grow at a CAGR of 0.8% between 2025 and 2030 and is expected to remain the world's most populous country throughout the century.

Furthermore, WPP 2024 highlights that approximately 100 countries and territories are expected to experience growth in their working-age populations (defined as individuals aged 20–64 years) through 2054. These countries and territories will have an opportunity to leverage their expanding working-age populations to accelerate economic growth and potentially reap demographic dividends. Notably, India is among these countries.

In 2023, India's working-age population stood at 849.9 million, accounting for 59.1% of the total population. This population is projected to peak at 967.7 million in 2034, when its share of the total population is expected to reach approximately 69.2%. This indicates that India has a multi-decade window of opportunity to accelerate economic growth by effectively harnessing the benefits of its favourable demographic profile.

India's population split by age groups, 2023-35P



Note: E: Estimates, P: Projection
Source: United Nations, World Population Prospects 2024; United Nations, World Urbanisation Prospects 2025; Crisil Intelligence

Furthermore, India's urban population has been rising steadily, and the trend is expected to continue as the economy expands. In 2023, the urban population is estimated to have accounted for 35.1% of India's total population, and this share is projected to rise to 38.7% by 2035P. This sustained shift underscores the growing imperative to expand urban infrastructure and strengthen the provision of basic services to support a rapidly growing city-based population.

India saw robust growth in per capita income between fiscals 2023 and 2026

India’s per capita income, a broad indicator of living standards, grew at a CAGR of 6.6% between FY23 and FY26, from Rs 159,557 in FY23 to Rs 193,480 in FY26. Growth was led by better job opportunities, propped up by overall GDP growth.

Per capita net national income at constant prices (base year: 2022-23)

	FY23	FY24	FY25 (FRE)	FY26 (PE)
Per-capita NNI (Rs)	159,557	170,153	181,172	193,480
Y-o-Y growth (%)		6.6%	6.5%	6.8%

Note: FRE – First Revised Estimate, PE: Provisional Estimates
Source: MoSPI, Crisil Intelligence

Overview of the manufacturing sector

India’s manufacturing sector is undergoing a transformation shaped by shifting global dynamics, domestic reforms and an active role for the private sector.

The government has taken structural steps to improve share of manufacturing in GDP to the stated aim of 25% by 2035. Over the past decade, the government has launched a series of structural reforms intended to catalyse manufacturing and trade. These span manufacturing focused, infrastructure- focused and overarching reforms to provide a leg up to the manufacturing sector.

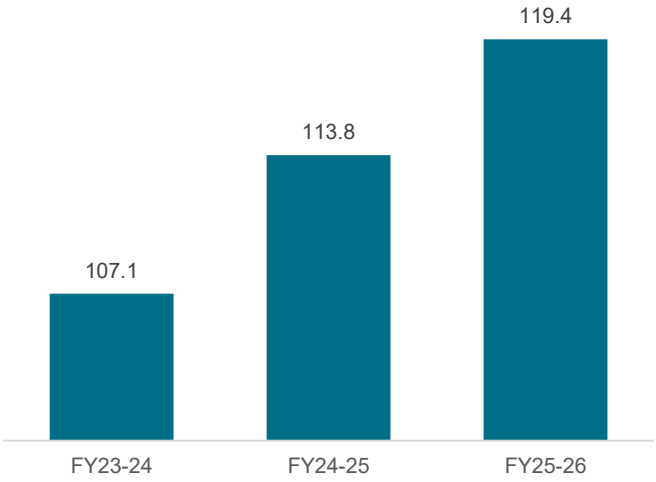
Key parameters in assessing the performance of the sector:

Manufacturing IIP increased in fiscal 2026

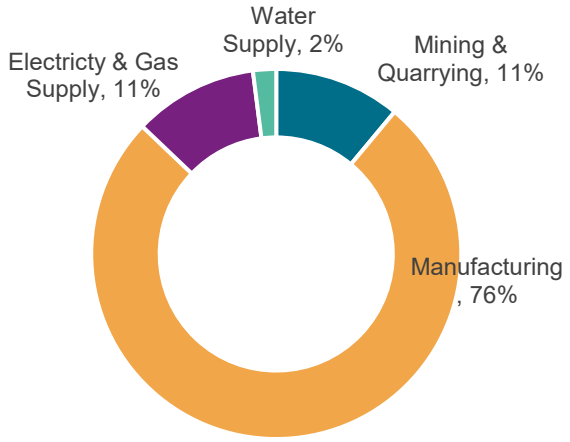
India's manufacturing activity has exhibited a steady upward trend, with the Manufacturing Index of Industrial Production (IIP) increasing from 107.1 in FY24 to 113.8 in FY25 and further to 119.4 in FY26. The revised IIP series (base year: 2022–23) also underscores the significance of the manufacturing sector, which accounts for 76% of the overall index, followed by mining and quarrying (11%), electricity and gas supply (11%), and water supply, sewerage and waste management (2%).

The high weightage of manufacturing in the IIP highlights its role in driving industrial output, while the gradual increase in the index reflects sustained manufacturing activity supported by policy initiatives, capacity expansion, and continued investments across key industries.

Manufacturing IIP (Base year: 2022-23)



Proportion of manufacturing in IIP



Source: PIB, Crisil Intelligence

Manufacturing sector GVA improved in fiscal 2026, driven by IIP growth

Manufacturing GVA recorded a CAGR of 10.9% between FY23 and FY26(PE), rising to ~Rs 47.5 trillion from around Rs 34.8 trillion. Consequently, the share of manufacturing GVA in overall industry GVA increased to ~59% from ~56%, while its share in total GVA rose from 14.7% in FY23 to 16.1% in FY26(PE).

Going forward, some of the key monitorables for the manufacturing industry in India include the pace of private investment, sustained domestic demand, input cost trends, progress on infrastructure development, and the evolving tariff situation, geopolitical conflicts, among others. Of these, the tariff landscape remains particularly significant, Crisil estimates that uncertainty surrounding the duration of tariffs, together with frequent tariff revisions, may weigh on investment activity. These developments will largely be shaped by the trade agreement that India is able to conclude with the United States, and the ongoing bilateral negotiations are therefore of considerable relevance to the sector.

As of July 2026, India and the United States continue to negotiate a mutually beneficial Bilateral Trade Agreement (BTA), with no final agreement concluded to date. United States Trade Representative Ambassador Jamieson Greer's visit to New Delhi from June 22 to 24, 2026, marked a key step towards finalising an interim arrangement consistent with the Joint Statement issued on February 7, 2026. Read more: Impact of US tariffs on the industry

Manufacturing GVA

	FY23	FY24	FY25 (FRE)	FY26 (PE)
Manufacturing GVA (Rs. Trillion)	34.8	39.2	42.9	47.5
Share in total GVA	14.7%	15.4%	15.7%	16.1%

Note: FRE: First Revised Estimates; PE: Provisional Estimates
Source: MoSPI, Crisil Intelligence

Increase in industrial capex projected to boost manufacturing

Overall cumulative industrial capex investments stood at approximately Rs 31 trillion between FY22 and FY26, and are projected to rise nearly 1.5 times to Rs 40 to 50 trillion between FY27 and FY31, driven by higher capacity utilisation, robust corporate balance sheets, and production linked incentive (PLI) schemes spanning multiple sectors including Automobiles & Auto Components, Pharmaceuticals, Electronic/ Technology Products, Speciality steel, etc.

As India transitions to value-added manufacturing, emerging sectors, such as electric vehicles, semiconductors and electronics, are poised to become the main drivers of industrial capex. The emerging sectors are projected to account for ~22% of the industrial capex between fiscals 2027 and 2031 from ~12% over fiscals 2022-26, underscoring the shift toward sustainable and technology-driven growth. Investments in these sectors will simultaneously strengthen India's manufacturing capabilities to achieve self-reliance and make local production globally competitive.

Industrial capex

Source: Crisil Intelligence

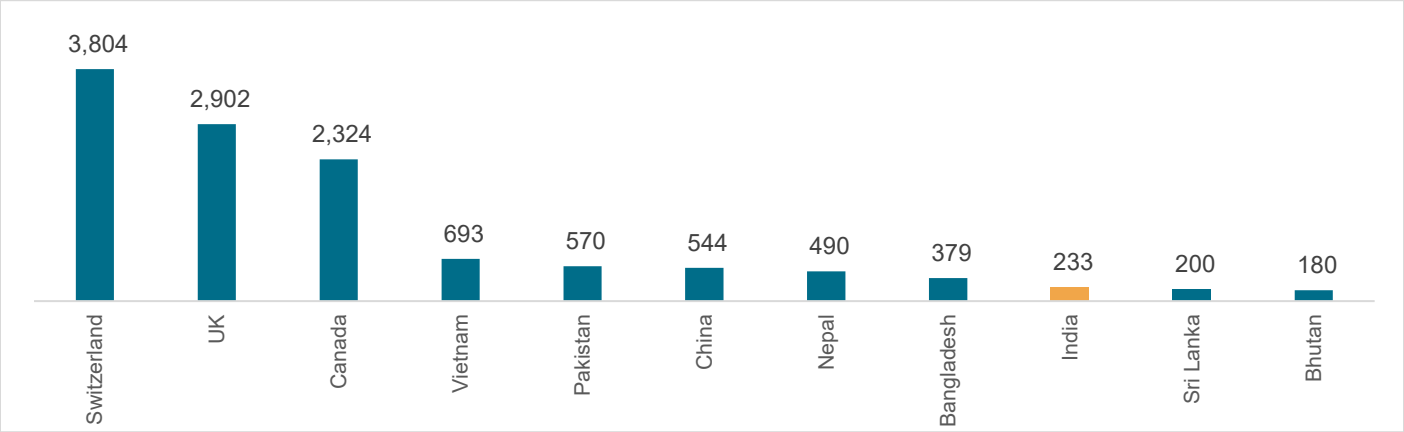
Factors influencing the manufacturing sector

Competitive labour costs

India benefits from a large and young workforce with highly competitive wage levels compared with developed economies and a few Asian peers. According to the International Labour Organization (ILO), India's statutory gross minimum monthly minimum wage in CY2024, adjusted for the purchasing power parities (PPP) in 2021, stood at just $233. In contrast, the corresponding figures were significantly higher for developed economies such as Switzerland ($3,691), the UK ($2,620) and Canada ($2,363). Even among regional peers, India maintains a cost advantage, with Vietnam at $693, Pakistan ($570) and China ($544). However, Sri Lanka and Bhutan reported lower minimum wages of $200 and $180, respectively.

This demographic dividend and conducive rate structure positions India favourably for labour-intensive manufacturing in textiles, apparel, leather goods and basic consumer electronics.

Statutory gross monthly minimum wages in $ converted using PPP in 2021 ($, calendar year 2024)



Note: The latest year's data may use preliminary PPP conversion factors. Minimum wages may not apply to all workers
Source: ILO, Crisil Intelligence

Ease of doing business

India has undertaken significant reforms to improve its investment climate, resulting in a marked improvement in the World Bank's Ease of Doing Business rankings over the past decade. Key reforms include the digitalisation of compliance processes, simplification of procedures for starting businesses, fast-tracking of environmental clearances and implementation of the goods and services tax (GST). These reforms have had a positive impact on investor sentiment and facilitated an increase in foreign direct investment (FDI) in manufacturing-led sectors such as electronics, defence, renewable energy and automobiles.

Nonetheless, state-level disparities persist, particularly in areas such as contract enforcement, land acquisition and utility reliability. While Maharashtra, Gujarat and Tamil Nadu have established strong industrial ecosystems, others require more policy and infrastructure development to attract meaningful investment.

As per the Doing Business Report 2020 by World Bank, India's rank improved from 142 in 2014 to 63 in 2019, marking an advancement of 79 positions over five years.

Global supply chain diversification

In recent years, global manufacturing companies have been actively pursuing diversification to reduce dependence on single-country sourcing models, particularly due to the pandemic-induced disruptions and rising geopolitical uncertainties. The supply chain derisking strategy has resulted in increased interest in India as a manufacturing destination.

India has emerged as a preferred alternative, driven by government initiatives such as the PLI schemes. Aligned with the vision of Atmanirbhar Bharat and the Make in India initiative, the PLI scheme aims to strengthen manufacturing, reduce reliance on imports and balance growth with sustainability.

As part of Make in India initiative, the Production Linked Incentive (PLI) schemes have been implemented across 14 key sectors, namely Large-Scale Electronics Manufacturing (LSEM), IT Hardware, Pharmaceuticals, Bulk Drugs, Medical Devices, Automobiles and Auto Components, Advanced Chemistry Cell Batteries, Solar PV modules, Telecom & Networking Products, Food Processing. The PLI schemes have generated investments exceeding Rs. 2.2 trillion as of 31st December 2025. The investments made under the PLI Schemes have led to incremental production and sales of over Rs. 20.4 trillion, as of 31st December 2025. Further, the Schemes have resulted in an employment generation of over 1.4 million (direct and indirect), and 836 applications have been approved across all 14 sectors covered under the PLI framework.

India's effort to develop domestic manufacturing is bolstered by the global supply chain derisking adopted by global peers This strategy involves companies diversifying their operations to limit exposure to single geographic location. The approach is being considered by some businesses to reduce their dependence on certain countries and diversify their supply chains amidst evolving regulatory environment and geopolitical uncertainties. Countries like India, Vietnam, Malaysia and Thailand present potential alternatives, offering lower labour costs, favourable government policies and access to new markets.

Hence, the strengthening of the manufacturing sector in India aims to capitalise on its export potential in key sectors such as electronics and pharmaceuticals. By positioning itself as a manufacturing hub with a vast consumer market, India is poised to attract increased investments and create new job opportunities.

Impact of US tariffs on manufacturing

- The imposition of tariffs by the United States affected several industries, including manufacturing, resulting in supply chain disruptions, cost escalation, and shifts in sourcing strategies. As of July 31, 2025, the US tariff structure for key countries stood as follows: Switzerland at 39%, India at 25%, Bangladesh at 20%, New Zealand at 15%, and the United Kingdom at 10%. In the case of the European Union, goods with a column 1 duty rate

above 15% attracted no additional tariff, whereas goods with a rate below 15% were adjusted to reach a total rate of 15%.

- Subsequently, on August 6, 2025, an executive order imposed an additional 25% tariff on imports from India, effective August 27, 2025. This tariff was levied over and above any existing duties, fees, or taxes, with exemptions granted to articles listed in Annex II, including copper, pharmaceuticals, semiconductors, lumber, certain critical minerals, and energy products.
- In a joint statement on 7 February 2026, India and the United States announced they had reached a framework for an interim agreement regarding reciprocal and mutually beneficial trade. It also commits the two nations to enhancing supply chain resilience and addressing barriers to digital trade, paving the way for a more integrated economic partnership. Key terms of the Interim Agreement between the United States and India includes:
  - **India's tariff commitments:** Elimination or reduction of tariffs on all U.S. industrial goods and a wide range of food and agricultural products (including DDGs, red sorghum, tree nuts, fruit, soybean oil, wine, and spirits).
  - **U.S. tariff commitments**: Application of an 18 percent reciprocal tariff on select Indian goods (textiles, leather, footwear, chemicals, machinery), with removal of tariffs on generic pharmaceuticals, gems and diamonds, aircraft parts, and certain aircraft goods upon successful conclusion.
  - **Automotive parts**: India to receive a preferential tariff rate quota on automotive parts subject to U.S. national security tariffs.
  - **Market access**: Both nations to provide preferential market access; India to address barriers to U.S. medical devices, ICT goods, and food and agricultural products.
  - **Non-tariff barriers and rules of origin**: Establishment of rules of origin favouring both nations, with a consultation mechanism to preserve agreement benefits.
  - **Strategic purchases**: India to procure $500 billion of U.S. energy products, aircraft, precious metals, technology products, and coking coal over five years.
  - **Technology cooperation**: Expanded trade in technology products, including GPUs and data center goods, and enhanced joint cooperation.
- However, on February 20, 2026, the US Supreme Court struck down the reciprocal tariffs that had been imposed under the International Emergency Economic Powers Act.
- **Pursuant to the U.S. Supreme Court judgment dated 20 February 2026, reciprocal tariffs are no longer in force.** However, the U.S. Administration, vide a Presidential Proclamation dated 20 February 2026 under Section 122 of the Trade Act of 1974, has imposed a temporary import surcharge of 10% ad valorem on select articles imported into the United States for a period of 150 days with effect from 24 February 2026. India remains engaged with the U.S. side on the issue.
- Furthermore, on March 12, 2026, the U.S. Trade Representative initiated 60 investigations (including India) related to the failure of various economies to impose and effectively enforce a prohibition on the importation of goods produced with forced labour. Subsequently, on June 2, 2026, the U.S. Trade Representative determined that the failure of each of the 60 investigated economies to impose and effectively enforce a forced labour import prohibition is unreasonable or discriminatory and burdens or restricts U.S. commerce. Details about the economies are as follows:

- As a result of the findings in each investigation, the Trade Representative proposes that appropriate action includes additional duties on all products of the investigated economies, except as provided in Annex A of Notice. The proposal differentiates between two groups:

Category	Proposed Additional Duty
Economies that already impose a forced-labor import prohibition, have committed to do so through an Agreement on Reciprocal Trade, or have a partial regime to prevent forced-labor goods	**10.0%**
All other investigated economies	**12.5%**

Source: Office of the United States Trade Representative (USTR), Crisil Intelligence

- The following 54 economies have failed to impose and effectively enforce a prohibition on importation of goods produced with forced labour:
    - Algeria; Angola; Argentina; Australia; the Bahamas; Bahrain; Bangladesh; Brazil; Cambodia; Chile; China, People's Republic of; Colombia; Costa Rica; Dominican Republic; Egypt; El Salvador; Guatemala; Guyana; Honduras; Hong Kong, China; **India**; Iraq; Israel; Japan; Jordan; Kazakhstan; Kuwait; Libya; Malaysia; Morocco; New Zealand; Nicaragua; Nigeria; Norway; Oman; Peru; the Philippines; Qatar; Russia; Saudi Arabia; Singapore; South Africa; South Korea; Sri Lanka; Switzerland; Taiwan; Thailand; Trinidad and Tobago; Türkiye; United Arab Emirates; United Kingdom; Uruguay; Venezuela; and Vietnam.
    - The following six economies have failed to effectively enforce a prohibition on the importation of goods produced with forced labor: Canada; Ecuador, the European Union; Indonesia; Mexico; and Pakistan.

However, the June 2026 announcement is a proposed Section 301 tariff action, not a final tariff order. The notice is a request for comments and hearings and describes the tariff rate that the USTR proposes to impose. The Federal Register notice itself does not indicate that the 12.5% duty had become effective as of the publication date.

Given the frequent policy revisions, the tariff situation remained dynamic and continuously evolving and therefore warrants close and ongoing monitoring.

Key government initiatives to boost the manufacturing sector

Government Initiative	Description and reasoning
Make in India	Launched on September 25, 2014, the Make in India initiative was designed to transform the country into a global hub for design and manufacturing. Its core objectives were to facilitate investment, encourage innovation and develop world-class infrastructure. As one of the pioneering 'Vocal for Local' initiatives, it sought not only to boost India's manufacturing capabilities but also to showcase its industrial potential on a global stage. Supported by programmes such as the PLI Scheme, PM Gati Shakti and the National Logistics Policy, and comprehensive tax reforms like GST, Make in India continues to drive economic growth, job creation and global competitiveness.
National Industrial Corridor Development Programme (NICDP)	The NICDP began with the launch of the Delhi-Mumbai Industrial Corridor. The Delhi Mumbai Industrial Corridor Development Corporation Ltd was established on January 7, 2008, as a special purpose vehicle under the administrative control of the Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry. The NICDP aims to develop world-class industrial infrastructure and promote planned urbanisation. These industrial corridors are being developed in collaboration with state governments to ensure efficient planning and execution. National Industrial Corridor Development Programme (NICDP), various greenfield industrial areas/region/nodes are being developed across India with the objective of creating manufacturing and investment destinations that are globally competitive. Till date about 20 projects under NICDP have been approved. These industrial nodes along six major corridors are expected to strengthen India's manufacturing ecosystem and boost its global competitiveness.
PM Gati Shakti	In 2021, the Prime Minister launched the PM Gati Shakti –National Master Plan for Multi-modal Connectivity. It is essentially a digital platform that brings 16 ministries, including Railways and road transport, together for integrated planning and coordinated implementation of infrastructure connectivity projects. It aims to incorporate the infrastructure schemes of various ministries and state governments, such as Bharatmala, Sagarmala, inland waterways, dry/land ports and UDAN (Ude Desh ka Aam Naagrik). It will cover economic zones such as textile clusters, pharmaceutical clusters, defence corridors, electronic parks, industrial corridors, fishing clusters, agri zones. It also aims to leverage technology, including spatial planning tools using imagery from Indian Space Research Organisation, developed by Bhaskaracharya National Institute for Space Applications and Geoinformatics.
PLI Scheme	The PLI Scheme was announced in Union Budget 2021-22, with a capital outlay of Rs 1.97 trillion. It focuses on 14 critical sectors to enhance manufacturing prowess, foster technological advancements and elevate the country's position in the global markets. Under the scheme, The PLI schemes have generated investments exceeding Rs. 2.2 trillion as of 31st December 2025. The investments made under the PLI Schemes have led to incremental production and sales of over Rs. 20.4 trillion, as of 31st December 2025. Further, the Schemes have resulted in an employment generation of over 1.4 million (direct and indirect), and 836 applications have been approved across all 14 sectors covered under the PLI framework.
Viksit Bharat 2047	The initiative is aimed at making India a developed nation by the centennial year of Independence in 2047. It seeks to mobilise efforts across economic, social, environmental and governance domains to achieve comprehensive and sustainable development. The concept envisions India as a leading global power with high standards of living, equitable growth and environmental stewardship.

Source: PIB, Crisil Intelligence

Assessment of the fire protection equipment market (Fire detection and fire suppression equipment)

Fire protection equipment also termed as fire fighting equipment (products) has evolved over the centuries as societies became more structured and increasingly complex urban environments and industrial ecosystems required the establishment of city codes and emergency response organisations.

With the advancement of technology and a more comprehensive understanding of fire dynamics, sophisticated and stringent fire protection systems, such as automatic fire sprinkler systems, smoke and heat detectors, fire alarms, portable and fixed fire extinguishers, etc. are being used across fire protection industry.

On the global front, the regulatory framework is governed by codes, standards and approvals like National Fire Protection Association (NFPA), UL Solutions and FM Approvals. Over the years these standards have evolved to cater to the industry's needs. For example, FM Approvals was formed in 1886 and provides certification and allied services in the fire protection industry. In addition, NFPA is the generally accepted code for fire safety in USA which was established in 1896 and since then has evolved to cover more than 300 codes and standards, spanning every area of fire, life, and electrical safety. From its most widely used documents, such as NFPA 13, the NEC, and NFPA 101. Similarly, UL Solutions founded in 1894 provides coverage across certification services, testing services, advisory services etc. in fire protection ecosystem. In addition, following section details the regulatory framework in India:

Evolution of fire protection regulations in India

1970-2000

- The National Building Code of India (NBC) to regulate building construction activities was published in 1970 and then first revised in 1983
- Thereafter, multiple major amendments were issued.

2001-2004

- In 2003, the Ministry of Urban Development called for the preparation of model building bye-laws (MBBL) in the wake of the Bhuj earthquake in 2001, with a focus on the structural safety of buildings and for the guidance of state governments
- Accordingly, the Model Building ByeLaws (MBBL) 2004 incorporated the provisions of structural safety and others

2016

- MBBL 2016 improved on the bye-laws brought out in 2004
- NBC 2016 was brought out due to large-scale changes in building construction activities

2020-present

- Several states have introduced acts, rules, guidelines and amendments to existing legislation in response to the growing complexity of urban development
- Examples include the Maharashtra Fire Prevention and Life Safety Measures (Amendment) Act, 2023, Gujarat Fire Prevention and Life Safety Measures Regulations, 2023, Tamil Nadu Fire and Rescue Services Act, 2025, Delhi Fire Service Act, 2007, and Delhi Fire Service Rules, 2010
- Ministry of Health introduced National Guidelines on Fire and Life Safety in Healthcare Facilities (2026). The guidelines comprehensively address multiple critical dimensions, including governance frameworks, risk assessment and mitigation, infrastructure planning, emergency response systems, training and capacity building of healthcare personnel, compliance mechanisms, and awareness generation. They also incorporate updated provisions for specialized high-risk areas such as Intensive Care Units (ICUs), Neonatal Intensive Care Units (NICUs), Pediatric Intensive Care Units (PICUs), and Operation Theatres (OTs), where stringent safety protocols are essential.

Source: Crisil Intelligence

The history of fire services in India spans over two centuries. After Independence, in view of the shortcomings in fire services in different states, the government formed a Standing Fire Advisory Committee in 1956 under the Ministry of Home Affairs. The committee had the mandate to examine technical problems relating to fire services and advise the government on the measures needed for speedy development and upgrades. Fire services fall under the 12th schedule of the Constitution, which deals with functions of a municipality.

As urban environments evolved and the emphasis on public safety increased, fire safety and prevention measures were integrated into key regulatory instruments, including the National Building Code (NBC) and the Model Building Byelaws (MBBL).

The **NBC, 2016 – Part 4: Fire and Life Safety** forms the central technical reference for fire safety regulations in the country. It is the basis upon which state-level legislation, municipal approvals and industrial fire safety protocols are structured. NBC 2016 is adopted either directly or through incorporation into state-specific fire protection legislation and development control regulations. Fire safety regulations have continued to evolve, as multiple states introduce/ amend laws, guidelines and rules, such as the Maharashtra Fire Prevention and Life Safety Measures (Amendment) Act, 2023, the Gujarat Fire Prevention and Life Safety Measures Regulations, 2023, and the Tamil Nadu Fire and Rescue Services Act, 2025.

Some examples are given below.

Growth driver	Description and reasoning
Maharashtra	• In Maharashtra, fire safety was governed by the Maharashtra Fire Prevention and Life Safety Measures Act, 2006, which was significantly amended through the Maharashtra Fire Prevention and Life Safety Measures (Amendment) Act, 2023. The rules under the Act were further updated via the Maharashtra Fire Prevention and Life Safety Measures Rules (Amendment), 2025, notified on June 12, 2025. • These legislative rules mandate a two-stage process to obtain fire no-objection certificates (provisional and final), compulsory periodic fire audits for specified buildings and integration of continuous system monitoring for high-risk occupancies. Licensed fire protection agencies are recognised by the Directorate of Fire Services to install and commission fire protection systems. All buildings under municipal corporations, including those under the Municipal Corporation of Greater Mumbai, are required to follow NBC 2016 and these state rules for system design and implementation. • To support these requirements, the Maharashtra Fire Services Academy at Kalina, Santacruz (East) in Mumbai serves as the state's training and certification hub.
Delhi-NCR	• In Delhi, fire protection for industrial and commercial buildings is governed by the Delhi Fire Service Act, 2007, and Delhi Fire Service Rules, 2010, which mandate compliance with the NBC and relevant norms of the Bureau of Indian Standards (BIS). These regulations require installation of automatic sprinkler systems (IS 15105), smoke management systems, hydrant networks and portable fire extinguishers appropriate to occupancy type and hazard level. Buildings that fall under the specified categories in Rule 27, based on height, floor area or use, must secure a fire safety certificate from Delhi Fire Service after installation and inspection of all required systems. • In Noida (Uttar Pradesh), fire protection is governed by state laws along with the NBC provisions adopted by the Noida Authority. Due to increasing industrial development and urbanisation, The Uttar Pradesh Fire and Emergency Services Act, 2022, was brought in. The Act emphasises mandatory fire prevention and life safety measures in all premises through proper design,

Growth driver	Description and reasoning
	equipment, maintenance, and accessibility for firefighting operations, while also mandating regular training, drills, and awareness programs for occupants and staff. • In Gurugram (Haryana), fire protection is governed by the state laws (for instance, the Haryana Fire and Emergency Services Act, 2022) and Haryana Building Code. The Act empowers the Government to, by notification, require any owner or occupier of a place or premises in areas deemed at risk of fire to implement specified preventive measures. It further lays down provisions for the issuance, renewal, and cancellation of fire safety certificates, along with penalties for non-compliance, thereby ensuring accountability and enforcement of fire safety standards. While all three regions follow the NBC with regard to technical requirements for systems like sprinklers, hydrants, alarms and extinguishers, the application process, validity period, inspection protocol and enforcement authority differ.
Gujarat	• In Gujarat, fire safety legislation is structured under the Gujarat Fire Prevention and Life Safety Measures Act, 2013, with enforcement guided by the Gujarat Fire Prevention and Life Safety Measures Regulations, 2023, and further clarified through an amendment notified in June 2024. These rules establish the technical and administrative protocols for compliance, licensing and inspections with direct reference to NBC 2016 for design and execution standards • Owners/occupiers of a building need to apply for renewal of fire safety certificates at least two months prior to expiry. The fire safety officer appointed under Rule 21 inspects the building/premises and verifies the compliance with regulations. Thereafter, the officer renews the fire safety certificate based on the approval by the regional or the chief fire officer. The certificate is valid for two years from the date of issuance
Tamil Nadu	• In Tamil Nadu, fire safety regulation has been consolidated under the Tamil Nadu Fire and Rescue Services Act, 2025 (Act No. 37 of 2025), which received the assent of the Governor on the June 6, 2025 • The Act categorises buildings by occupancy risk, based on which they must obtain a fire safety licence, safety certificate or comply with a self-certification scheme

Source: Crisil Intelligence

Categorisation of fires

Fires can be broadly classified according to the type of fuel that is burning, as detailed below:

Types of fires

Fire class	Material on fire i.e. fuel (as per IS 15683: 2018 and IS 2190: 2010)	Suitable fire suppression equipment (Ref para 10.1 of IS 2190:2010)
Class A	Ordinary combustible solids such as wood, cloth, paper, synthetic rubber, plastics, furniture and curtains	Water, foam, ABC* dry chemical powder and halo carbons extinguishers
Class B	Flammable liquids or liquefiable solids such as gasoline, diesel, kerosene, alcohol, acetone, paint thinner, lubricating oils, waxes and greases	Foam, dry chemical powder, clean agents and Carbon dioxide (CO2) extinguishers
Class C	Flammable gases under pressure, including liquefied gases such as liquefied petroleum gas (LPG), natural gas, propane, methane etc.	Dry chemical powder, clean agents and Carbon dioxide (CO2) extinguishers
Class D	Combustible metals such as magnesium, aluminium, zinc, sodium, potassium, etc.	Extinguishers with special dry powder suitable for metal fires
Class F (Kitchen fire)	Cooking media such as vegetable or animal oils and fats etc.	Wet chemical fire extinguisher
-	Energised electrical conductor equipment	Non-conducting extinguishing media such as dry chemical powder, carbon dioxide (without metal horn) or clean agent

Note:

ABC: Class A, Class B and Class C fires

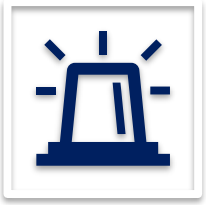
Kindly note that as per Indian standards, electrical fires (fires involving energised electrical conductors/ equipment) are not given specific class as they can fall into any of the classifications as per the material on fire (fuel). However, the categorisation may be different in other countries

Source: Ministry of Railways, Crisil Intelligence

Qualitative overview of key fire protection equipment

The fire protection equipment market can be broken down into two main segments:

- Fire detection systems
- Fire suppression systems



Fire detection equipment refers to a category of safety systems specifically designed to identify early signs of fire and provide immediate alerts to building and emergency response services (if required).

These equipment detect smoke, heat or flames at the earliest possible stage to prevent loss of life and minimise property damage. The common components of fire detection systems include smoke detectors, heat detectors, flame detectors, multi-sensor detectors and fire alarm control panels.

Fire suppression systems comprise a range of systems and devices specifically designed to control, suppress and extinguish fires after detection. Unlike fire detection equipment, which serves primarily as an alert mechanism, suppression systems actively engage to mitigate and limit the spread of fire. These systems can be broadly classified into foam equipment & suppression systems, water-based and gas-based systems.

Key fire suppression equipment includes monitors & monitor nozzles, extinguishers, hydrants, blankets, sprinklers, deluge valve and pre-action systems.

Source: Crisil Intelligence

Qualitative overview of key fire detection products

Smoke detector

A common type of fire detector, which detects smoke particles in the air. Multiple types of smoke detectors are present in the industry like ionization-based, photoelectric-based, optical smoke detectors, etc.

Heat detector

These detectors respond to high temperatures or rapid temperature changes and are often used in areas where smoke detectors may not be effective, such as in kitchens, etc.

Flame detectors

Flame detectors are specialized devices that detect the presence of flames, providing early warning of potential fires.

Fire alarm control panels

Fire alarm panels are the central control units that monitor and control the fire detection system, playing a crucial role in ensuring the safety of occupants and preventing damage to property.

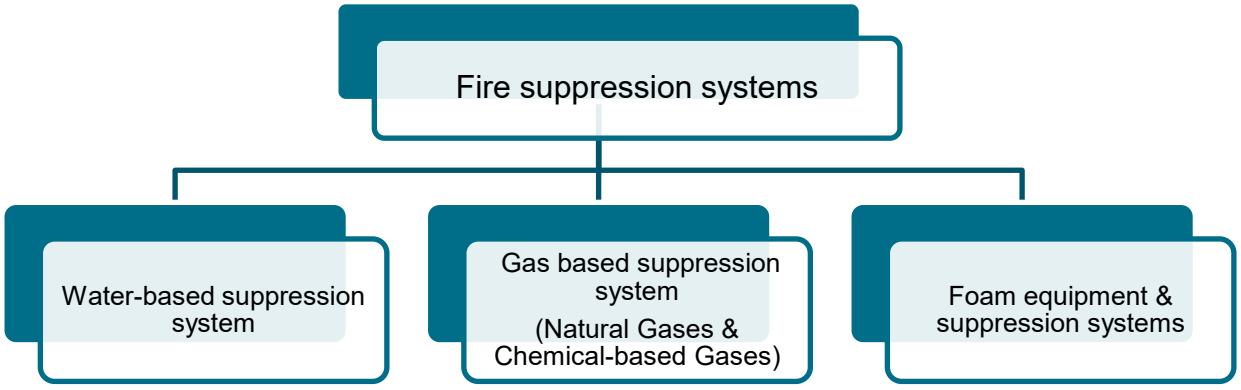
Note: The list of products above is indicative only and not exhaustive
Source: Crisil Intelligence

Qualitative overview of key fire suppression products

Fire suppression systems are designed to control and extinguish fires automatically or manually, typically using agents such as water, gas or foam. Major types of fire suppression systems are as follows:

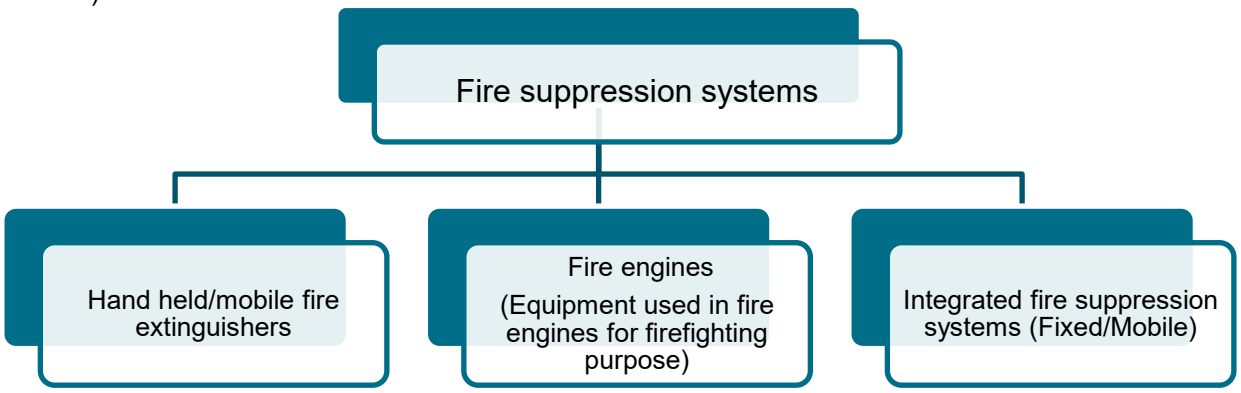
- **Water-based fire suppression systems:** These are the most common type of fire suppression equipment. They use water to extinguish fires by cooling the fuel. These systems are generally effective in suppressing Class A fires, which involve ordinary combustible materials such as wood, paper and cloth. Water-based systems are typically used in residential spaces, commercial buildings and industrial settings, and are often connected to a municipal water supply or a stored water tank
- **Gas-based fire suppression systems (using gases and chemicals):** These systems use a clean agent gas to extinguish fires, although the extinguishing mechanism varies depending on the type of agent used. Inert gas systems function primarily by reducing the oxygen concentration in the affected area to a level insufficient to sustain combustion. Clean agent systems, function primarily by absorbing heat from the fire and chemically interfering with the combustion reaction. It should be noted that not all gaseous systems rely on both mechanisms simultaneously; the specific mode of action depends on the agent employed. These systems are typically effective for Class A, B and C fires. Gas-based systems are generally used in commercial and industrial settings, such as data centres, laboratories and manufacturing facilities. They are designed to extinguish fires quickly without damaging sensitive equipment or leaving residue. They are also environmentally friendly and non-corrosive, making them a preferred choice for protecting high-value assets and sensitive equipment.

  Chemical-based fire suppression systems use a chemical agent, such as dry chemical powder, to extinguish fires by interrupting the chemical reaction that sustains combustion. These systems are typically effective for all classes of fires, depending on the type of chemical used. Chemical-based systems are generally used in residential, commercial and industrial settings, such as kitchens, laboratories and manufacturing facilities. They are designed to extinguish fires quickly; however, unlike gas-based systems, dry chemical powder does leave residue upon discharge. This residue can be corrosive or abrasive in nature and may cause damage to sensitive electronics or equipment. Consequently, these systems are generally considered less suitable than gas-based systems for the protection of high-value electronic assets, and post-discharge cleanup is typically required.
- **Foam equipment & suppression systems:** These systems use a foam agent to extinguish fires by smothering the fuel and cooling the surrounding area. These systems are typically effective for Class A and Class B fires, which involve flammable liquids such as gasoline, oil and paint. Foam equipment & suppression systems are generally used in high-risk areas such as industries and factories. They are designed to quickly extinguish fires and prevent re-ignition and are often used in conjunction with other fire suppression systems.



Source: Crisil Intelligence

Further, the suppression systems can also be segregated based on use, i.e. handheld/ mobile fire extinguishers, equipment used in fire engines (typically used by fire department) and fire suppression systems (larger integrated systems -fixed / mobile).

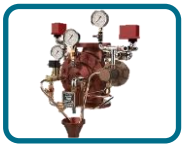


Source: Crisil Intelligence

Further, these systems can be classified into fire extinguishers, hydrants, monitors & monitor nozzles, sprinkler systems, deluge systems, and pre-action systems, as detailed below.

Key fire suppression equipment

Name	Functional overview	Working principle	End-use segment
Fire extinguishers	Portable fire extinguishers are the first line of defence against small, controllable fires. **Key agents: Water, foam forming agents, inert and active gases[1]**	The fire extinguishing agent is stored in a pressurised cylinder and is released through a nozzle or a hose when the extinguisher is activated. The extinguishing agent works by suppressing one or more of the three elements necessary for a fire to continue: fuel, oxygen and heat.	• Residential • Commercial • Industrial
Fire hydrant systems	These provide a quick and effective way to combat fires. The system is typically designed to discharge a high volume of water. **Key agents: Water**	Fire hydrant installation consists of a system of pipes connected directly to a water supply main and is intended to provide water for firemen to douse a fire. Of late, foam-based fire hydrants are also being installed to address water conservation issues and in cases wherein water is inefficient.	• Residential • Commercial • Public spaces • Industrial *(factories, large buildings, offices, etc)*
Fire sprinkler systems	These are a network of water/ suppressant agent-filled pipes that start at the required water service line and end with strategically spaced fire sprinkler heads located throughout the property. **Key agents: Water**	The sprinkler heads are frangible bulbs filled with a liquid that, when heated, expand, causing the bulb(s) to break and the system to release water. The water from the sprinkler head will cover the area where the fire has broken	• Residential • Commercial • Industrial

Name	Functional overview	Working principle	End-use segment
		out and will continue to operate until the fire department can fully extinguish the fire.	
 **Pre action and deluge systems**	These are specialised fire suppression systems that are designed to provide enhanced fire protection in specific applications. **Key agents: Water, foam concentrates, foam solutions**	A pre-action system uses pressurised air or nitrogen to fill the pipes and requires a two-step activation process – an external fire detection system first detects the fire, which opens pre action valve and water enters the piping system. A deluge system features open sprinkler heads that are designed to activate all at once when a heat or smoke detector detects a fire.	• Residential • Commercial • Industrial *(storage, power plants, warehouses, machine rooms, generator rooms, data centres, etc)*
Gas suppression systems	These are fire protection systems that use a clean agent or gas to extinguish a fire in a quick and effective manner. These systems are generally used where water-based fire suppression systems may not be suitable. **Key agents:** Natural or Chemical-based gases	These systems work by releasing a clean agent gas, which displaces the oxygen and cools the fuel, thereby extinguishing the fire. The clean agent gas is stored in cylinders, usually pressurised and is released through a network of pipes and nozzles, which are strategically located throughout the protected area.	• Commercial • Industrial *(data centres, laboratories, manufacturing facilities)*
Monitors & monitor nozzles	Monitors & monitor nozzles are critical components of fire suppression systems, designed to deliver a powerful stream of water or foam to extinguish fires. **Key agents: Water, foam concentrates, foam solutions**	The working principle of monitors & monitor nozzles involves the use of a pump or water pressure to propel water through a nozzle, creating a high-velocity, precise stream of fire suppression agent (water or foam) that can reach long distances, allowing firefighters to target the base of the fire and extinguish it quickly and safely.	• Residential • Commercial • Industrial *(large buildings, public spaces, space centres, launch pads, factories, etc)*
Foam equipment & suppression systems	Foam equipment & suppression systems such as fire bladders, proportioning systems, foam concentrates and related equipment are crucial in fire suppression systems, used to extinguish fires by smothering and cooling the fuel. **Key agents: Foam concentrates, foam solutions**	Foam equipment & suppression systems consist of a foam generator, distribution network and control panel. When a fire is detected, the foam agent is mixed with water and pumped through the distribution system, creating a foam blanket that smothers, cools and separates the fuel from the ignition source.	• Commercial • Industrial

Name	Functional overview	Working principle	End-use segment
Custom-engineered systems	These are specialised fire protection solutions designed to address specific fire hazards in complex environments. **Key agents: Depends on the end-use industry requirements**	These systems go beyond standard off-the-shelf fire protection products, by incorporating unique risk assessments, hazard classifications and operational requirements of the facility. These systems are designed to deliver the correct suppression agent in a timely, automated manner.	• Commercial • Industrial *(high hazard areas: oil refinery, power plant, chemical storage area, etc)*

Colour	*Meaning*
	Water-based systems
	Foam-based systems
	Gas-based systems

Notes:
1) The list of key systems and their end-use industry is only indicative and not exhaustive
2) Chemical-based systems are included within gas-based systems

Key chemicals used

Type of fire extinguisher used	*Key agents*
Gas-based/ Chemical agents- based	*Active and inert gases* *Sodium bicarbonate base* *Potassium bicarbonate base* *Ammonium phosphate base agent* *Solutions of water and potassium acetate, potassium carbonate, potassium citrate*
Water-based	*Water*
Foam-based	*Firefighting synthetic foam*

Source: National Fire Protection Association (NFPA), Crisil Intelligence

Overview of the global fire protection equipment market

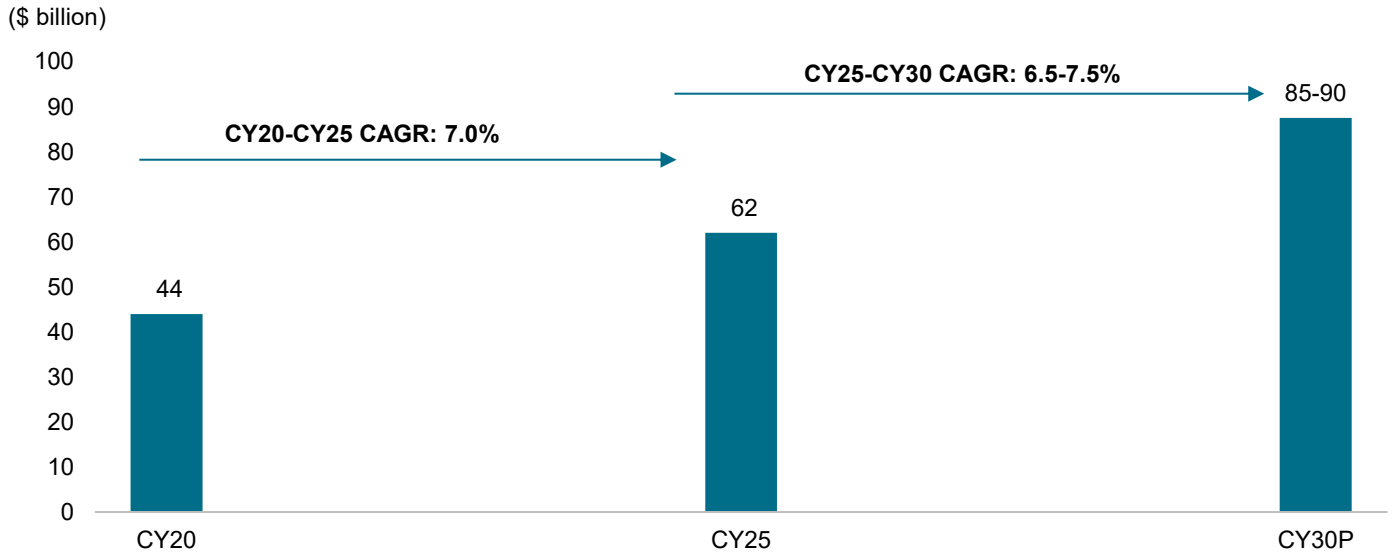
Global fire protection equipment market to grow at 6.5-7.5% CAGR between CY25 and CY30

The global fire protection equipment market, which grew at 7.0% CAGR between calendar years 2020 and 2025, to $62 billion, is projected to continue to grow at 6.5-7.5% CAGR over 2025-2030, to $85-90 billion.

The growth of the global fire protection equipment industry is being driven by increasing awareness of fire hazards and the emphasis on workplace and residential safety. Also, stringent government regulations and mandatory fire protection codes across industries are compelling businesses and institutions to invest in advanced fire protection systems.

Another factor boosting the demand for fire detection and suppression solutions is rapid urbanisation, especially in developing countries, which is increasing residential and commercial construction. The growth of sectors such as oil and gas, chemicals and manufacturing is also contributing significantly to market growth. Compliance with fire protection measures because of insurance requirements is further encouraging the installation of equipment. Public infrastructure development, such as airports, metro stations, etc. continues to be a major growth driver as well.

Trend of the global fire protection equipment market



P – projected

Note:

The fire protection equipment market sizing represents only the equipment portion of the fire protection systems, consisting of fire detection and fire suppression/fighting equipment.

- *Fire detection equipment systems detect early signs of fire, including smoke, flame, heat, etc, and provides warning through alarms, notifications, etc. These systems include smoke detectors, temperature detectors, flame detectors, gas detectors and alarms.*
- *Fire suppression systems are designed to control and extinguish fires automatically or manually, and typically include agents such as water, gases, foam, chemical suppressants, etc to suppress the fire. These systems include fire extinguishers, fire hydrants, monitors & monitor nozzles, sprinkler systems, deluge systems, and pre action systems.*

Source: International Market Analysis Research and Consulting (IMARC), Crisil Intelligence

North America expected to remain the largest market for fire protection equipment

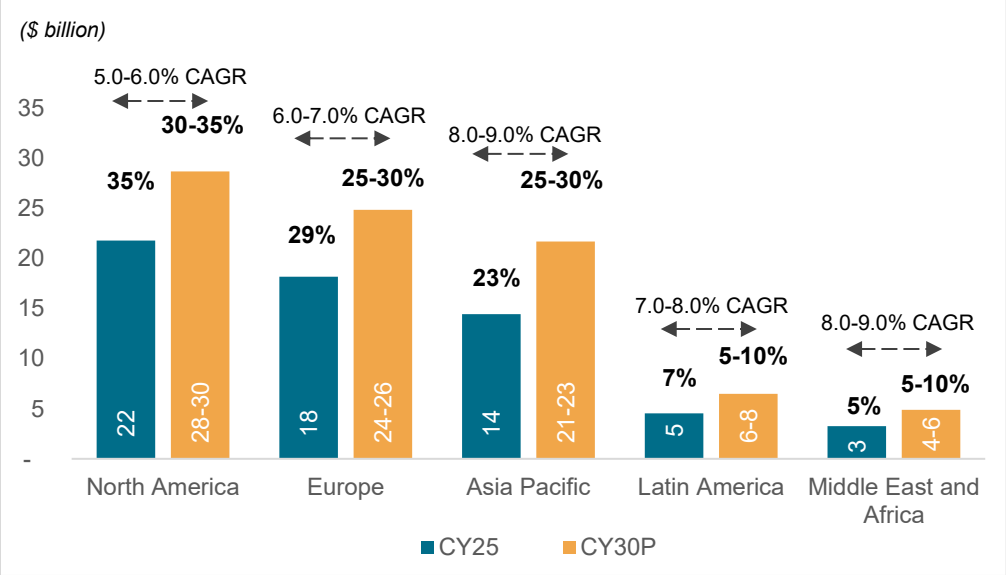
The global fire protection equipment market can be segregated into North America, Europe, Asia-Pacific, Latin America, and the Middle East and Africa. In 2025, North America was the world's largest fire protection equipment market, accounting for ~35% share, or $22 billion, followed by Europe (29%; $18 billion).

Over 2025-2030, the global fire protection equipment market is expected to grow at 6.5-7.5% CAGR to $85-90 billion. This growth trajectory is expected to be driven by increasing demand across all regions, with Asia-Pacific and the Middle East

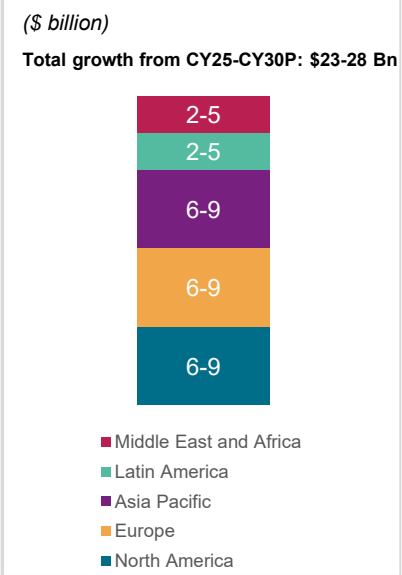
and Africa emerging as the fastest growing markets, both registering a CAGR of 8.0-9.0%. Asia-Pacific is projected to reach $21-23 billion by 2030, while the Middle East and Africa is expected to reach $4-6 billion. Latin America is also anticipated to grow faster than the overall market, with a CAGR of 7.0-8.0%, reaching $6-8 billion by 2030.

In comparison, North America and Europe are expected to experience relatively moderate growth, with projected CAGRs of 5.0-6.0% and 6.0-7.0%, respectively. Nevertheless, North America is forecast to retain its position as the largest market, accounting for a 30-35% share and reaching a market value of $28-30 billion by 2030.

Market growth by region



Contribution to growth by region



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Kindly note that, due to rounding, the segment-wise figures shown may not add up exactly to the total market size and/or to 100% market share.

Source: IMARC, Crisil Intelligence

Fire suppression systems comprise bulk of the global fire protection equipment market

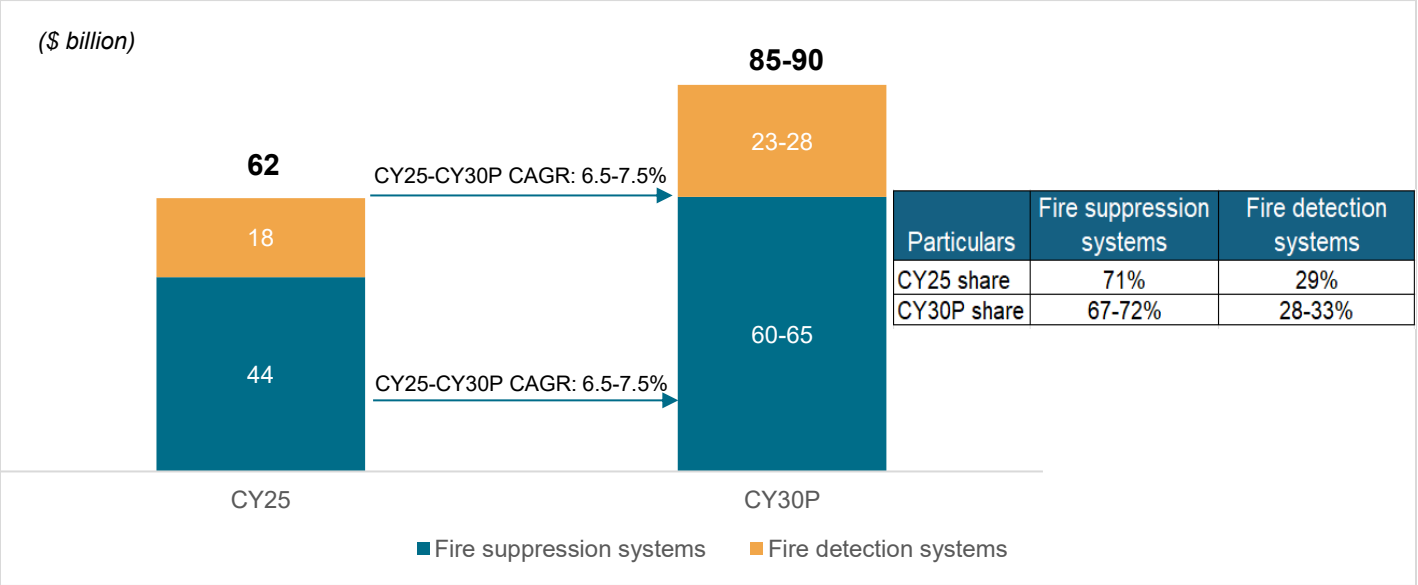
Fire suppression systems accounted for the largest share of the global fire protection equipment market, at 71% in 2025, i.e. $44 billion.

The growing awareness of the severe economic and human consequences associated with fire incidents, particularly in high-value assets and critical infrastructure, is a key factor driving global demand for fire suppression systems. Furthermore, the expansion of the commercial real estate sector, encompassing large public spaces such as shopping malls, hotels, hospitals, and airports, is further accelerating this demand. These establishments require advanced fire suppression solutions to ensure compliance with stringent safety regulations and to safeguard the well-being of their occupants.

Over 2025-2030, the pace of growth of the global fire suppression systems is expected to sustain at 6.5-7.5% CAGR, to $60-65 billion, thereby continuing to maintain a dominant 67-72% share of fire protection equipment market. The growth of large-scale warehousing, and the e-commerce and renewable energy sectors is expected to drive demand for specialised fire suppression systems, particularly in dense storage and high-value equipment applications.

Fire detection systems, which was a $18 billion industry in 2025 and accounted for 29% share of the global market, is expected to grow at 6.5-7.5% CAGR during 2025-2030, to $23-28 billion, thereby accounting for 28-33% share of the global fire protection equipment market. The growth of fire detection systems is being driven by increasingly stringent fire protection regulations and building codes, as well as rapid urbanisation.

Market segmentation by product type



Particulars	Fire suppression systems	Fire detection systems
CY25 share	71%	29%
CY30P share	67-72%	28-33%

P – projected

Figures at the top indicate total fire protection equipment market

Fire protection equipment market sizing represents only the equipment portion of the fire protection systems, consisting of fire detection and fire suppression/fighting equipment.

Fire detection equipment systems detect early signs of fire, including smoke, flame, heat, etc, and provide warnings signs through alarms, notifications, etc. These systems include smoke detectors, temperature detectors, flame detectors, gas detectors, alarm panels, etc.

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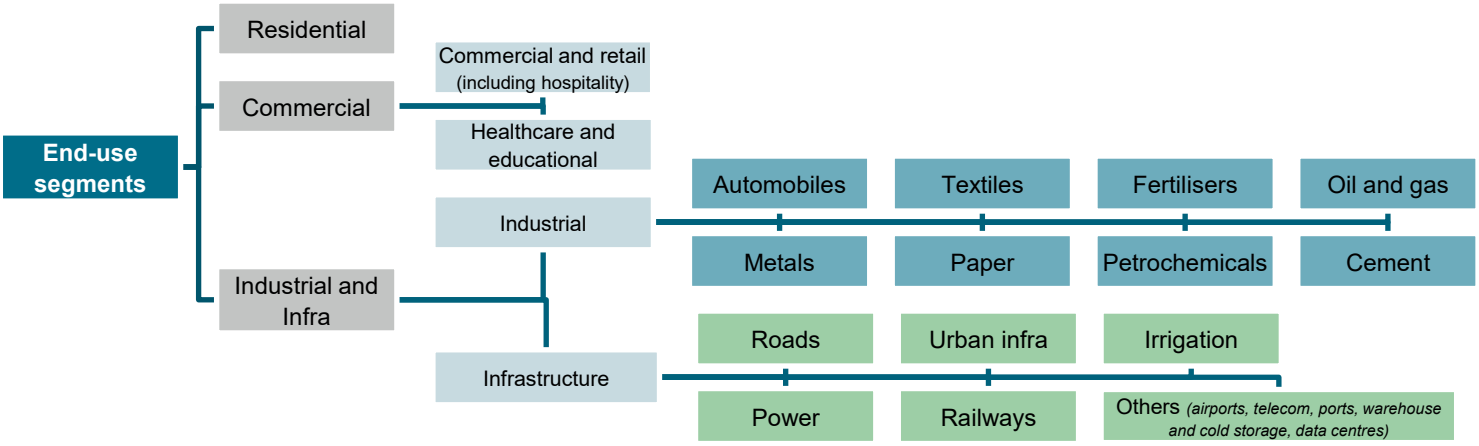
Source: IMARC, Crisil Intelligence

Market segmentation of fire protection equipment

For this report, Crisil has considered three key segments for the installation of fire protection equipment:

- Residential: Encompasses demand of fire protection equipment in homes, apartments and other dwelling units
- Commercial: Comprises fire protection equipment demand from commercial and retail establishments (including hospitality), healthcare facilities, and educational institutions
- Industrial and infrastructure: This segment can be further divided into:
    - Industrial: Includes oil and gas, petrochemicals, metal, automobiles, textiles, paper, fertilisers, and cement sectors
    - Infrastructure: Includes warehouse and cold storage, data centres, airports, telecom, ports, roads, power, urban infrastructure (construction-intensive mass rapid transit system (MRTS), bus rapid transit system (BRTS), water supply and sanitation (WSS) projects, smart cities, and related infrastructure development), railways, and irrigation

Indicative end-use segmentation



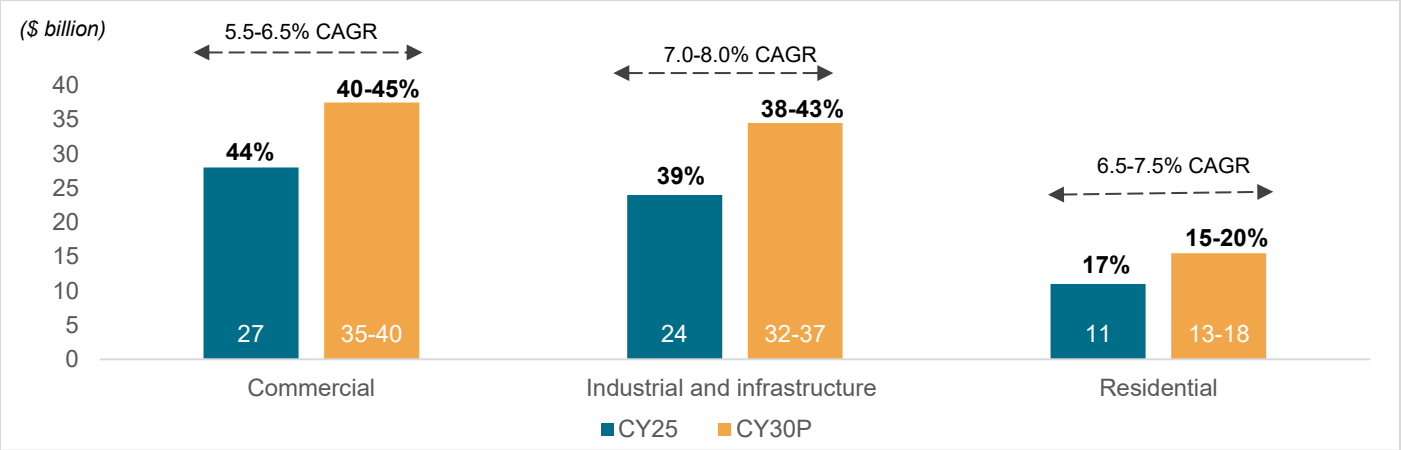
Source: Crisil Intelligence

Commercial segment will continue to dominate the demand of fire protection equipment market

As of 2025, commercial segment accounted for the highest share (44%) in the overall fire protection equipment market at $27 billion, followed by industrial and infrastructure (39%), and residential (17%) segments.

Moving forward, commercial segment is estimated to maintain a steady growth rate of 5.5-6.5% CAGR between 2025-2030 to $35-40 billion, whereas industrial and infrastructure, and residential segments are expected to drive overall growth of the global fire protection equipment market. Demand from the industrial and infrastructure segment, supported by increasing industrial activities and rising adoption of fire protection norms at the premises, is expected to grow at 7.0-8.0% CAGR from 2025 to 2030, to $32-37 billion, and demand from the residential segment is expected to grow at 6.5-7.5% CAGR, to $13-18 billion.

Market segmentation by end-use demand



P – projected

Note: Figures at the top of the column Indicate share of respective categories in overall fire protection market.

Kindly note that, due to rounding, the segment-wise figures shown may not add up exactly to the total market size and/or to 100% market share.

Source: IMARC, Crisil Intelligence

Key growth drivers of global fire protection equipment market

Improving urbanisation

Global urbanisation is projected to rise to 59.5% in 2031 from ~57.4% in 2023, which could result in more densely populated urban infrastructure, thereby driving the need for fire protection equipment

Improving per capita income

Global per capita GDP rose at 5.6% CAGR between 2020 and 2025, to $14,715. The growth in incomes could continue to support the voluntary adoption of fire protection solutions

Growing population

The global population is estimated to be around 8.2 billion in 2024 and is projected to grow to 8.6 billion in 2031, at CAGR of 0.7% between 2024 and 2031. This will require more sophisticated public infrastructure, which may drive the demand for fire protection solutions

Growing awareness

Rising awareness of fire risks and safety norms are expected to encourage broader adoption of fire protection measures across end-use segments, which will buoy demand for fire protection equipment

Growing penetration in developing markets

Penetration of fire protection equipment in key developing markets is expected to rise, owing to increasing regulatory compliance and growing awareness

Regulatory strengthening

Improving regulatory frameworks and stricter compliance requirements, especially in emerging economies, could increase the demand for fire protection systems

Source: Crisil Intelligence

Overview of Indian fire protection equipment market

Projected to clock a CAGR of 10-12% between fiscals 2026 and 2031

India's urban landscape is undergoing rapid transformation, marked by a surge in high-rise buildings, commercial complexes, malls, airports, and metro stations. Government initiatives such as the Smart Cities Mission are accelerating infrastructure development, while manufacturing-focused schemes including PLI, Make in India, and Viksit Bharat 2047 are driving industrial growth across the country.

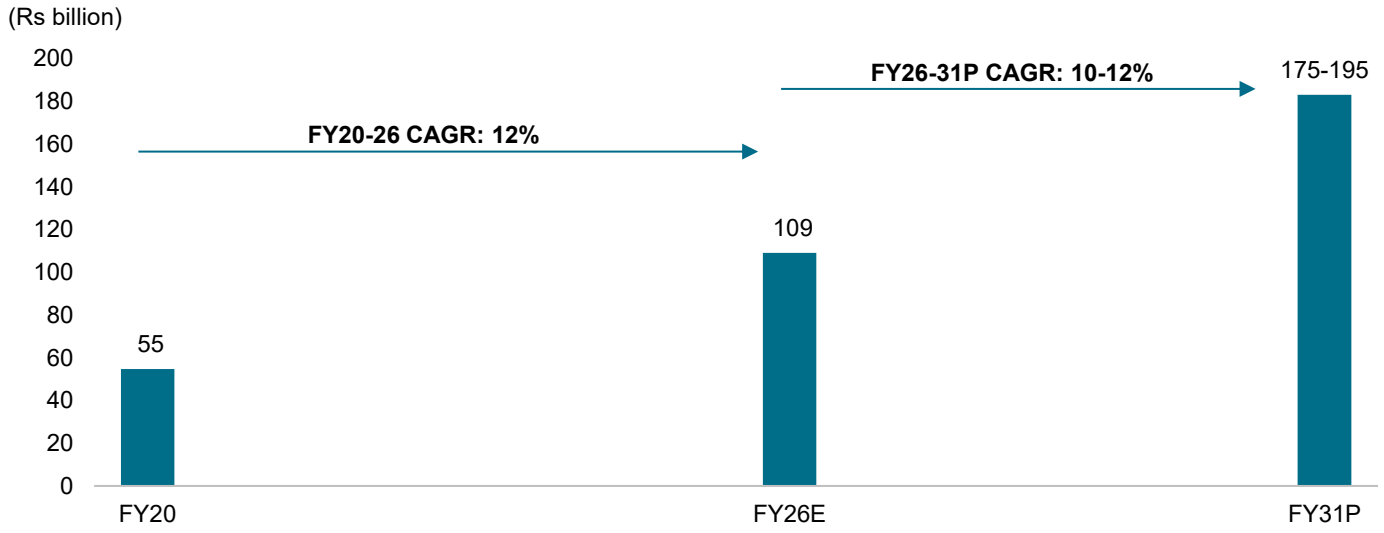
This boom in real estate, infrastructure, and industrial activity has substantially increased demand for advanced fire protection installations in recent years. Additionally, corporate ESG policies and compliance requirements set by insurance companies have further encouraged investments in fire protection as part of broader risk management and sustainability strategies.

The Indian fire protection equipment market expanded at a CAGR of 12% between fiscals 2020 and 2026 to Rs 109 billion, outperforming the global fire protection equipment market in terms of growth rate (7% CAGR between 2020-2025), and is expected to clock a CAGR of 10-12% between fiscals 2026 and 2031 to reach Rs 175-195 billion.

The market comprises both international and domestic players. International players include Bosch, Gunnebo, Honeywell, Johnson Controls, Siemens, Victaulic and Viking, while domestic players include Ceasefire Industries, De's Technico, Firetech Equipment & Systems, Fluid Pumps & Equipment, HD Fire Protect, Newage Fire Fighting Company, Safex Fire Services and Vimal Fire Controls.

The fire detection segment is traditionally dominated by international brands owing to wider presence across the detection value chain, while the fire suppression segment has large and small domestic players operating in commoditised products such as fire extinguishers.

Review and outlook of Indian fire protection equipment market



Note:

E- Estimated, P- Projected

Fire protection equipment market sizing represents only the equipment portion of the fire protection systems, consisting of fire detection and fire suppression/fighting equipment.

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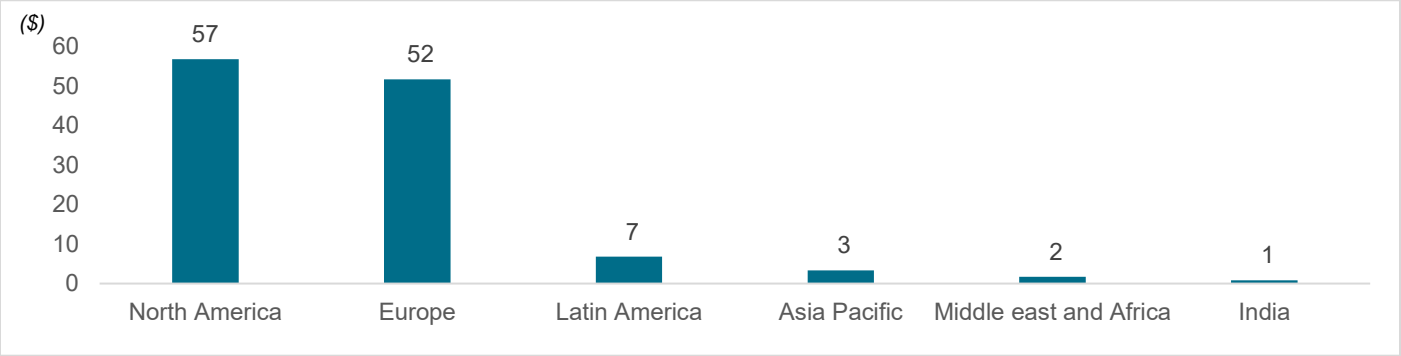
Kindly note that, due to rounding, the segment-wise figures shown may not add up exactly to the total market size and/or to 100% market share.

Source: Crisil Intelligence

Domestic market has upside potential to grow as it lags key developed markets in terms of per capita fire protection equipment consumption

India lags key developed markets such as North America and Europe in terms of per capita fire protection equipment consumption. In CY2025, North America had per capita consumption of $57, Europe had $52, while Latin America, Asia Pacific and Middle east and Africa had per capita consumption of $7, $3 and $2 respectively. India at just $1 (fiscal 2026), presents an opportunity for growth.

Per capita consumption of fire protection equipment (2025)

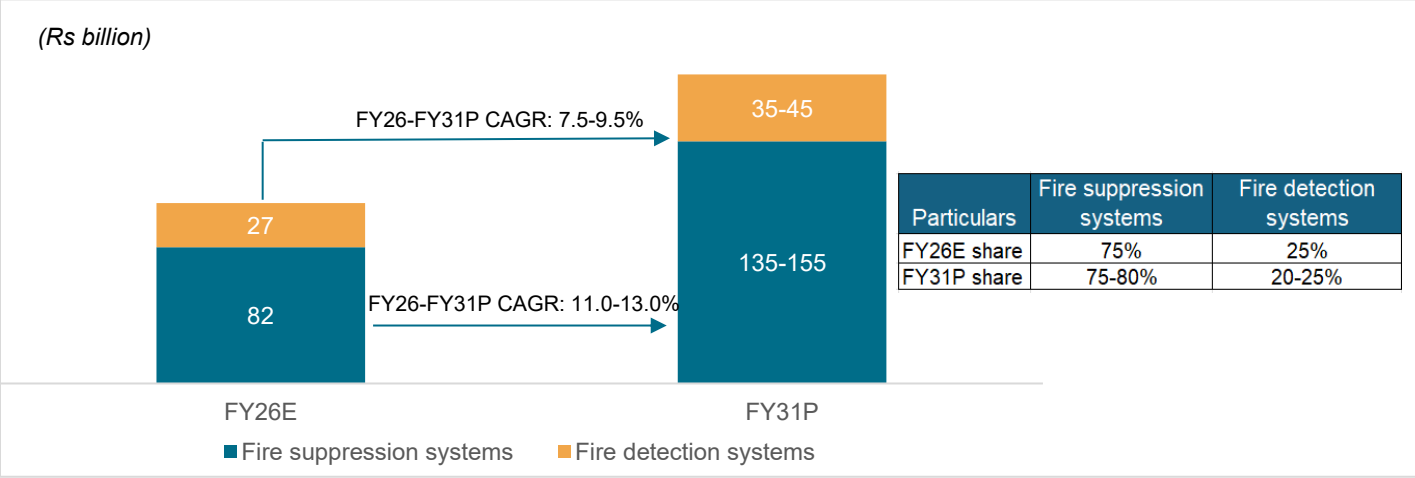


Note: Per capita fire protection equipment consumption is calculated by dividing the overall fire protection equipment market size by the population of respective regions
Source: World Bank, UN Population reports, Crisil Intelligence

Fire suppression segment to grow at higher pace than fire detection

In fiscal 2026, the fire suppression system segment (fire sprinklers, hydrants, deluge valves, gas-based systems, foam equipment & suppression systems, etc) accounted for 75% of the total market and was valued at Rs 82 billion, while the fire detection segment (fire alarms and panels, smoke detectors, heat detectors, etc) formed 25% and was valued at Rs 27 billion. Between fiscals 2026 and 2031, the fire suppression segment is expected to clock 11.0-13.0% CAGR to reach Rs 135-155 billion, with a 75-80% share of the overall fire protection equipment market in India.

Segmentation of Indian fire protection equipment market



Particulars	Fire suppression systems	Fire detection systems
FY26E share	75%	25%
FY31P share	75-80%	20-25%

Note:
E- Estimated, P- Projected

Figures at the top indicate total fire protection equipment market.

Fire protection equipment market sizing represents only the equipment portion of the fire protection systems, consisting of fire detection and fire suppression/fighting equipment.

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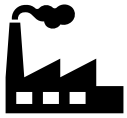
Source: Crisil Intelligence

End-use segments for fire protection market in India

Parameters			
End-use segment	**Commercial**	**Industrial and infrastructure**	**Residential**
Estimated FY26 share	**42%**	**37%**	**21%**
FY26E market value	**Rs 45 billion**	**Rs 41 billion**	**Rs 23 billion**
Projected FY31 share	**37-42%**	**37-42%**	**20-25%**
FY31P market value	**Rs 65-75 billion**	**Rs 65-75 billion**	**Rs 35-45 billion**
FY26E-FY31P CAGR	**8.5-10.5%**	**10.5-12.5%**	**11.5-13.5%**
Key growth drivers	• Increasing construction spending • More stringent regulations	• Growing construction spending • Increasing share of oil and gas in overall industrial construction spending • Increasing industrial and infrastructure capex • Support through schemes such as PLI, Make in India	• Increasing urbanisation • Growing population density • Improving awareness of fire protection

Note:

E- Estimated, P- Projected

Kindly note that, due to rounding, the segment-wise figures shown may not add up exactly to the total market size and/or to 100% market share.

Source: Crisil Intelligence

Commercial segment holds the highest share

The commercial segment is estimated to hold the highest share in the fire protection equipment market, at 42%, and is estimated to be valued at Rs 45 billion in fiscal 2026, owing to growing construction spends and fire regulatory requirements by BIS, MBBL, NBC, etc.

The commercial real estate sector in the country has seen strong growth in recent years, driven by expanding geographical reach. In the past decade, it emerged as a key pillar of economic development because of MNC expansion and government policies promoting foreign investment. This market is poised to see sustained growth on the back of digital transformation, infrastructure development and government initiatives such as Smart Cities and Make in India.

Key growth drivers for the commercial segment are detailed in Commercial sector-led growth drivers section.

Industrial and infrastructure have the second-highest share

The expansion of industrial and infrastructure activity across India, particularly in sectors such as chemicals, oil and gas, infrastructure, power, automotive, textiles, heavy manufacturing, power, metros, airports, data centres, warehouse and cold storage has led to the creation of more fire-prone zones. Additionally, compliance with fire safety norms outlined by the National Building Code (NBC) and other regulatory authorities, especially for hazardous and large-scale industries, has necessitated the installation of proper fire protection equipment systems such as fire alarms, suppression systems and emergency evacuation mechanisms, which is driving the demand for fire protection equipment across industrial and infrastructure sectors.

Due to the same reasons, the industrial and infrastructure sector holds the second-highest share in the fire protection equipment market, at 37%, and was valued at Rs 41 billion in fiscal 2026.

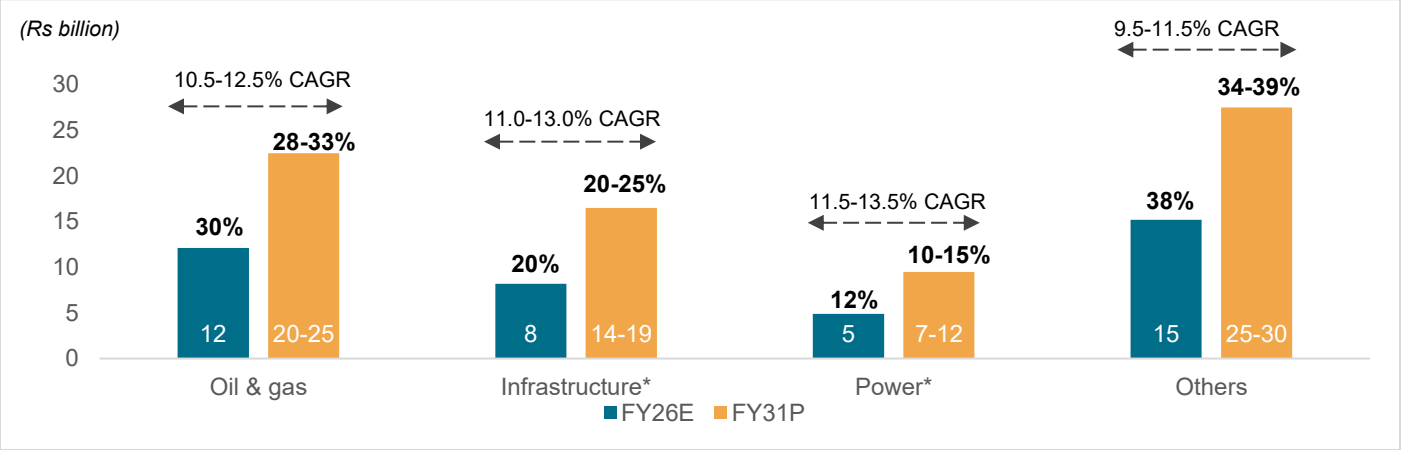
Moving forward, the share of this sector is expected to improve due to the following reasons:

- As industries scale up production capacities and establish new plants, there is a growing need to safeguard infrastructure, workers and assets from potential fire-related incidences. This industrial boom directly fuels the adoption of modern fire detection and suppression systems, contributing to the growth of the fire protection equipment market
- Further, the Indian government has mandated strict safety guidelines for industrial establishments under laws such as the Factories Act, Petroleum Act and Explosives Act
- Construction capex in the industrial segment is estimated to have increased to Rs 886 billion in fiscal 2026, from around Rs 617 billion in fiscal 2022, thereby registering a CAGR of 9.5%. This rise in industrial construction capex continues to support the growing adoption of fire protection equipment across these segments.

The growth in construction spends coupled with the applicability of multiple regulations, including PESO, OISD, BIS, MBBL, and NBC, are expected to boost the demand for fire protection equipment in the industrial and infrastructure segment.

Key growth drivers for the industrial and infrastructure segment are detailed in Industrial and infrastructure sector-led growth drivers section.

Key end-use industries



Note:

E- Estimated, P- Projected

Figures at the top of the column indicate the share of respective categories in the overall fire protection industrial segment

Industrial and infrastructure includes the following:

- *Industrial: Includes oil and gas, petrochemicals, metal, automobiles, textiles, paper, fertilisers, cement, etc.*

- *Infrastructure: Includes warehouse and cold storage, data centres, airports, telecom, ports, roads, power, urban infrastructure (construction-intensive mass rapid transit system (MRTS), bus rapid transit system (BRTS), water supply and sanitation (WSS) projects, smart cities, and related infrastructure development), railways, irrigation, etc.*
- *Others: includes all the sub-segments excluding oil and gas, infrastructure (including power)*

**-Please note power sector is part of the overall industrial and infrastructure segment. However, as power is one of the key end-use sub-segments in the industrial and infrastructure segment, the same is showed separately for the purpose of this chart*

Kindly note that, due to rounding, the segment-wise figures shown may not add up exactly to the total market size and/or to 100% market share.

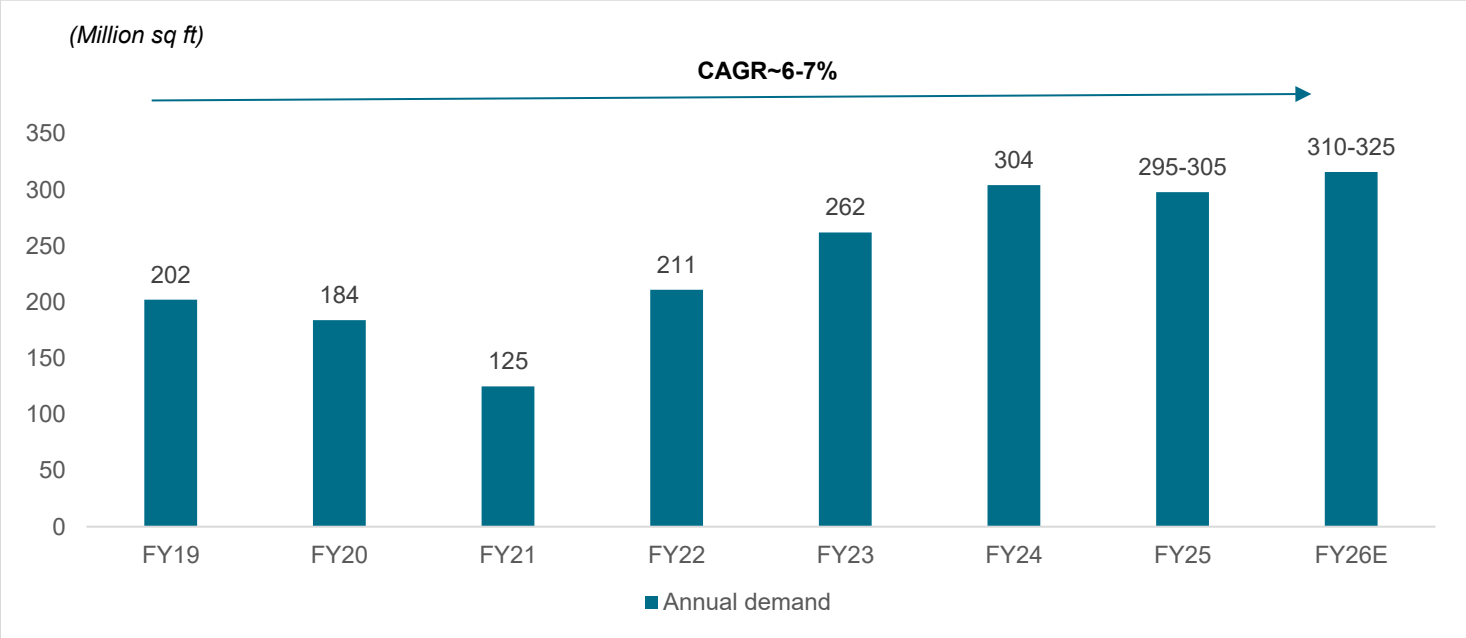
Source: Crisil Intelligence

Rising urbanisation to support fire protection equipment demand in residential segment

The residential segment is estimated to have a 21% market share as of fiscal 2026, accounting for Rs. 23 billion. This segment is supported by improving urbanisation, growing population and increased real estate demand in key cities. The demand for residential real estate is expected to have grown at a CAGR of ~6-7% over fiscals 2019-2026. This growth has propelled the demand for well-equipped fire protection systems. Developers and construction companies are investing in modern fire alarm systems, sprinklers, extinguishers and emergency lighting to meet safety needs and regulatory approvals. More details on regulatory environment related to fire safety are covered in Regulatory environment in India section.

More details on key growth drivers for residential segment are covered in Demographics and consumer-led growth drivers' section.

Residential real estate market in India*



E - estimated

*Note: *Residential real estate market of top seven cities — Mumbai, Delhi-NCR, Pune, Bengaluru, Hyderabad, Chennai, Kolkata*

Source: Industry, Crisil Intelligence

Exports and imports of key fire protection equipment

Based on an analysis of key export segments in the fire protection equipment, the exports of Indian fire protection equipment clocked a CAGR of 8% over fiscals 2020-2026 to reach $107 million in fiscal 2026 as compared to $67 million in fiscal 2020. This can be attributed to the government's growing focus on the manufacturing sector, coupled with players increasingly prioritising branded products and global approvals, which have collectively supported manufacturers. Fire

extinguishers, fire alarms, and fire protection valves are among the key products exported from India, with exports accounting for 8 to 10% of the overall fire protection industry in the country.

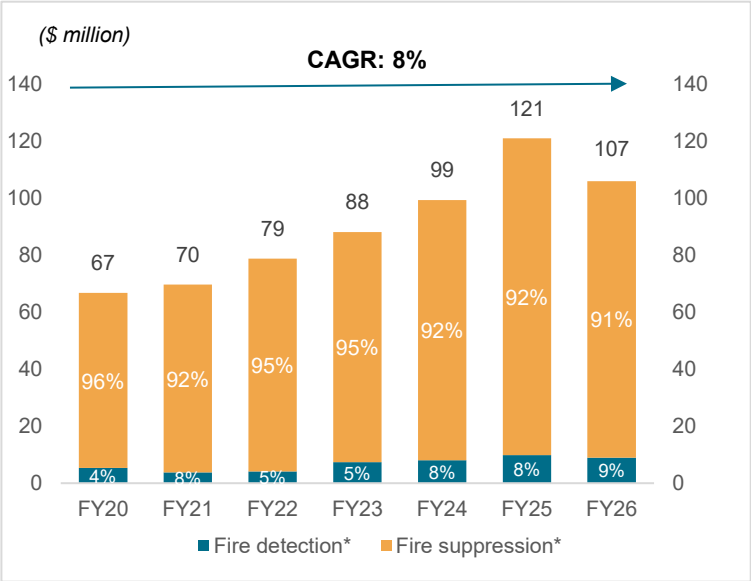
On the imports front, in the early 1990s, critical fire protection equipment and systems such as deluge valves, alarm valves, and medium velocity water spray nozzles were largely imported, owing to the limited availability of Indian manufacturers offering high-quality alternatives such as UL Listed and FM Approved products. In line with the growth in exports, imports increased to $210 million in fiscal 2026 from $104 million in fiscal 2020, reflecting a CAGR of 12%.

In terms of product categories, fire suppression equipment constitutes the majority of trade in the Indian fire protection market. The fire detection segment comprises products such as fire alarms, while the fire suppression segment includes fire extinguishers, safety valves, and similar products. The fire suppression segment accounted for 91% of exports in the last fiscal, valued at ~$97 million, with the balance attributable to the fire detection segment, valued at ~$9 million. Similarly, on the imports side, fire suppression products comprised 90% of imports in the last fiscal, valued at ~$188 million, while fire detection products accounted for the remaining 10%, valued at ~$22 million.

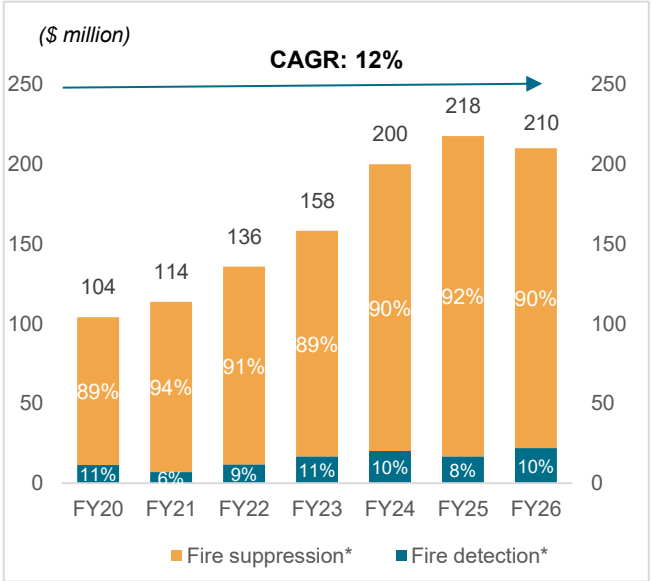
In terms of geographies, the UAE, Kuwait, Qatar, the Kingdom of Saudi Arabia (KSA), Singapore, Malaysia, and Vietnam are the key export destinations for fire protection products from India. On the other hand, China, the US, Germany, Vietnam, and South Korea are the key countries from which fire protection equipment is imported into the country.

Fire protection equipment import-export trend* (Including products from allied engineering industries which has similar HS codes for trade)

Exports



Imports



Note:

HS codes considered for import-export data: 38130000, 84242000, 84814000, 85311020, 90261090, 83061000 and 842410

HS code considered for the fire detection segment: 85311020

HS codes considered for the fire suppression segment: 38130000, 84242000, 84814000, 90261090, 83061000 and 842410

**Please note that the data/ analysis presented above is based on the import and export figures corresponding to the HS codes referenced herein. It may be noted that these HS codes are not exclusive to fire protection equipment, particularly the fire suppression segment, and may also encompass products pertaining to other engineering-related industries. Consequently, the trade data presented is inclusive of all such products tagged under the respective HS codes, and the figures should therefore be interpreted accordingly.*

Source: Ministry of Commerce and Industry, Crisil Intelligence

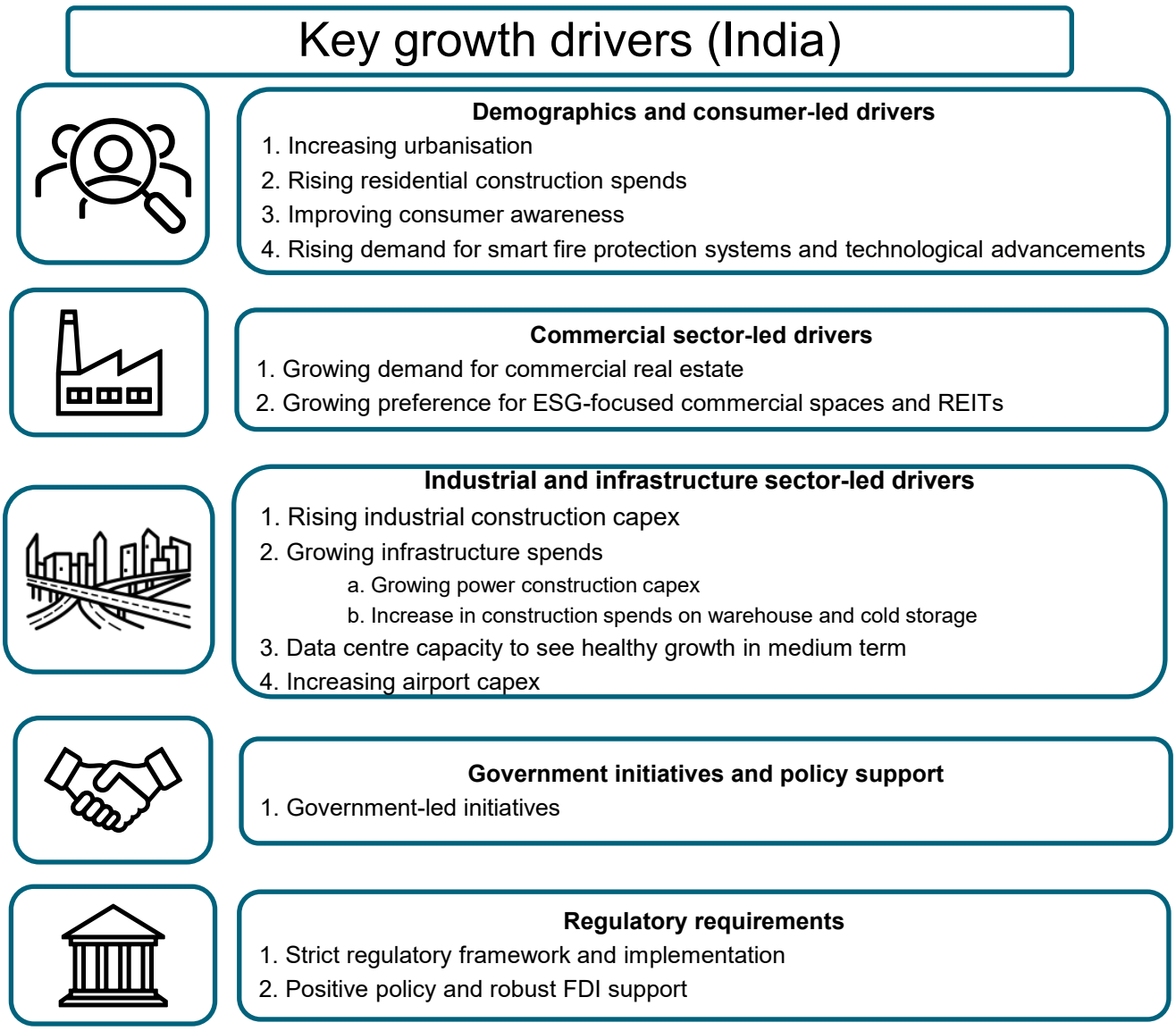
Overview of capex and utilisation levels

India has witnessed significant growth in the fire protection equipment manufacturing sector in recent years, driven by increasing demand from various industries, government regulations and rising awareness about fire safety. Accordingly, players are expanding their existing manufacturing facilities in India to increase production capacity and cater to incremental demand.

Manufacturers are investing in research and development to develop new and innovative fire protection products such as advanced fire detection systems and suppression systems.

In terms of capacity utilisation, fire protection equipment players generally operate at 60-80% utilisation. The utilization depends on several key factors like demand, availability of raw material and availability of skilled workforce. Players generally plan their product manufacturing based on the demand trends and other relevant market conditions to optimally utilise the plant capacity.

Key growth drivers for fire protection equipment market in India



Source: Crisil Intelligence

Demographics and consumer-led growth drivers

Crisil has discussed key demographics and consumer-led growth drivers, including increasing urbanisation, rising residential construction spends, improving consumer awareness and rising demand for smart fire protection systems and technological advancements in this section.

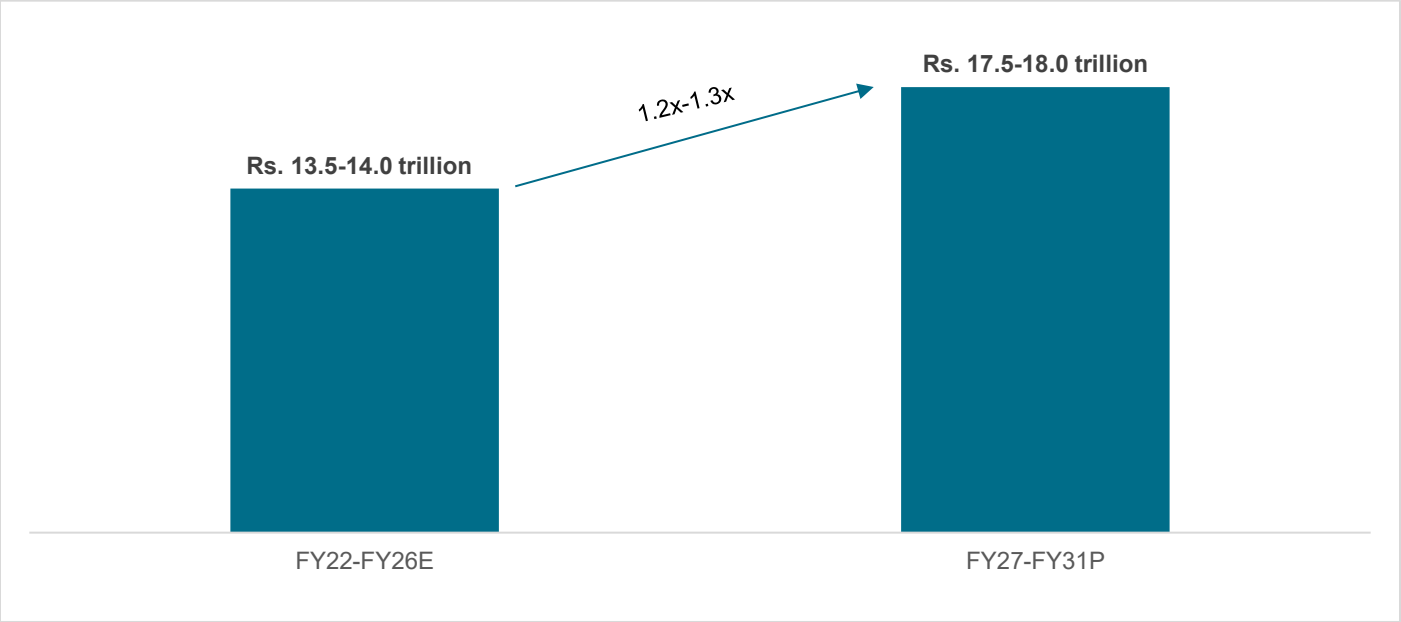
Increasing urbanisation

India's urban population is estimated to rise from 35.1% in 2023 to 38.7% in 2035, which is expected to drive the expansion of densely populated areas, thereby resulting in a high concentration of high-rise buildings, commercial spaces and public spaces. This increased population density and infrastructure complexity may require additional fire safety systems, thereby directly boosting the demand for fire protection equipment in urban set-ups.

Rising residential construction spends

Construction expenditure across the residential segment is expected to grow to Rs 17.5-18.0 trillion over fiscal 2027 to 2031, compared with ~Rs 13.5-14.0 trillion between fiscals 2022 and 2026, driven by improving urbanisation, increasing population and real estate activity in both metro and non-metro regions. This is, in turn, expected to result in a larger volume of built-up space, thereby necessitating adequate fire protection measures. Consequently, the growing building construction spend is expected to have a positive bearing on the fire protection equipment industry in India, providing an additional source of demand.

Residential construction spends



Note:
E- Estimated, P- Projected
The numbers in the above chart represent cumulative investments for the specific period
Source: Crisil Intelligence

Improving consumer awareness

Growing consumer awareness about fire hazards due to educational initiatives, media coverage and more stringent regulations has led to an emphasis on fire safety protocols by institutional as well as retail buyers. For example, Union Ministry of Health and Family Welfare, in partnership with all States and Union Territories and in coordination with relevant Central Ministries and Departments, commenced the nationwide observance of Fire Safety Week from 4th May to 10th May 2026, for prioritising and highlighting the issue of fire prevention and safety. This growing awareness is expected to positively influence the demand for fire protection equipment by encouraging compliance with the existing fire safety codes and supporting voluntary adoption.

Rising demand for smart fire protection systems and technological advancements

The integration of Internet of Things (IoT), artificial intelligence (AI) and sensory-driven automation has revolutionised the fire protection infrastructure, enabling the development of modern and sophisticated systems. For instance, AI-powered systems can analyse data from various sources to identify potential fire hazards and enable real-time monitoring, while IoT-enabled devices provide real-time monitoring of fire protection systems, enabling a quick response to potential fires and reducing the risk of false alarms.

As a result, critical sectors such as oil and gas, data centres, pharmaceuticals and high-value assets, including commercial spaces and REITs with a focus on ESG, are expected to be early adopters of these advanced fire protection systems. The adoption of these systems will enhance the overall effectiveness and operational reliability of fire protection infrastructure, driving demand across industries, particularly in areas where automation, data analytics and centralised controls are prioritised, and supporting the growth of smart fire protection systems in high-hazard industries and critical infrastructure.

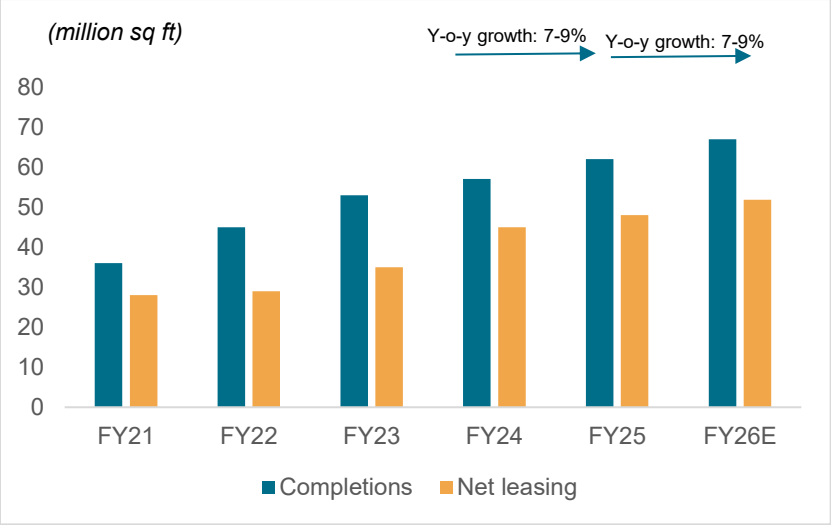
Commercial sector-led growth drivers

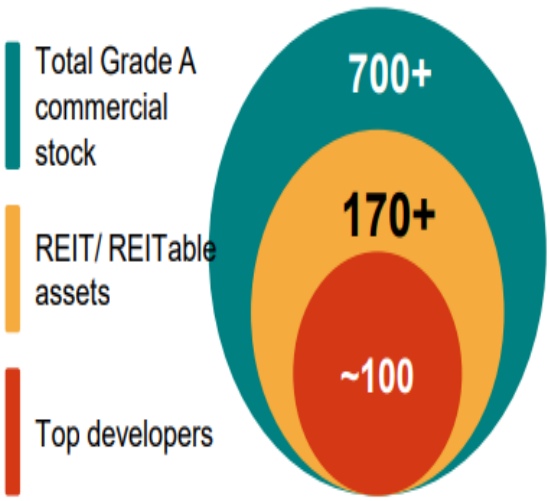
Crisil has looked at growth drivers from the commercial sector in this section. For the purpose of this report, the commercial sector comprises demand from commercial and retail establishments (including hospitality), healthcare facilities, and educational institutions.

Growing demand from commercial real estate

The annual demand-supply in the top seven commercial real estate markets (Mumbai, Delhi-NCR, Pune, Bengaluru, Hyderabad, Chennai and Kolkata) has seen healthy growth, with completions and net leasing each estimated to have registered an increase of 7-9% in fiscal 2025 and fiscal 2026. Net leasing of commercial office space will be driven by factors such as global capability centres (GCCs) showing an increasing preference for India, return to office, increased hiring in key sectors and the expectation of healthy economic growth. In addition, REIT penetration is rising gradually with four listed REITs and a few more in the pipeline. In these REITs, the share of grade A assets was the highest, indicating a shift towards high-end commercial real estate assets. Overall, sustained demand for commercial infrastructure is expected to drive demand for fire protection equipment in India.

Commercial real estate market in India*





**Commercial real estate market of the top seven cities — Mumbai, Delhi-NCR, Pune, Bengaluru, Hyderabad, Chennai, Kolkata*
Source: Industry, Crisil Intelligence

Growing preference for ESG-focused commercial spaces and REITs

The rise in high-quality commercial spaces, coupled with the expansion of REITs that prioritise premium-grade assets, is likely to drive demand for advanced fire protection solutions. Many of these properties are being developed with a focus on environmental, social and governance (ESG) principles, which emphasise safety, sustainability and compliance with global building standards. ESG-focused REITs invest heavily in overall infrastructure, integrating fire detection, suppression and safety systems to protect occupants and assets.

This trend is expected to influence fire safety benchmarks in commercial real estate positively, thereby stoking additional demand for fire protection equipment.

Industrial and infrastructure sector-led growth drivers

Crisil has focused on the industrial and infrastructure-driven growth drivers in this section. In the industrial segment, the primary growth catalysts are expected to be an increase in industrial construction capital expenditure, as well as the rising proportion of oil and gas construction investments within the overall industrial construction capex. Favourable government policies and the ongoing diversification of global supply chains are expected to bolster growth in this segment.

Meanwhile, the infrastructure segment is poised to benefit from growing infrastructure expenditure, particularly in the power, airports and warehouse and cold storage sectors, which are expected to emerge as key growth drivers. These developments are expected to collectively contribute to a favourable outlook for the fire protection equipment market.

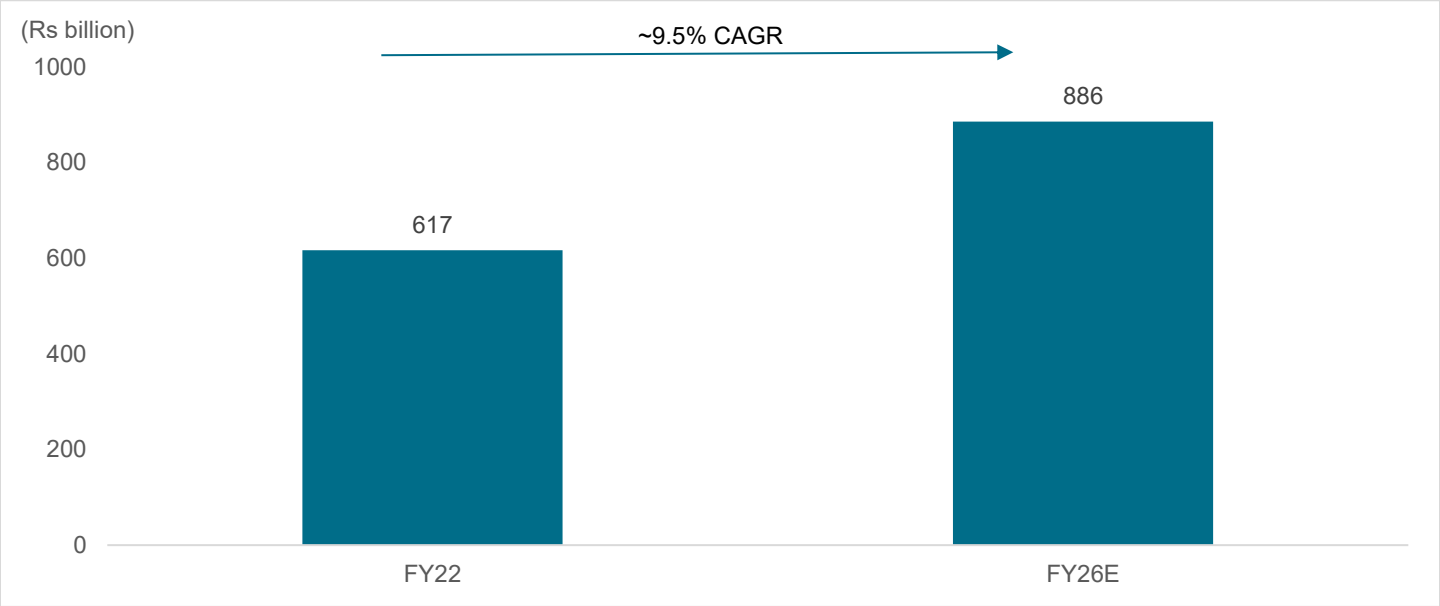
Note: For the purpose of this report the infrastructure sector includes warehouse and cold storage, data centres, airports, telecom, ports, roads, power, urban infrastructure (construction-intensive mass rapid transit system (MRTS), bus rapid transit system (BRTS), water supply and sanitation (WSS) projects, smart cities, and related infrastructure development), railways, and irrigation; and the industrial sector includes oil and gas, petrochemicals, metal, automobiles, textiles, paper, fertilisers, and cement sectors. For more details on segmentation, kindly refer to Market segmentation of fire protection equipment market section.

Rising industrial construction capex

Based on an analysis of eight key sectors (Automobiles, metals, textiles, fertilizers, petrochemicals, O&G, cement, and paper), Crisil estimates construction investment in the industrial segment reached Rs 886 billion in fiscal 2026, reflecting a

CAGR of 9.5% over fiscal 2022. This growth was led by the metals sector, where capital expenditure largely focused on brownfield expansions aimed at enhancing existing production capacities and improving operational efficiencies. Additionally, capacity additions in refineries further contributed to this growth. This rise in industrial construction capex is also expected to positively influence the deployment of fire protection systems.

Construction capex: Industrial segment



Note: The above construction spends are based on the analysis of eight key sectors: oil and gas, petrochemicals, metal, automobiles, textiles, paper, fertilisers, and cement sectors.

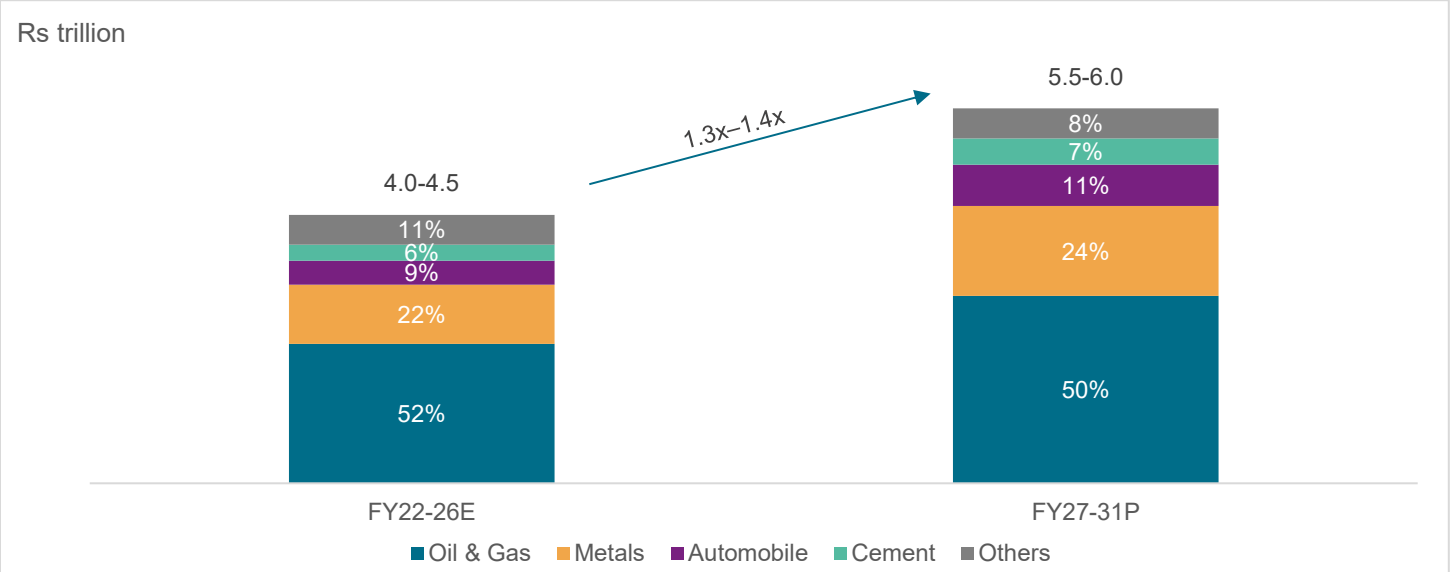
Furthermore, while the PLI scheme entails 14 sectors, Crisil has only considered three capex intensive sectors viz. auto and auto components, textiles and specialty steel for inclusion in its estimates.

Source: Crisil Intelligence

The key reasons for growth of the industrial segment in India, which will influence demand for fire protection equipment positively are as follows:

- The increasing construction spends in the industrial segment, driven by government schemes such as PLI, Make in India, etc and companies diversifying their supply chain are expected to positively impact the establishment or expansion of industrial facilities, a major end-use segment for fire suppression systems and the overall demand for fire suppression equipment.
- The disruption in global supply chains during the pandemic due to supply concentration in a few countries forced the West to look for other manufacturing destinations such as India, Vietnam, Malaysia and Mexico. India is a suitable option for manufacturing as it offers several advantages such as a large local market, young working population group, expanding middle class and cheaper labour.
- Furthermore, oil and gas is expected to remain the dominant segment, accounting for a 50% share of the overall industrial construction sector during FY27 to FY31. Given that oil and gas facilities are considered high risk and high hazard on account of the flammable nature of the materials handled and processed, they are typically governed by multiple stringent fire safety norms, thereby supporting sustained demand for fire protection equipment.

Break-up of industrial segment construction capex



Note: P: Projected
Source: Crisil Intelligence

Consequently, growing construction spending in industrial sector will serve as a key driver for the fire suppression market, particularly for foam equipment & suppression systems, dry chemical suppression systems, gas-based systems and other specialised fire suppression systems.

Growing infrastructure construction spends

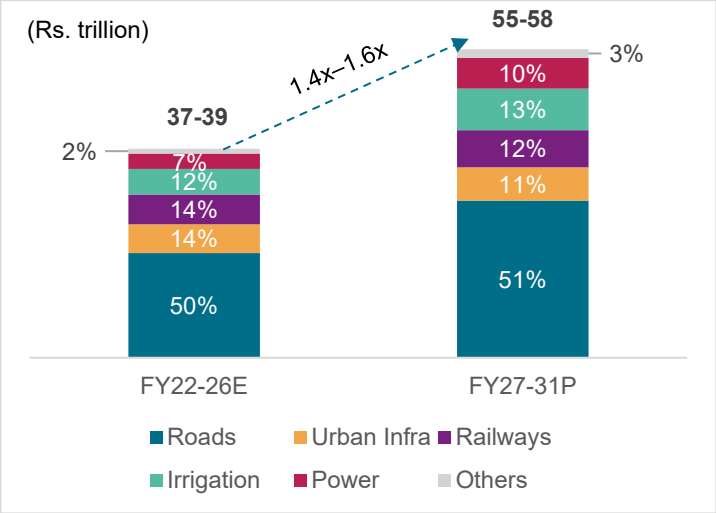
As per Crisil estimates, infrastructure related construction capex in India is estimated to have increased by 1.4-1.6 times from Rs 37-39 trillion over fiscal 2022 to 2026 to reach Rs 55-58 trillion between fiscals 2027 and 2031, mainly driven by increased spending on infrastructure projects such as roads and railways, supported by both central and state government investments.

Within infrastructure, Crisil estimates that construction expenditure in metro projects will reach Rs 2.2-2.4 trillion during fiscal 2027 to fiscal 2031, up 1.6-1.7 times over fiscal 2022 to fiscal 2026, garnering the second-largest share in urban infrastructure investments, which includes construction-intensive mass rapid transit system (MRTS), bus rapid transit system (BRTS), water supply and sanitation (WSS) projects, smart cities and related infrastructure development.

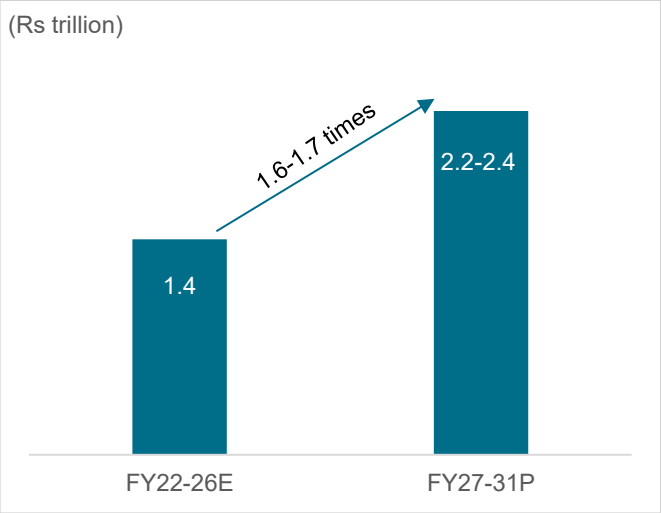
Hence, overall increase in the construction capex of the infrastructure segment, including in segments such as power, warehouse and cold storage, metros and airports, which require comprehensive fire protection infrastructure, will drive demand for fire protection equipment.

Overall infrastructure investments

Total construction investments in infrastructure



Total metro construction investments



Notes: P: Projected; Others includes Ports, warehousing, Telecom towers etc.
Source: Crisil Intelligence

Growing power construction capex

As per Crisil estimates, construction spending in the power sector is estimated to have surged by approximately 38% in FY26, driven by a significant ramp-up in renewable energy capacity additions. Going forward, construction spending is expected at a CAGR of ~10–11% during FY27–FY28, as investment intensity is likely to normalize following substantial capacity additions in FY26.

This substantial increase underscores a robust shift towards RE sources, including investments in new generation infrastructure and transmission facilities, which will require specialised fire protection equipment to safeguard life and property, given the risk of electrical fires and its negative impact on equipment as well as operations. Hence, increasing power construction capex will push demand for certified fire protection equipment related to the power industry.

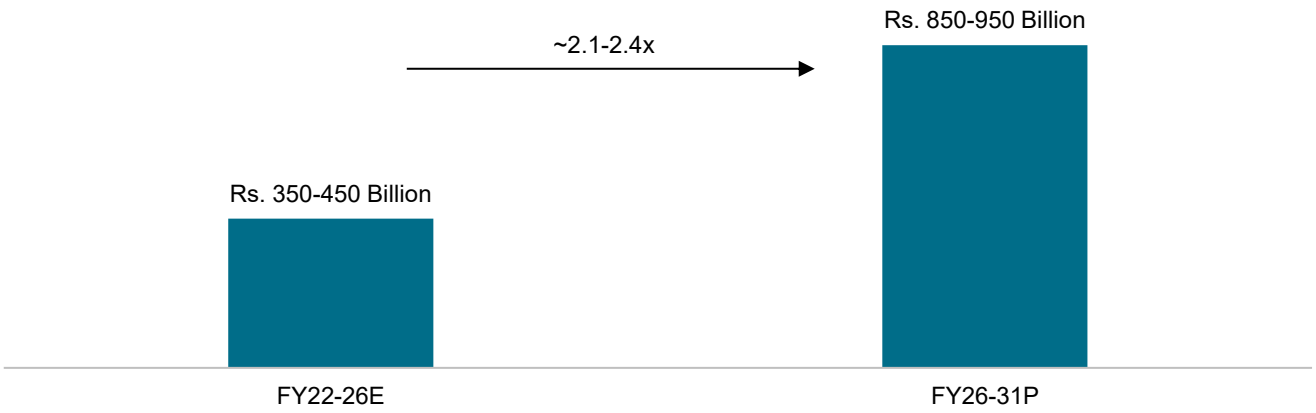
Increase in construction spends on warehouse

Construction investment across key end-use segments for fire protection equipment, such as warehouses, is witnessing an upward trend, which is expected to drive demand for high-end fire suppression systems. Construction spends in the warehouse segment (agricultural and industrial) are expected to reach Rs 850 to 950 billion over the next five years, representing 2.1 to 2.4 times the construction spends witnessed between FY22 and FY26, supported by expectations of rising demand from factors such as e-commerce, logistics, and allied activities.

In area terms, incremental warehousing demand grew at a robust CAGR of 23 to 27% between fiscals 2021 and 2025, driven by the post-pandemic e-commerce boom and a low initial base, with incremental demand standing at 20 to 24 million sq. ft. For fiscal 2026, CRISIL Intelligence estimates that incremental demand expanded by 11 to 16%, reaching 60 to 64 million sq. ft, driven by sustained demand for Grade A warehousing spaces across the 3PL, e-commerce, and manufacturing segments.

As these facilities store large volumes of goods, including high-value items, they typically require robust fire safety protocols to ensure the protection of life and property. Consequently, the rising construction spends on warehouse and cold storage infrastructure, coupled with the growing demand for industrial warehousing, is expected to further augment demand for fire protection equipment in India.

Construction investments in warehouse and cold storage



Source: Crisil Intelligence

Data centre capacity to see growth in the medium term

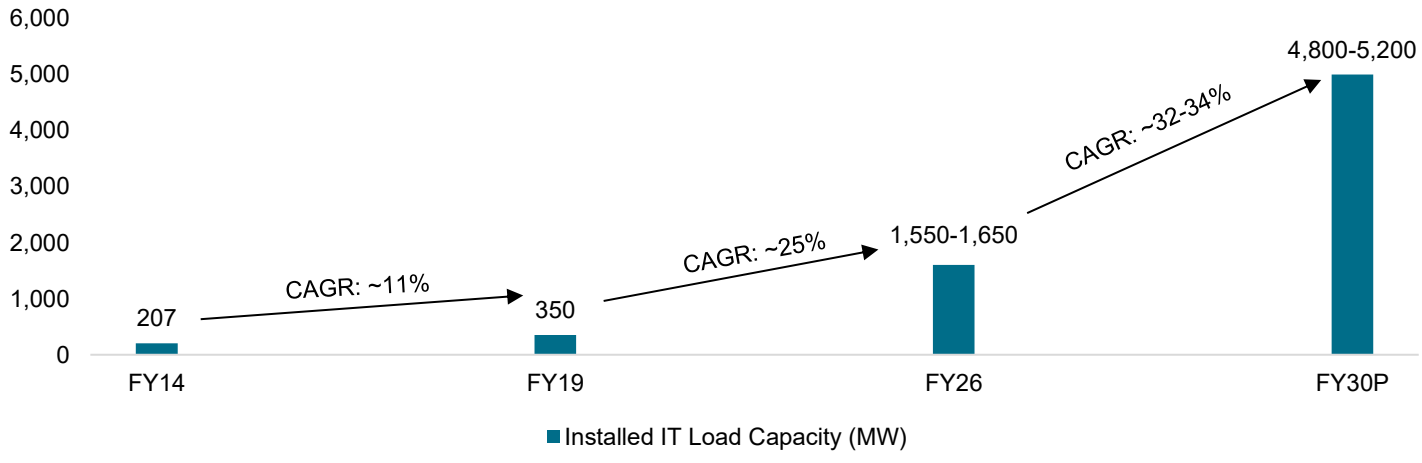
From fiscal 2019 to fiscal 2026, the Indian data centre industry had clocked a CAGR of ~25% in terms of capacity, driven by growth in internet accessibility, surge in e-commerce adoption, rise in digital adoption, remote working and rise in OTT (over-the-top) consumption.

The installed capacity of data centre industry is estimated to register a CAGR of ~32-34% between fiscals 2026 and 2030 to reach 4,800-5,200 MW by fiscal 2030, owing to regulatory push for data localisation, rapid growth in data consumption, rise of colocation and edge computing. These structures, which require specialised fire suppression infrastructure due to their high-value and high-risk nature, will potentially drive growth in the fire suppression market.

As data centres house expensive, critical IT infrastructure and support critical operations, any fire-related disruptions can cause significant operational and financial losses. Hence, these facilities require sophisticated, non-disruptive fire protection equipment, such as clean agent suppression systems and early detection equipment, to ensure smooth operations.

Accordingly, the anticipated increase in the installed capacity of data centre industry in India is expected to bring a positive impact on the demand of specialised fire protection equipment.

Data centre industry in India (installed capacity)



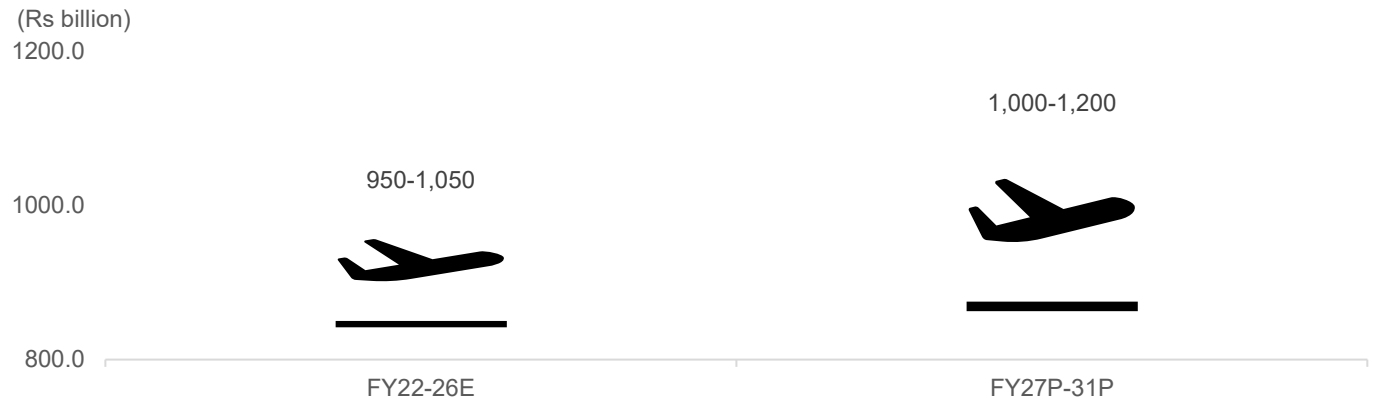
Note:
E- Estimated, P- Projected
Capacity refers to the data centre load that is consumed or is dedicated to IT equipment such as servers, storage equipment, communications switches and routers. Power for lighting or cooling the data centre is excluded from IT power. Further, the capacity mentioned in the above chart pertains to third party data centre only.
Source: Industry, company reports, Crisil Intelligence

Increasing airport capex

According to CRISIL, airport investments are projected to reach Rs 1 to 1.2 trillion between fiscals 2027 and 2031, up from an estimated Rs 950 to 1,050 billion during fiscals 2022 to 2026. This uptick in capex is largely on account of the upcoming second phase of the Jewar and Navi Mumbai International Airport (NMIA) projects, along with major brownfield expansions, including works at Hyderabad airport (Phase 3) and the expansion of the Ahmedabad and Mangalore airports. In addition, there exists potential for the privatisation of 25 airports. The Government of India has also granted 'in-principle' approval for 21 new greenfield airports, of which 12 are already operational.

The development of these new airports, coupled with the modernisation of existing ones, is likely to generate incremental demand for certified and specialised fire protection equipment, given that airports are subject to rigorous safety and evacuation standards.

Airport capex



Note:
E- Estimated, P- Projected
Source: Crisil Intelligence

Government initiatives and policy support

Government-led initiatives

Government initiatives aimed at strengthening fire protection infrastructure and creating awareness are expected to bring a positive influence on the demand of fire suppression equipment in India.

- For instance, the Scheme for Expansion and Modernisation of Fire Services in the States, launched in 2023, helps the states to improve and expand their fire services by setting up new fire stations, supporting state training centres, modernisation of fire services by procuring modern firefighting equipment and strengthening the state headquarters and urban fire stations
- The government has also launched multiple public awareness campaigns to increase awareness about fire safety. For example, Union Ministry of Health and Family Welfare, in partnership with all States and Union Territories and in coordination with relevant Central Ministries and Departments, commenced the nationwide observance of Fire Safety Week from 4th May to 10th May 2026, for prioritising and highlighting the issue of fire prevention and safety.
- These awareness campaigns are expected to increase consumer awareness and adoption of fire safety measures, which in turn is expected to drive the demand for fire protection equipment

Regulatory requirements-driven growth drivers

Strict regulatory framework and implementation

The government’s increasing focus on fire safety has led to the introduction of stricter building codes, insurance requirements and regular fire safety campaigns. These initiatives have increased awareness about the importance of fire safety and driven the adoption of fire protection equipment in residential, commercial and industrial spaces, directly contributing to the demand for fire protection equipment in India. Further, improving the compliance environment regarding fire safety, including increasing fire safety campaigns by the governments, is also expected to boost the demand for fire protection equipment.

Positive policy and robust FDI support

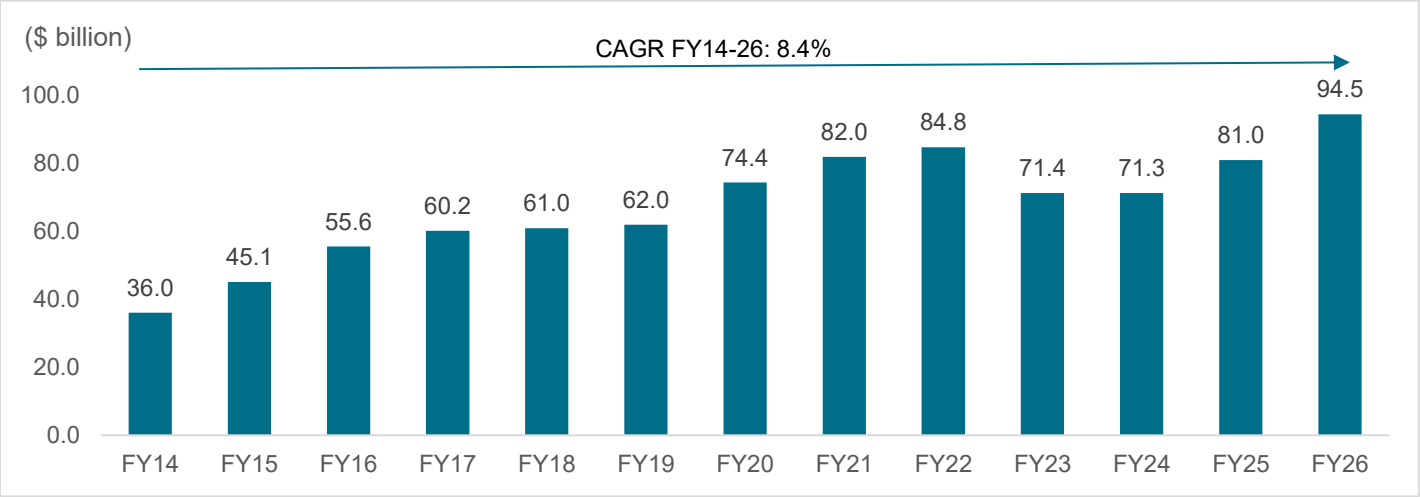
India's FDI inflows improved to $94.5 billion in fiscal 2026, compared with $36.0 billion in fiscal 2014, reflecting enhanced investor confidence. This growth has been supported by reforms such as the liberalisation of FDI norms across key sectors, the introduction of the GST, and initiatives such as the Make in India programme. To sustain this trajectory, the government continues to undertake measures aimed at attracting greater FDI, including the removal of regulatory barriers, streamlining of processes, development of infrastructure, strengthening of logistics, and improvement of the overall business environment through enhancements to the Ease of Doing Business (EoDB). Notably, through the Jan Vishwas (Amendment of Provisions) Act, 2023, the government has decriminalised 183 provisions across 42 central acts spanning 19 ministries and departments, with a view to enhancing the ease of living and the EoDB.

Policy reforms such as these, aimed at improving the ease of doing business and permitting greater FDI in core sectors, including manufacturing, are expected to have a positive bearing on the establishment of new industrial facilities in India by both domestic and international players.

Collectively, these reforms are expected to attract higher FDI inflows into India, including in fire-intensive sub-sectors such as pharmaceuticals and non-conventional energy. This, in turn, is expected to positively influence the development of the manufacturing sector, which remains a key end-use segment for fire protection equipment. As these manufacturing units

are required to adhere to fire safety norms to minimise the risk of loss of life and property, they are, in turn, expected to drive demand for fire suppression systems.

Total FDI inflow in India

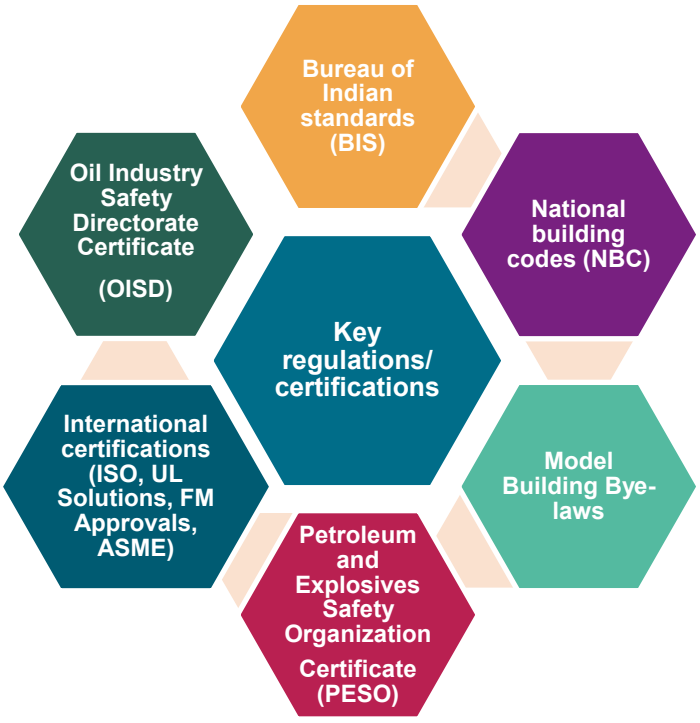


Source: Department for Promotion of Industry and Internal Trade (DPIIT), Crisil Intelligence

Regulatory environment in India

The fire protection equipment industry in India is governed by the regulatory framework, majorly by the Bureau of Indian standards (BIS) and, National building codes (NBC), etc. Further, types of construction—industrial, infrastructure, and residential—and risk classification of building also influences the regulatory requirements related to fire protection equipment.

Key regulations/ certifications



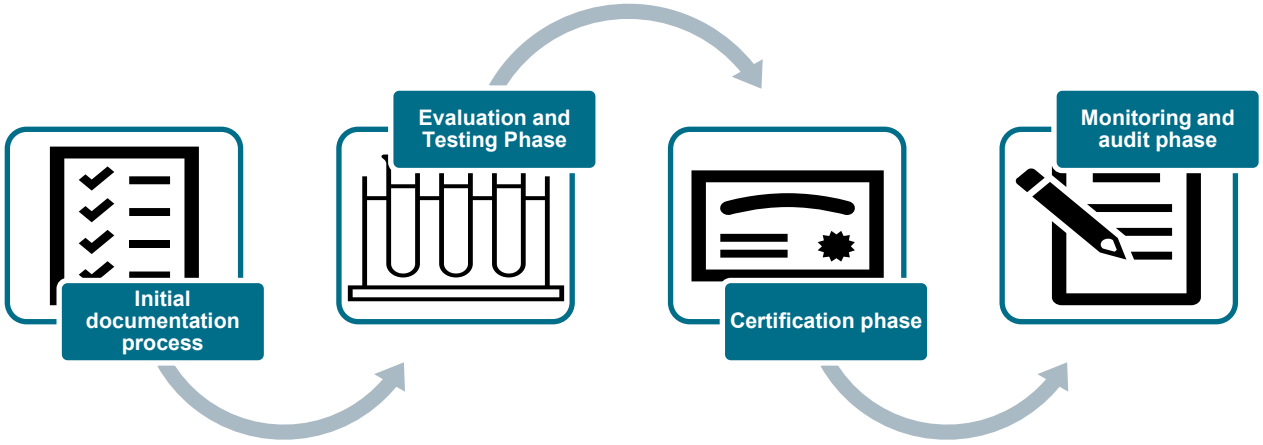
Source: Crisil Intelligence

Certification process

Major certification processes involve a comprehensive and rigorous evaluation of products, systems or services to ensure compliance with specific standards and requirements. The certification process consists of three major steps:

- **The initial phase**: This phase includes the application process, documentation and technical clarification. The applicant submits their application, provides necessary documentation and clarifies technical aspects of their product or system in the initial phase, setting the foundation for subsequent steps and ensuring that necessary information is gathered and reviewed.
- **The evaluation and testing phase**: This phase involves a thorough assessment of the product or system, including site visits, product checking, quality checking, document verification, system checks and other evaluations to verify compliance with the relevant standards. This phase is critical in ensuring that the product or system meets the required specifications and performance criteria.
- **The certification and monitoring phase**: The certification and monitoring phase is the final phase, which involves finalising technical matters, verifying compliance, completing documentation and issuing the certificate. This phase also includes regular audits and monitoring to ensure ongoing compliance and maintenance of the certified product or system, providing assurance to stakeholders that the certified entity continues to meet the required standards.

Certification process



Source: Crisil Intelligence

List of key certifications

BIS

- BIS mandates certification for a wide range of fire protection equipment that ensures product safety and operational reliability of fire protection equipment. These certifications are required for manufacturing, sale and installation of such equipment within India, especially in public infrastructure and regulated sectors.

Key BIS standards related to fire protection equipment

Code	Description
IS 15683:2018	Portable fire extinguishers — performance and construction — specification (first revision)
IS 16018:2012	Wheeled fire extinguishers - performance and construction - specification
IS 2190:2024	Selection, installation and maintenance of first-aid fire extinguishers - portable and mobile - code of practice (fifth revision)
IS 4947:2006	Gas cartridges for use in fire extinguishers - Specification (Third Revision)
IS 15105:2021	Design and installation of fixed automatic sprinkler fire extinguishing systems - Code of Practice (first revision)
IS 16088:2012	Chlorinated polyvinyl chloride (CPVC) pipes for automatic sprinkler fire extinguishing system - Specification
IS 16534:2017	Chlorinated polyvinyl chloride (CPCV) pipe fittings for automatic sprinkler fire extinguishing system - specification
IS/ISO 6182-7:2004 ISO 6182-7: 2004	Fire protection - automatic sprinkler systems: part 7 requirements and test methods for early suppression fast response (ESFR) sprinklers
IS 9972:2002	Specification for automatic sprinkler heads for fire protection service (first revision)
IS 9972:2023	automatic sprinkler heads for fire protection service - specification (second revision)
IS 15105:2021	Design and installation of fixed automatic sprinkler fire extinguishing systems- code of practice

Source: BIS, Crisil Intelligence

NBC

- The NBC 2016 complements BIS requirements by providing a comprehensive set of guidelines on fire prevention, life safety and fire protection in building design and construction
- For instance, Part 4 of the NBC specifically addresses fire and life safety and provides construction, occupancy and protection features that are necessary to minimise threat to life and property from fire. It specifies the demarcation of fire zones, restrictions on construction of buildings in each fire zone, classification of buildings based on occupancy, types of building construction according to fire resistance of the structural and non–structural components and other restrictions and requirements necessary to minimise danger to life from fire, smoke, fumes or panic before the buildings can be evacuated. The provisions covered in this part are broadly divided into three areas: fire prevention, life safety and fire protection
- Additional fire safety requirements for high rise-building, atrium, commercial kitchen, car parking facilities, metro stations, metro trainways and measures for venting in industrial buildings are also covered in this part

For a detailed overview, kindly refer to National Building Code of India (NBC), 2016 - Part 4: Fire and Life Safety

Provisions/clauses related to fire protection equipment under Part 4 of the NBC

Clause	Related to
1.2	Applicability
2.33	Terminology
2.38	Terminology
2.64	Terminology
3.1	Classification of buildings (fire prevention)
4.9	Requirements related to fire detection and alarm
5	Fire extinguishers/ fixed firefighting installations
Annex E (Clauses 5.1.4 and 6)	Additional requirements for high-rise buildings
Annex J (Clause 6.4.4)	Fire and life safety requirements for metro stations

Source: NBC, Crisil Intelligence

Model Building Bye- Laws

- In 2003, the Ministry of Urban Development desired that Model Building Bye- Laws (MBBL) be prepared, in view of Bhuj Earthquake that occurred in 2001 to put emphasis on structural safety of buildings and for the guidance of the state governments. Accordingly, the MBBL 2004 incorporated the provisions of structural safety and other provisions, such as rainwater harvesting and wastewater recycling, solar assisted heating, barrier-free public buildings and fire safety. The bye-laws were circulated to all the 28 states and 8 union territories, wherein 22 states and union territories have undertaken comprehensive revision of their respective building bye-laws since 2004.
- In 2015, the Ministry of Urban Development identified the need to revise the Model Building Bye-Laws 2004 keeping in view emerging issues such as norms for rooftop solar PV installation, segregated sanitation facilities for visitors in public buildings, additional provisions in building regulations for natural hazard prone areas, conservation of heritage sites, including heritage buildings, heritage precincts and natural feature areas, bye-laws for safe use of glass, barrier-free environment for disabled, children and old persons and mitigation of the effects of electromagnetic radiation on built spaces

- The chapter 11 of the MBBL 2016, which focuses on fire protection and fire safety requirements, covers fire protection requirements for multiple structures mentioned in the table below.

Key provisions/ clauses under the MBBL related to fire

Clause	Related to
11.1	Scope
11.2	Procedure for clearance from fire service
11.3	Renewal of fire clearance
11.19	Fire protection requirements
11.19.1	First aid /fixed firefighting /fire detection systems and other facilities
11.21	Automatic sprinklers
11.23	Fire alarm system
11.29	Fire prevention

Source: MBBL, Crisil Intelligence

Sector-specific requirements

There can be additional requirements based on the fire protection equipment used and the structure and the use of buildings where these equipment are installed. For example, the Petroleum and Explosives Safety Organisation (PESO) ensures that the prescribed safety and firefighting norms and equipment under the petroleum rules are completely adhered to at the retail petrol pumps outlet before issuing the explosive license.

Some of the key certifications required in critical sectors are provided in the following table:

Some key sector-specific certifications

Sector	Governing body	Standard/ guidelines/ provisions	Description
Petrol pumps	Petroleum and Explosives Safety Organisation (PESO)	Petroleum Rules, 2002	PESO has informed that the licenses (including firefighting facilities) for retail outlets are issued according to the safety provisions stipulated under the Petroleum Rules, 2002. The design and the layout of petrol pumps are approved according to the Schedule IV of the Petroleum Rules, 2002. The requirement of the firefighting facilities is elaborated in the conditions of the license and the said Rules.
Oil and gas	Oil Industry Safety Directorate (OISD)	OISD-GDN-115	Guidelines on firefighting equipment and appliances in the petroleum industry
		OISD-STD-116	Fire protection facilities for petroleum refineries and oil/ gas processing plants

Sector	Governing body	Standard/ guidelines/ provisions	Description
		OISD-STD-117	Fire protection facilities for petroleum depots, terminals, pipeline installations and lube oil installations
		OISD-STD-142	Inspection of firefighting equipment and systems
		OISD-STD-156	Fire protection facilities for ports handling hydrocarbons
		OISD-STD-164	Fireproofing of steel supporting structures in the oil and gas industry
		OISD-GDN-169	OISD guidelines on small LPG bottling plants (design and fire protection facilities)
		OISD-STD-173	Fire prevention and protection systems for electrical installations
		OISD-STD-189	Standard on firefighting equipment for drilling rigs, work over rigs and production installations
		OISD-GDN-228	Selection, training and placement of fire operators in the hydrocarbon and petrochemical Industry
		OISD-STD-235	Storage, handling, refuelling and firefighting at aviation fuelling stations
Government explosives establishments	Storage & Transport of Explosives Committee Centre for Fire, Explosive and Environment Safety (CFEES), DRDO	STEC Pamphlet - 6	Regulations on fighting fires in government explosive establishments

Note:
The above list of certificates, governing bodies, and standards/ guidelines/ provisions is only indicative and not exhaustive.
Source: Crisil Intelligence

International certifications (UL Solutions, FM Approvals, ISO, etc.)

In addition to the statutory and sector-specific certifications, companies may also need to adhere to international standards/ obtain third-party certifications — e.g., National Fire Protection Association (NFPA), FM Approvals, Underwriters Laboratories (UL) and International Organization for Standardization (ISO) — depending on the project requirements.

To obtain these certifications, companies must undergo multiple testing and inspection processes. Additionally, although these processes generally do not have any expiry date, regular audits are required for valid certifications. For example, for certifications by UL Solutions and FM Approvals, product-level approval is obtained after a stringent testing procedure, and quarterly audits may be required for products post-approval. The entire approval process can be lengthy (1-2 years) as well as expensive (cost can run up to Rs 10 million and above).

- Additionally, some companies, especially in the B2B segment, maintain vendor lists, which include manufacturers/ companies that are eligible to provide fire protection equipment to the company. The entire process of becoming an approved vendor is usually time-consuming and complex, requiring significant time and resources to meet the required standards and certifications.

Overall, the certification process for fire suppression equipment and systems can be complex and time-consuming, requiring companies to conform to multiple standards, certifications and laws depending on the project requirements. Furthermore, becoming an approved vendor can take several years, and companies must be prepared to invest significant time and resources to meet the required standards and certifications.

Hence, these certifications create high entry barriers and reinforce customer stickiness, especially in industries such as oil and gas, infrastructure, and manufacturing, where clients prioritise certified partners with proven compliance and reliability.

Key international certifications

Name	Founding year	Description	Tentative timeline	Cost	Indian company with certification*
UL Solutions	1894	UL is a global safety certification company that provides testing, inspection and certification services for multiple products, including electrical and electronic devices and fire safety products. **Requirements** Certification has product-specific and technical requirements, including product assurance, inspection and testing, documentation, calibration, material control (such as procurement, verification and handling), and other processes necessary to assure compliance with UL requirements. As per its website, UL can also access operational adherence to applicable regulations and standards for manufacturing facilities. Services include plan reviews, onsite evaluations to confirm adherence to installation codes, critical safety issue checks, and assessment of building product and component performance. The company's	6 months-1 year	$20,000-$200,000	Ceasefire Industries, Firetech Equipment & Systems, Fluid Pumps & Equipment, HD Fire Protect, Honeywell, Johnson Controls (India), Newage Fire Fighting Company, Vimal Fire Controls, Safex Fire Services Limited, De's Technico Limited,

Name	Founding year	Description	Tentative timeline	Cost	Indian company with certification*
		facility certification services encompass digital security solutions, food safety and supplier audits, and testing of medical equipment and devices.			
FM Approvals	1886	FM Approvals is an international third-party testing and certification company, requiring high standards of quality, technical integrity and performance. **Requirements** Successful certification is based on satisfactory evaluation of the product and the manufacturer in major areas. This includes examination and testing of production samples; suitability of the product; product performance as specified by the manufacturer and required for certification; durability and reliability of the product, as far as practical; and other processes necessary to assure compliance with certification requirements. An examination of manufacturing facilities and audit of quality control procedures are carried out to evaluate the manufacturer's ability to consistently produce the product that was examined and tested.	6 months-18 months	$25,000-$200,000+	HD Fire Protect, Safex Fire Services, Newage Fire Fighting Company, Vimal Fire Controls, Firetech Equipment & Systems, Fluid Pumps & Equipment, Johnson Controls (India), Honeywell
CE	1985	Conformité Européenne (CE) marking is a mandatory conformity marking required by the European Union (EU) for products sold within the European Economic Area (EEA). CE marking is only obligatory for products for which EU specifications exist and require the affixing of CE marking. **Requirements** For certification, the manufacturer needs to ensure conformity with all relevant EU-wide requirements, determine whether one can assess the product by oneself or if one has to involve a notified body, put together a technical dossier documenting conformity, and draft and sign an EU declaration of conformity	6-12 months	$20,000-$75,000	HD Fire Protect, Newage Fire Fighting Company, Vimal Fire Controls, Ceasefire Industries Pvt Ltd., Firetech Equipment & Systems, Johnson Controls (India), Honeywell
NFPA	1896	NFPA is an international non-profit organisation committed to eliminating death, injury, property damage and economic loss from fire, electrical and other hazards. It develops and publishes more than 300 consensus codes and standards intended to minimise the possibility and effects of fire and other risks.	The adoption and implementation timeline for NFPA standards can vary	-	-

Name	Founding year	Description	Tentative timeline	Cost	Indian company with certification*
			significantly depending on the jurisdiction and the specific standard.		
ASME[1]	1880	The American Society of Mechanical Engineers (ASME) is a not-for-profit membership organisation that enables collaboration, knowledge sharing, career enrichment and skills development across all engineering disciplines, towards a goal of helping the global engineering community develop solutions to benefit lives and livelihoods. ASME has expanded through the decades to include more than 140,000 members in 151 countries. **Requirements** To obtain accreditation or certification, applicants should review the relevant information on the ASME website, decide on the scope of work and obtain required standards. They must also enter into an agreement with an authorised inspection agency (AIA) if necessary and prepare a quality manual. Before submitting an application, the applicant should indoctrinate and train personnel to implement the quality programme. A certificate will be granted after the applicant successfully demonstrates implementation of its quality programme.	6-7 months	$15,000-$25,000	HD Fire Protect, Firetech Equipment & Systems
Lloyd's Register (LR Type Approval)	1760	Lloyd's Register (LR) is a global provider of classification and compliance services to the marine and offshore industries. LR Type Approval is an independent certification that verifies a product's compliance with specified standards and/ or LR rules. **Requirements** The approval is based on two key components: 1. An examination that includes design review and testing of the product or testing of representative samples of the product 2. Verification of satisfactory control of production (when produced in quantity)	4-6 months	~$10,000	HD Fire Protect, Honeywell

Name	Founding year	Description	Tentative timeline	Cost	Indian company with certification*
		This approval ensures that the equipment meets relevant international standards, regulatory standards and safety requirements, and is reliable and suitable for use in marine environments.			
Country-specific certifications	NA	**China** China Compulsory Product Certification is CCC or 3C. It is the statutory compulsory safety certification system and the basic approach to safeguard the consumers' rights and interests, and protect the personal and property safety, which is adopted widely by international organizations. **Kuwait** Kuwait requires licence for trading of fire safety equipment, fire alarms, fire resistant materials, etc. To obtain the required licence, the applicant must submit samples of the equipment, apparatus and materials to be approved, as recommended by Kuwait Fire Service Directorate, along with required documents.			HD Fire Protect

** Indian companies present in the fire protection equipment space, list is only indicative and not exhaustive*

[1]ASME certification includes advance deposits.

Note: The above list of certificates, requirements, descriptions, tentative timeline, cost and company names is indicative and not exhaustive. The cost mentioned may not include security deposits, late fees, certificate mark fees, remote support fees, etc.

Source: Crisil Intelligence

Snapshot of key international certifications

Certification	Number of years since standard became applicable[1]	Number of countries affiliated with	Number of companies with certification	Number of Indian companies with certification	Total number of standards/products approved
UL Solutions	**132+**	110*	251,612**	3,737	N.A.
FM Approvals	**140+**	N.A.	2,500+	N.A.	130,000
CE	**41+**	32	N.A.	N.A.	N.A.
NFPA	**130+**	N.A.	N.A.	N.A.	422
ASME	**146+**	130+	8,543	438	N.A.
Lloyd's Register	**266+**	138@	N.A.	N.A.	N.A.
ISO	**80+**	176$	N.A.	N.A.	26,397

Note:

1 Following formula is used to calculate number of years since standard became applicable: 2026 - Founding year

** As per their website, number represents UL solution's customers in more than 110 countries*

*** Total number of companies with UL Listed products approved*

@Lloyd's Register (LR) was founded in 1760; and as per their website they work with clients and partners in one hundred and thirty-eight countries

$ As per their website, number represents members representing ISO in their country and there is only one member per country

Note: NA – not available

Source: Company Websites, Crisil Intelligence

Assessment of the fire suppression equipment market

Fire suppression systems, also known as firefighting or fire response systems, are an integral component of modern fire protection infrastructure, designed to detect and extinguish fires at an early stage, thereby minimising harm to life and property.

The primary objective of a fire suppression system is to respond rapidly to fire outbreaks, often before human intervention is possible, usually using a suitable extinguishing agent that is compatible with the nature of fire, as well as characteristics of the protected environment. For the same reasons, the selection of a suitable fire suppression system is guided by multiple factors, including the type of occupancy, classification of fire hazard, equipment vulnerability and operational continuity requirements. Key fire suppression equipment includes fire sprinklers, fire hydrants, hydrant valves, deluge valves and pre-action systems, monitors & monitor nozzles, fire nozzles, hose reels, hose boxes, foam equipment & suppression systems, gas-based products, and fire blankets.

Overall, these systems function as active fire suppression mechanisms and are typically installed in an environment where fire risk is high, and the value of protected assets is significant. Furthermore, deployment of these systems is often mandated by building codes, fire safety regulations and industry-specific management standards.

For details on major types of suppression systems, please refer to the ‘Qualitative overview of key fire suppression products’ section.

Manufacturing of key fire suppression products

Fire sprinklers

The manufacturing process of fire sprinklers involves multiple stages, including design and material selection, assembly, and testing.

The stages of fire sprinkler manufacturing and their details are as follows:

Stage	Details
Design and Engineering	Fire sprinklers are designed according to specific standards and codes. Some of the codes include NFPA, UL, etc. These codes usually specify the flow rates, operating pressures, temperature ratings, and sprinkler types for different applications (e.g., residential, industrial, commercial).
Material Selection	The main parts of a fire sprinkler are typically made of brass, bronze, stainless steel, or a corrosion-resistant alloy. These materials are chosen for their durability, resistance to corrosion, and ability to withstand high temperatures. The thermal sensing element is typically made of a glass bulb filled with a liquid that expands when heated, or a fusible link made of metal alloys that melt at a specific temperature. Rubber or elastomer materials are often used for O-rings and seals to prevent leaks and ensure proper operation
Manufacturing the Components	The sprinkler body and other metal components are usually produced through casting. Brass or bronze is melted and poured into molds to form the various sprinkler parts. After casting, parts like the sprinkler body, deflector, and threaded ends are machined to precise dimensions. CNC (Computer Numerical Control) machines are used for high accuracy and consistency. Many sprinkler parts, especially the body, are plated or coated to prevent corrosion. Common coatings include chrome, nickel, or a specialized protective coating that ensures the sprinkler will remain functional for many years. If the sprinkler uses a glass bulb for activation, the bulb is manufactured by melting and forming glass to create a hollow chamber. The chamber is filled with a liquid that expands when heated, and the bulb is then sealed.
Quality Control and Testing	All parts are visually inspected for defects such as cracks, misalignment, or manufacturing flaws. Sprinklers undergo pressure testing to ensure that they can withstand the required water pressure without failure. They are often tested in water-filled tanks or with specialized equipment that simulates pressure conditions. The flow rate is checked to make sure the sprinkler will discharge water at the proper rate and pattern when activated. For glass-bulb sprinklers, the thermal sensitivity is verified by subjecting the bulbs to different temperatures to ensure they activate at the correct temperature.

Source: Crisil Intelligence

Foam equipment & suppression systems

The manufacturing process of foam equipment & suppression systems requires careful control of raw materials, mixing, and foaming processes to ensure that the final product meets the required fire protection standards and regulations. Fire-fighting foam is mixture of hydrocarbon surfactants, fluoro surfactants, solvents, foam stabilisers, polymers, glycols, etc. The foam is typically discharged through a dispensing gun or nozzle, which allows for precise control over the amount and direction of the foam. After discharge, the foam expands to fill the gap and provides a fire-resistant seal. The foam is usually stored in pressurised containers or tanks, which are designed to maintain the foam's stability and prevent degradation. It is recommended to store the foam in a cool, dry place, away from direct sunlight and heat sources, with an ideal storage temperature typically ranging from 15°C to 49°C (-22°F to 120°F), but specific recommendations can vary. Storage temperature ranges are crucial for maintaining the foam concentrate's effectiveness and preventing damage to the container.

The stages of foam equipment & suppression systems manufacturing and their details are as follows:

Stage	Details
Raw Materials mixing and blending	Key raw materials include hydrocarbon surfactants, fluoro surfactants, solvents, foam stabilisers, polymers and glycols. The selection of these materials depends on the desired properties of the final product, such as density, thermal insulation, and fire resistance. The raw materials are mixed and blended in a specific ratio to create a uniform mixture. This mixture is then fed into a machine that creates the foam.
Foam Solution Generation and Aeration	The foam concentrate is first proportioned with water (example: 1%, 3% or 6%) using equipment such as an in-line eductor or bladder tank to form a foam solution. This solution is then aerated through aspirating or non-aspirating nozzles, foam makers, or monitors, which introduce air to generate expanded foam. Depending on the expansion ratio, foam is classified as low (up to 20:1), medium (20:1-200:1), or high (200:1-1000:1) expansion, suited to different fire scenarios. Key quality parameters, such as drainage time and bubble stability, determine how effectively the foam forms a smothering blanket over the fuel surface.
Testing and Inspection	Rigorous testing and inspection are crucial to ensure the equipment functions as intended and meets safety standards. This includes verifying the quality of the foam concentrate, testing the proportioning and aeration systems, and ensuring the mechanical components like pumps and nozzles operate correctly. Inspections also cover the integrity of the equipment's physical structure and the proper functioning of any associated alarms or control systems.
Key Sizes	Foam fire extinguishers, commonly found in factories, offices, and other locations, are available in various sizes with the most common being a 6-liter capacity. Other available sizes include 2-liter, 3-liter, and 9-liter.

Source: Crisil Intelligence

Deluge and pre-action systems

Deluge and pre-action systems are types of fire suppression systems that use a network of pipes to distribute water or a fire suppressant agent to extinguish fires.

The manufacturing process of these systems involves several steps:

Stage	Details
Designing	The design requirements for the deluge valve are determined based on the specific application, including the type of fluid to be used, pressure rating, and flow rate. The materials used to manufacture the deluge valve are selected based on their strength, corrosion resistance, and durability.
Manufacturing process	Casting: The deluge valve components, such as the valve body, bonnet, and trim, are cast using materials such as Brass, Bronze, Stainless steel and Ductile iron. Machining: The cast components are machined to precise tolerances using computer numerical control (CNC) machines or manual machining techniques. Assembly: The deluge valve components are assembled, including: Valve body, Bonnet, Trim (e.g., valve seat, stem, and disc), Actuator (e.g., electric, pneumatic, or hydraulic) Welding: The deluge valve components are welded together using techniques such as Shielded metal arc welding (SMAW), Gas metal arc welding (GMAW), Gas tungsten arc welding (GTAW)
Testing and Inspection	The deluge valve is hydrostatically tested to ensure it can withstand the maximum allowed working pressure. The deluge valve is functionally tested to ensure it operates correctly and meets the required flow rate and pressure drop specifications
Key Sizes	Deluge systems utilize deluge valves that are available in various sizes. Common sizes include 50, 80, 100, 150 & 200 mm*

** The list is indicative and not exhaustive*
Source: Crisil Intelligence

Monitors & monitor nozzles

Stage	Details
Designing	The design requirements for the monitors & monitor nozzles are determined based on the specific application, including the type of fluid to be used, pressure rating, and flow rate.
Material Selection	The materials used to manufacture the monitors & monitor nozzles are selected based on their strength, corrosion resistance, and durability.
Manufacturing the Components	Casting: The monitors & monitor nozzles components, such as the monitor body, nozzle, and valve, are cast using materials such as Brass, Bronze, Stainless steel and Ductile iron Machining: The cast components are machined to precise tolerances using computer numerical control (CNC) machines or manual machining techniques. Assembly: The monitors & monitor nozzles components are assembled, including Monitor body, Nozzle, Valve Actuator (e.g., electric, pneumatic, or hydraulic) Welding: The monitors & monitor nozzles components are welded together using techniques such as: Shielded metal arc welding (SMAW), Gas metal arc welding (GMAW), Gas tungsten arc welding (GTAW)
Quality Control and Testing	The monitors & monitor nozzles is hydrostatically tested to ensure it can withstand the maximum allowed working pressure. The monitors & monitor nozzles is functionally tested to ensure it operates correctly and meets the required flow rate and pressure drop specifications. The monitors & monitor nozzles is inspected for any defects or irregularities, such as Visual inspection, Dimensional inspection, Material inspection
Key Sizes	Common sizes for monitors & monitor nozzles typically range from 63mm to 100mm with flow rates from 1750 LPM to 3500 LPM. Larger monitors with higher flow rates, such as 150mm (6") and beyond, are also available for specific applications requiring greater water delivery.*

** Please note the list is indicative*
Source: Crisil Intelligence

Overview of the global fire suppression equipment market

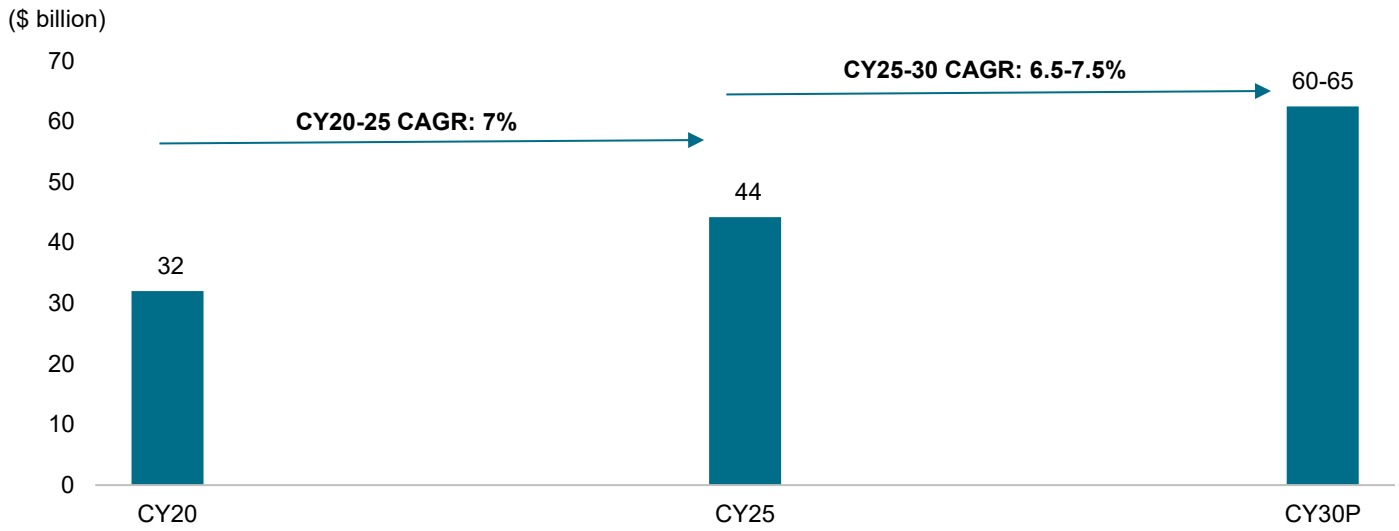
Global fire suppression equipment market is expected to clock a CAGR of ~6.5-7.5% between CY2025-2030

The global demand for fire suppression systems is being driven by the rising awareness of fire safety norms and the losses caused by fire incidents, particularly in high-value assets and critical infrastructure. The expansion of commercial real estate, including shopping malls, hotels, hospitals, airports and large public spaces, is also fuelling demand, as these facilities require sophisticated suppression solutions to ensure compliance and occupant safety.

The rise of large-scale warehousing, e-commerce fulfilment centres and cold storage facilities is anticipated to create substantial demand for specialised suppression systems designed for dense storage configurations and sensitive inventory. The growth of the renewable energy sector, including solar farms, battery storage facilities and wind farms, could also create new application areas for tailored suppression solutions to protect complex and high-value equipment. Urban densification in developed and emerging markets is expected to fuel demand for compact, high-performance fire suppression systems suitable for confined spaces such as data centres, healthcare facilities, underground transit systems and multi-use high-rise building.

The global fire suppression equipment market expanded at a CAGR of 7% between CY2020 to CY2025 valued at $44 billion. The global fire suppression equipment market is expected to grow at a CAGR of 6.5-7.5% during calendar years 2025-30 and was valued at $60-65 billion.

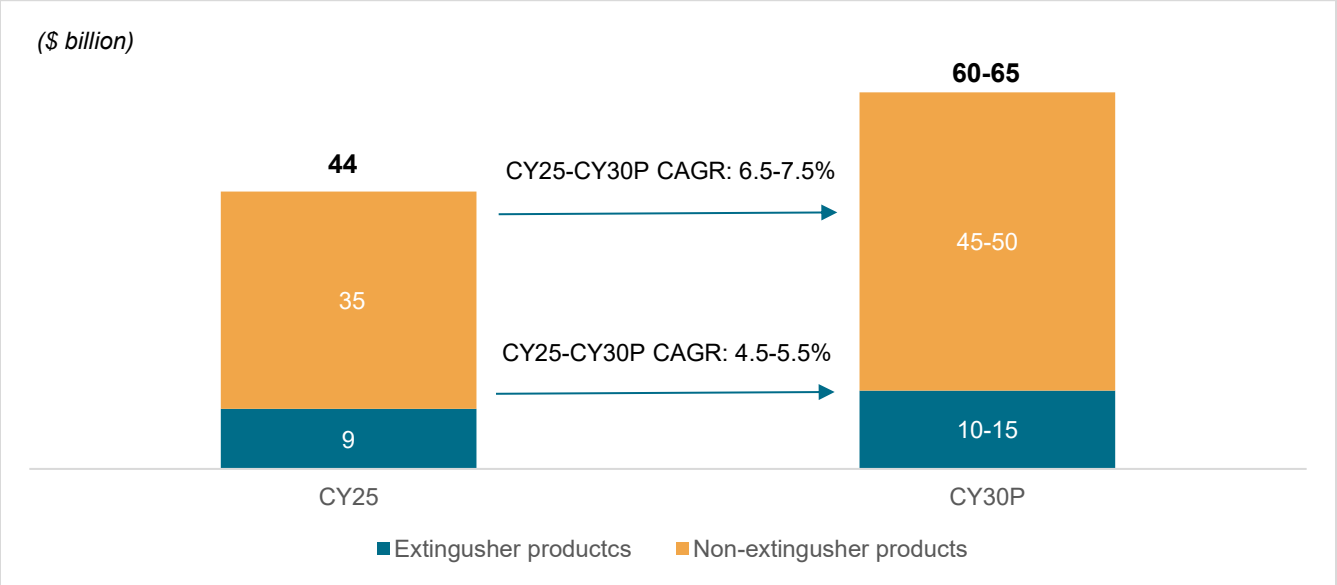
Review and outlook of global fire suppression equipment market



P — projected
Source: IMARC, Crisil Intelligence

In terms of broad categories, global fire suppression market can be categorized into extinguisher products and non-extinguisher products. Non-extinguisher products commanded a higher share in global fire suppression market as of CY2025 valued at $35 billion and are expected to grow at 6.5-7.5% CAGR from CY2025 to CY2030 reaching value $45-50 billion in CY2030.

Split of global fire suppression market for extinguishers and non-extinguisher products



P-projected
Figures at the top indicate total global fire suppression market.
Kindly note that, due to rounding, the segment-wise figures shown may not add up exactly to the total market size and/or to 100% market share.
Source: IMARC, Crisil Intelligence

Overview of the Indian fire suppression equipment market

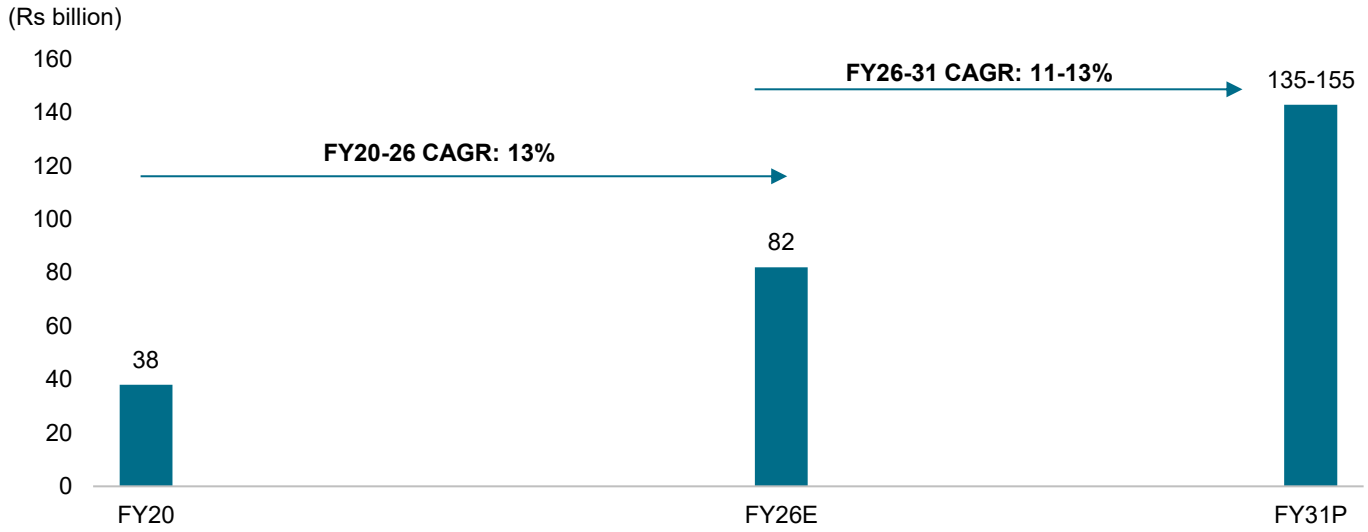
Clocked a CAGR of 13% between fiscals 2020 and 2026

Fire suppression systems are engineered solutions designed to control and extinguish fires automatically or manually. They include components such as fire suppression agents (including water, foam, gas or chemicals), and delivery mechanisms such as fire sprinkler systems and fire hydrant systems. The increasing fire safety measures taken across sectors such as manufacturing, oil and gas, logistics, data centres and commercial real estate in India has increased the adoption of specialised fire suppression solutions that can protect lives and infrastructure. For instance, clean-agent gas suppression systems are favoured in data centres to protect sensitive electronic equipment, while foam equipment & suppression systems and water-mist systems are common in oil depots and chemical factories. In residential buildings, dry powder and sprinkler systems are being promoted due to their cost-effectiveness and reliability. The need for customised solutions is expanding the market footprint of suppression systems in India.

The domestic fire suppression equipment market has clocked a CAGR of 13% from fiscals 2020 to 2026, growing from Rs 38 billion to Rs 82 billion. It is expected to see a CAGR of 11-13% during fiscals 2026-31, valuing the market at Rs 135-155 billion.

For growth drivers of Indian fire protection equipment market, please refer Key growth drivers for Indian fire protection equipment market

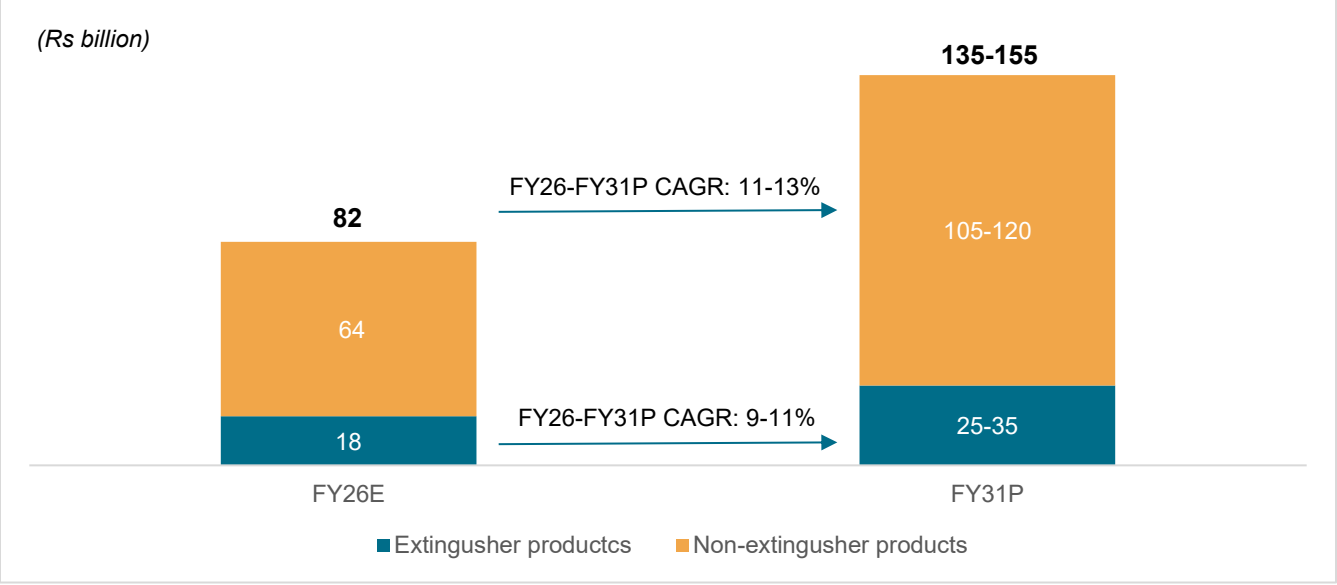
Review and outlook of Indian fire suppression equipment market



Note:
E- Estimated, P- Projected
Source: Crisil Intelligence

In terms of broad categories, Indian fire suppression market can be categorized into extinguisher products and non-extinguisher products. Non-extinguisher products commanded a higher share in Indian fire suppression market as of FY26 valued at Rs 64 billion and are expected to grow at 11-13% CAGR from FY26 to FY31 reaching value Rs 105-120 billion in FY31.

Split of Indian fire suppression market for extinguishers and non-extinguisher products



Note:
E- Estimated, P- Projected
Figures at the top indicate total Indian fire suppression market.
Kindly note that, due to rounding, the segment-wise figures shown may not add up exactly to the total market size and/or to 100% market share.
Source: Crisil Intelligence

Sprinkler, hydrant and foam equipment & suppression systems rule the segment

The domestic fire suppression equipment market has a diverse range of products, including fire sprinklers, fire hydrants, hose reels, foam equipment & suppression systems, gas-based products and extinguishers. The requirement varies based on the use. Residential and commercial office spaces usually require fire sprinklers, fire hydrants and extinguishers. Oil and gas installations, petrochemical complexes, data centres and other industrial sites require more sophisticated equipment.

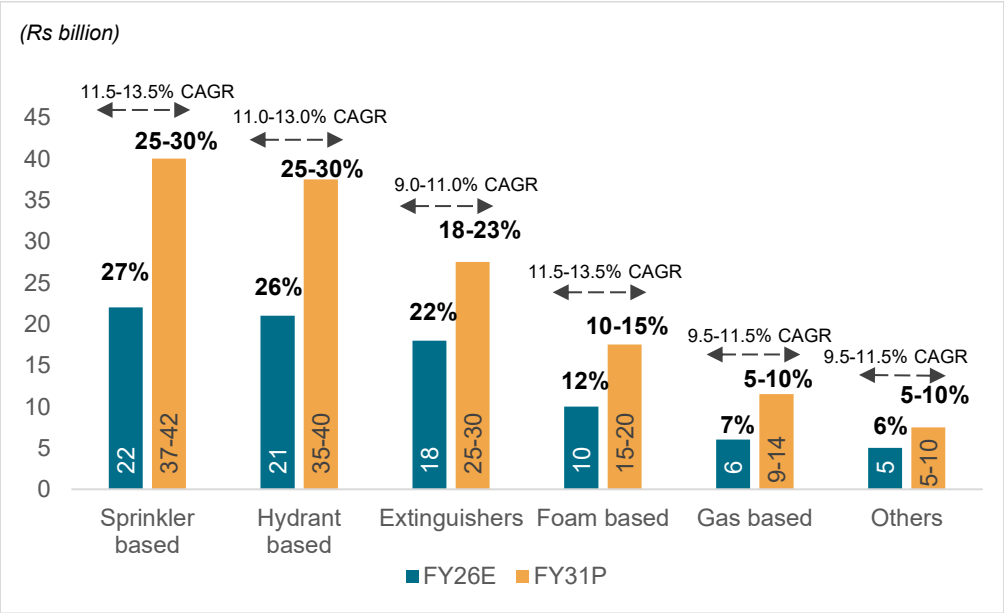
The Indian market for fire suppression equipment is dominated by products segments such as sprinklers, hydrants and foam equipment & suppression systems. The market for products like fire extinguishers, fire sprinklers and fire hydrants is getting commoditized whereas more complex equipment like sprinklers systems, deluge valves, pre-action systems, monitors & monitor nozzles, foam equipment & suppression systems, gas-based equipment majorly have branded players.

The market also has products with multiple certifications, such as CE and those provided by UL Solutions and FM Approvals. As end-use industries are moving towards using sophisticated fire protection systems, branded products with international approvals are gaining popularity.

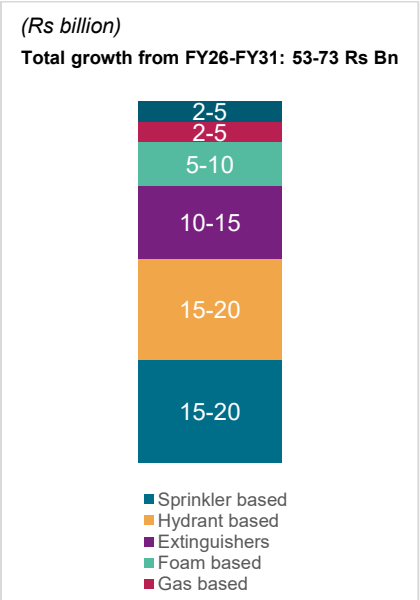
In fiscal 2026, sprinkler-based systems led the market with an estimated 27% share (Rs 22 billion), closely followed by hydrant-based systems at 26% (Rs 21 billion) in fiscal 2026. Extinguishers formed 22% of the market and was valued at Rs 18 billion in fiscal 2026. Foam equipment and suppression systems held a market share of 12% in fiscal 2026, valued at Rs 10 billion. Gas-based systems had a market share of 7% in fiscal 2026, valued at Rs 6 billion.

The broad split of the fire suppression market based on product categories is as follows:

Split of key products in the Indian fire suppression market



Contribution to growth by product



Key players present in the above-mentioned product categories

Product category*	Sprinkler based	Hydrant based	Extinguishers	Foam equipment & suppression systems	Gas based
Key players^	• HD Fire Protect • Safex Fire Services • Newage Fire Fighting Company • Vimal Fire Controls • Johnson Controls (India)	• HD Fire Protect, • Safex Fire Services • Newage Fire Fighting Company • Vimal Fire Controls • Firetech Equipment & Systems • Ceasefire Industries	• Vimal Fire Controls • Safex Fire Services • Ceasefire Industries • Johnson Controls (India)	• HD Fire Protect • Safex Fire Services, • Newage Fire Fighting Company • Ceasefire Industries • De's Technico • Vimal Fire Controls, • Firetech Equipment & Systems • Fluid Pumps & Equipment • Johnson Controls (India)	• HD Fire Protect, • Safex Fire Services • Ceasefire Industries • Vimal Fire Controls • Johnson Controls (India) • Honeywell

Note:
E- Estimated, P- Projected
Sprinkler-based systems consist of products such as fire sprinklers, deluge valves and pre-action systems
Figures at the top of the column Indicates share of respective categories in overall Indian fire suppression segment
Hydrant-based system consists of fire hydrants, hydrant valves, hose reels and hose reel enclosures, among others
Extinguishers consist of portable chemical and gas-based extinguishers and other extinguishers
Foam equipment & suppression systems consist of foam concentrates, cylinders, etc
Gas-based suppression system includes inert and chemical gas-based suppression systems
**The list of the products provided is indicative only and there may be overlap between the product categories*
Others include other fire suppression equipment not categorised into any of the above categories, such as fire blankets and fire PPE kits
Kindly note that, due to rounding, the segment-wise figures shown may not add up exactly to the total market size and/or to 100% market share
^ The list of key players is only indicative and not exhaustive
Source: Crisil Intelligence

Pricing of key fire suppression equipment

Pricing for fire protection equipment is dependent on several factors like type and quality of the equipment, raw material prices, manufacturer's brand, configuration of the product and associated certifications. The type and quality of fire protection equipment, such as fire extinguishers, fire alarms, and sprinkler systems, hydrant systems, foam equipment & suppression systems, and gas-based systems can significantly impact the price. Complex equipment with advanced features and certifications (e.g., ISO, CE, UL Solutions, FM Approvals) tends to be more expensive. Also, credibility, and market presence of the manufacturer or brand can influence the price of fire protection equipment. Variation in raw materials like brass, steel, aluminium, copper may also impact pricing of the fire protection equipment.
In India, fire protection equipment are sold under diverse brands and with varied specifications and standards. The price of the equipment may also vary depending on the type of fire protection system being used, competitive positioning, customer segments and regional dynamics.
In India, fire protection equipment are sold under diverse brands and with varied specifications and standards.
At overall level, the Indian fire protection equipment industry has seen robust value growth of ~13% CAGR from FY2020-FY2025 which was supported by volume and price growth. From FY2020 to FY2025, volume growth formed 7-8% of the total growth while price growth was at 3-5%. The following table shows the pricing of some key products.

Pricing details for some of the key fire suppression products (fiscal 2026)

Particulars/product names	Price range (Rs/unit)
Standard fire protection products	
Fire sprinklers (pendent, upright and sidewall)	Rs 150-300
Fire sprinklers (higher k-factor for warehouse protection)	Rs 500-2000
Fire extinguishers (ABC dry powder type, 2 kg)	Rs 600-2,000
Fire sprinklers (concealed)	Rs 700-1,500
Hydrant systems	Rs 3,500,000-40,000,000
Sophisticated fire protection products	
Medium and high velocity water spray nozzles	Rs 200-1000
Monitors & monitor nozzles	Rs 25,000-120,000
Deluge valves (without trim)[1]	Rs 30,000-100,000
Specialised monitors & monitor nozzles - remote-controlled	Rs 100,000-800,000
Foam bladder tank proportioners	Rs 200,000-2,500,000
Pre-action systems (fully pre-assembled)[2]	Rs 500,000-2,500,000
Fire sprinkler systems	Rs 5,000,000-40,000,000
Foam equipment & suppression systems	Rs 1,000,000-15,000,000
Gas suppression systems	Rs 1,000,000-15,000,000

Note: The prices are indicative at the manufacturer's level, and may vary on the basis of standards, application, make and other factors
Source: Crisil Intelligence

Key entry barriers in the fire suppression industry

The fire suppression equipment industry is characterised by moderate to high entry barriers, particularly in industrial and commercial applications. Some of the entry barriers are mentioned in the following table.

Entry barriers	Description
Regulatory compliances requiring long certification/qualification cycles	A prominent entry barrier is stringent regulatory compliances, which require manufacturers to adhere to multiple codes and standards, including the NBC codes, BIS certifications, OISD (for oil and gas industry), environmental laws, relevant state and project laws governing fire safety. For specialised applications, such as in the oil and gas sector or data centres, global certifications such as UL Solutions, FM Approvals are often mandatory, significantly raising the threshold for entry. Furthermore, product certification process is time-consuming, often requiring 6-24 months for new product lines due to extensive testing, documentation, approval from certification bodies and third-party inspections. This significantly delays time-to-market for new entrants. Overall, fire protection is usually a highly regulated industry with long certification cycles, high compliance thresholds, and high-performance benchmarks. Additionally, several end-use sectors require specialised product approvals, industry-specific certifications, regular audits, and compliance with geographical certifications, which acts as an entry barrier for new players.
High capital intensity	High capital intensity of fire suppression equipment business poses a significant challenge to enter this industry. Setting up approved and certified manufacturing facilities require significant manpower and financial investments, particularly while seeking global certifications or serving large-scale infrastructural, industrial or public projects. Big mandates also demand robust quality management systems, traceability, audit readiness, well-established supply chain, pan-India service network and good after-sales service, each of which requires sustained investment and operational maturity. This creates significant challenges for new players.
Technical capabilities	Product complexity is a major barrier. Manufacturing of fire suppression systems requires deep expertise in system design, hydraulic calculations and integration with broader building management systems. Hence, players need to invest dedicated resources for the R&D and engineering capabilities to meet evolving client requirements in these sectors.
B2B sales relationships	Sourcing and procurement discussions in B2B segments like commercial buildings, industrial spaces, etc. are often influenced by long-standing vendor relationship and vendor empanelment. It becomes difficult for new entrants to win contracts as established players, who are already part of approved vendor list, may enjoy the status of preferred vendors. To be on the approved list, new entrants would have to go through a lengthy and complex process that includes extensive documentations, checks, technical evaluation, compliance and audits. This can put off new players from commercial and industrial segments.

Source: Crisil Intelligence

SWOT analysis of fire protection equipment industry

S (strengths)	• **Growing economy**: Economic growth supports infrastructure development and construction activities, which are expected to positively influence demand for fire suppression equipment • **Regulatory mandate**: Mandatory compliance with multiple standards and codes, including the BIS, NBC and product- and state-specific laws, ensure consistent demand • **Government initiatives to boost manufacturing**: Government initiatives such as PLI schemes, Make in India, etc., are expected to spur industry- and logistics-related construction activity. This will likely increase the demand for fire suppression equipment • **Diverse end-use segments:** Fire safety equipment is used across various industries such as industrial and infrastructure (the infrastructure sector includes warehouse and cold storage, data centres, airports, telecom, ports, roads, power, urban infrastructure, railways, and irrigation; and the industrial sector includes oil and gas, petrochemicals, metal, automobiles, textiles, paper, fertilisers, and cement sectors), commercial (commercial and retail establishments (including hospitality), healthcare facilities, and educational institutions) and residential. This diversity in demand ensures a steady stream of customers and revenue • **Government-led initiatives:** Government initiatives aimed at strengthening fire protection infrastructure and creating awareness are expected to positively influence the demand of fire suppression equipment • **High entry barrier**: The fire safety equipment industry has a high barrier to entry due to the need for specialised knowledge, equipment and regulatory compliance. This makes it challenging for new competitors to enter the market
W (weaknesses)	• **Limited enforcement of fire protection laws:** In some regions and segments, fire protection laws and regulations may not be strictly enforced, which can lead to a lack of awareness and adoption of fire safety equipment • **Limited awareness and voluntary adoption**: Despite growing awareness, there is still a lack of understanding about fire protection and the importance of fire suppression equipment among many Indians, particularly in rural areas • **High competition**: The Indian fire suppression equipment market is highly competitive, with multiple domestic and international branded players, which can negatively impact product pricing • **Dependence on imports**: Dependence on imports for raw material and components, such as valves, nozzles, etc. makes the supply chain susceptible to global disruptions, including fluctuations in foreign currency, geopolitical tensions, policy changes, etc.
O (opportunities)	• **Increasing urbanisation**: Rapid urbanisation offers significant opportunities for residential, commercial and other infrastructure projects, which can positively increase the demand of fire suppression equipment • **Technological advancements**: Adoption of new technologies such as IoT and AI for better detection, monitoring and predictive analysis can improve the efficiency of fire suppression systems • **Increasing construction capex**: Growing construction capex in end-use segments, industrial and infrastructure, commercial and residential, will likely create strong demand for sophisticated fire systems

	• **Data centre capacity addition**: Data centre industry installed capacity is estimated to register a CAGR of ~32-34% between FY26-30 to reach 4,800-5,200 MW by FY30. As these structures require specialized fire suppression infrastructure due to their high- value and high- risk nature, it will potentially drive the growth of fire protection equipment market. • **Positive policy and robust FDI support:** Policy reforms aimed at improving the ease of doing business and allowing greater FDI in core sectors, including manufacturing, are expected to bring a positive impact on the establishment of new industrial facilities in India. As these manufacturing units are required to adhere to fire safety norms to minimise the risk of loss of life and property and, therefore, are expected to drive demand for fire suppression systems. • **Protecting critical assets amid regional uncertainty:** Amid ongoing geopolitical developments, including tensions linked to the West Asia conflict, safeguarding high-value energy assets and storage infrastructure against fire-related risks will warrant increased attention. This is expected to positively influence demand for fire suppression equipment in regions directly affected by these developments, offering Indian manufacturers a potential opportunity to expand presence to these affected regions. • **Import substitution:** With the increasing focus on local manufacturing and self-sufficiency, there is an opportunity to substitute imported fire safety equipment with indigenously manufactured products
T **(threats)**	• **Economic slowdown**: Any downturn in the economy including major policy shifts such as trade sanctions, tariffs, etc., can significantly affect the construction sector, which can limit the demand for fire suppression systems • **Regulatory challenges**: Any changes in existing regulations or mandatory requirements/ certifications for new fire suppression equipment can create compliance hindrances • **Raw material price volatility:** Fluctuations in raw material prices, such as steel, aluminium, etc., can impact the cost of manufacturing fire suppression equipment and reduce profit margins

Source: Crisil Intelligence

Assessment of competitive landscape of fire protection equipment industry in India

In this section, Crisil has analysed some key players operating in the fire protection equipment industry in India. The Indian fire protection equipment industry comprises a few large multinational players such as Honeywell, Johnson Controls, etc., as well as branded domestic players. These multinational and branded players form ~70% of the overall fire protection equipment market, with local/unbranded players constituting the remaining 30%. For competitive benchmarking, we have considered key players present in the fire protection equipment industry- multinational as well as large, branded players focusing on the fire suppression segment in India.

Note: The list of competitive peers considered in this section is not exhaustive but indicative in nature. Crisil has considered key players operating in the fire protection market in India basis primary inputs and secondary research. In addition to the players considered in this section, the fire protection market in India also consists of multinational brands such as Siemens, Viking, Victaulic, etc. However, operational and/ or financial details for their fire protection business in India is not available in the public domain.

Data has been obtained from publicly available sources, including annual reports available in the public domain/ filed with the Registrar of Companies (RoC), investor presentations of listed players, regulatory filings, rating rationales, and/or company websites and social media pages. Financials in the competitive section have been re-classified by Crisil, based on annual reports available in the public domain/ filed with the RoC and financial filings by the relevant players. Financial ratios used in this report may not match with the reported financial ratios by the players on account of Crisil's standardisation and re-classification.

Overview of key players

Company name^	Founding year*	Registered office*	Business overview[1]	Manufacturing plants
Fire protection equipment focused				
HD Fire Protect Ltd (HD Fire Protect)[1]	1997	Mumbai	HD Fire Protect's business was originally carried on under the name H.D. Fire Protect Company which was established by Harish Dharamshi as a partnership firm on April 27, 1990. The Company was incorporated as a private limited company on April 24, 1997. Thereafter, on April 1, 2005, the Company acquired H.D. Fire Protect Company, as a going concern along with all its assets and liabilities, and the business was consolidated under a single corporate entity. HD Fire Protect is primarily in the business of manufacturing and supply of fire protection equipment and systems catering to the domestic and international markets. It has headquarters in Thane, Maharashtra and manufacturing facilities in Jalgaon and Thane.	2
Safex Fire Services Ltd (Safex Fire Services)[2]	2000	Mumbai	Safex Fire Services was established as a partnership firm in 1972. The firm was reconstituted as a closely held public limited company in 2000. It manufactures fire-safety equipment such as extinguishers, suppression systems, sprinklers, etc.	1

Company name^	Founding year*	Registered office*	Business overview[1]	Manufacturing plants
Newage Fire Fighting Company Ltd (Newage Fire Fighting Company)[3]	1986	Surendranagar	Newage Fire Fighting Company is a part of Newage group and was incorporated on 4th July 1986. The company is engaged in the manufacturing and dealing of firefighting instruments, parts, hose pipes, etc.	5
Ceasefire Industries Pvt Ltd (Ceasefire Industries)[4]	2002	Mumbai	Ceasefire entered the Indian market in 2002 and is into research, development, manufacturing, testing, and support of fire extinguishers, suppression systems, hydrant systems, and related accessories.	1
De's Technico Ltd. (De's Technico)[5]	1988	Howrah	De's Technico Limited was established in 1976 as a partnership concern and later reconstituted as a private limited company as DESTPL in 1988. The company manufactures fire and gas detection and protection systems, products, and services. It also works as lump sum turnkey contractor for various industrial segments.	1
Vimal Fire Controls Pvt. Ltd. (Vimal Fire Controls)[6]	1996	Mumbai	Vimal Fire Controls, an Indian private company, is in the business of manufacturing and trading of firefighting equipment, operating as a standalone entity.	1
Firetech Equipment and Systems Pvt Ltd (Firetech Equipment & Systems)[7]	1994	Mumbai	Firetech Equipment and Systems is an Indian company in the fire protection equipment industry. The company provides multiple offerings including fire monitors, foam-based systems, customised engineering system solutions, hose reels, mobile equipment, etc.	1
Fluid Pumps & Equipment India Pvt Ltd (Fluid Pumps & Equipment)[8]	2010	Coimbatore	Fluid Pumps & Equipment India is a part of the Fluid group, which was founded in 1978 in the United Kingdom. The company offers multiple products in fire protection equipment including deluge valves, spray nozzles, grooved fittings, etc.	1
Johnson Controls (India) Pvt Ltd (Johnson Controls (India))[9]	1995	Pune	Johnson Controls (India) is incorporated and domiciled in India. Its ultimate holding company is Johnson Controls International plc., Ireland. The company provides building automation systems, fire alarms systems, access control and security surveillance systems, including allied equipment, chillers, components, etc., and related services such as turnkey contracts, erection, commissioning, etc. It also offers shared services and engineering solutions, primarily to group companies.	2
Honeywell International (India) Pvt Ltd (Honeywell)	1995	Delhi	Honeywell International (India) is an Indian company established in 1995. The group is primarily involved in distributing and assembling automation and control products, as well as providing other services and solutions to its affiliated entities.	N.A.
Gunnebo India Pvt Ltd (Gunnebo India)[10]	1932	Thane	Gunnebo India, a subsidiary of Gunnebo group, is a provider of security products, services and solutions. Gunnebo offers multiple security solutions encompassing six business	1

Company name^	Founding year*	Registered office*	Business overview[1]	Manufacturing plants
			segments: bank security, entrance security, firefighting solutions, system integration, security services and cash handling solutions.	

Notes:

Kindly note that for this section, Crisil has not included Siemens Ltd and Bosch Ltd since their financial and/ or operational details related to the fire protection equipment segment in India are not available in the public domain. Within fire protection equipment, both companies are focused on the fire detection segment.

Siemens Limited's revenue from operations on a consolidated basis for the year ended March 31st, 2026, was Rs 248,456 million. External revenue for the year ended March 31st, 2026, of the business segments is as follows: Energy: Rs 25,608 million, Smart infrastructure: Rs 1,38,597 million, Mobility: Rs 49,713 million, Digital industries: Rs 57,414 million, Others: Rs 2,732 million.

Bosch Limited's revenue from operations on a consolidated basis for the year ended March 31, 2026, was Rs 200,347 million. Segmentation details of the company are as follows: Automotive products: Rs 178,074 million, Consumer goods: Rs 18,360 million, Others (after considering effect of inter-segment revenue elimination): Rs 3,913 million

^ The above table is arranged in the order of the latest available revenue from operations from the highest to lowest (except for HD Fire Protect)

This list of players, their offerings and sector presence is indicative and non-exhaustive.

** Registered office and founding year are as per the MCA*

1 HD Fire operates two manufacturing facilities in Maharashtra, Jalgaon MIDC and Thane MIDC respectively

2 As per the Safex Fire Services Limited's website accessed in July 2026, the company has a manufacturing plant

3 As per the Newage Fire Fighting Company Limited's website accessed in July 2026, the company has five manufacturing premises.

4 As per the Ceasefire industries website, the Company owns manufacturing facility in Dehradun, India.

5 As per the ratings rationale dated January 2026, the company has its unit in Howrah, West Bengal

6 As per the Vimal Fire Controls Private Limited's website accessed in July 2026, the company has a manufacturing plant in Gujarat.

7 As per the Firetech Equipment and Systems Private Limited's website accessed in July 2026, the company has a single manufacturing facility.

8 As per the Fluid Pumps & Equipment India Private Limited's website accessed in July 2026, the company has one factory unit and one foundry unit in India.

9 As per the company's website accessed in July 2026, the company has two manufacturing plants in India.

10 As per the company's website accessed in July 2026, the company has one manufacturing unit India in Halol, Gujarat.

Source: Company websites, annual reports available in the public domain/ filed with the RoC, rating rationales, MCA, Crisil Intelligence

- HD Fire Protect Limited (HD Fire Protect) was incorporated in India with headquarters in Thane, Maharashtra. The company has manufacturing facilities in Jalgaon and Thane, Maharashtra and is primarily in the business of manufacturing and supply of fire protection equipment and systems, catering to domestic and international markets.
- HD Fire Protect's Jalgaon facility holds 9COM number for valves (6000002872) and sprinkler fire protection systems (6000001325). A 9COM number allows an entity to receive RFQ's for upcoming Saudi Aramco projects for the approved product categories. In July 2026, HD Fire Protect incorporated a subsidiary in Saudi Arabia, holding a 70% ownership stake.

Operational overview

Product offerings

Company name^	Offerings								
	Fire detection equipment[1]	Fire suppression equipment							
		Sprinklers	Foam equipment & suppression systems[2]	Systems valves and accessories	Deluge valves, deluge skids and pre-action systems	Gas suppression systems	Custom engineered systems	Water spray nozzles	Monitors & monitor nozzles
Fire protection equipment focused									
HD Fire Protect		✓	✓	✓	✓	✓	✓	✓	✓
Safex Fire Services		✓	✓	✓	✓	✓		✓	
Newage Fire Fighting Company		✓	✓	✓				✓	✓
Ceasefire Industries			✓			✓		✓	
De's Technico	✓		✓		✓			✓	
Vimal Fire Controls	✓	✓	✓			✓			✓
Firetech Equipment & Systems	✓		✓		✓		✓	✓	✓
Fluid Pumps & Equipment			✓	✓	✓			✓	
Fire protection equipment and other diversified segments									
Johnson Controls (India)	✓	✓	✓	✓	✓	✓		✓	
Honeywell	✓			✓		✓		✓	

Note

^ The above table is arranged in the order of the latest available revenue from operations from highest to lowest (except for HD Fire Protect)

1 Fire detection systems include alarms, notification appliances, fire detectors, notifier, smoke detectors, heat detectors, flame detectors, multi sensor detectors, fire alarm control panels etc.

2 Foam equipment & suppression systems include foam equipment/ devices, foam generators, foam concentrators, foam nozzles, foam suppression systems, etc.

The above list of offerings and end-use segments is only indicative and not exhaustive

Due to inaccessibility of Gunnebo India Private Limited's India website, the company is not considered in the above table.

Source: Company websites, annual reports available in the public domain/ filed with the RoC, rating rationales, Crisil Intelligence

Key observations

- HD Fire Protect is a manufacturer and supplier of fire suppression (water, gas, and foam equipment & suppression systems) and protection equipment and systems serving end-user industries viz. industrials, heavy engineering, data centres, oil & gas, petrochemicals, refining, power & energy, aerospace, commercial, residential, warehousing amongst others with presence in both domestic and international markets
- HD Fire Protect is one of the key players in India with presence across all the fire suppression equipment and systems excluding fire extinguishers, namely sprinklers, alarm valves & accessories, deluge valves, deluge skids & pre-action systems, foam equipment & suppression systems, monitors & monitor nozzles, systems valves & accessories, water spray nozzles, custom engineered systems, gas suppression systems
- HD Fire Protect is among the key manufacturers of fire protection equipment and systems in India. HD Fire Protect has product offerings across sprinklers, alarm valves & accessories, deluge valves, deluge skids & pre-action systems, foam equipment & suppression systems, monitors & monitor nozzles, systems valves & accessories, water spray nozzles, custom engineered systems, gas suppression systems., amongst others and had export sales in more than 90 countries as of fiscal 2026
- HD Fire Protect is the first Indian company to introduce UL Listed (UL Solutions) Pre-action system (UL Category-VKYL), as of September 2026, HD Fire remains exclusive Indian manufacturer of this product
- HD Fire Protect is among the few Indian fire protection manufacturers having offerings in custom engineered systems for fire protection
- HD Fire Protect has outperformed the growth of Indian fire protection equipment market from FY20 to FY26, HD fire has grown at 18% CAGR from FY20-FY25 whereas overall industry has grown at 12% in the same period
- HD Fire Protect has supplied products at some of the key sites including Master stream nozzle installations at India's space launch pad at Sriharikota, fire protection equipment (Alarm valve, Monitor, Master stream nozzle at India's largest refinery at Jamnagar, fire protection equipment (Drain valve, water flow detectors etc.) for the new Indian parliament building, fire protection systems to multiple Indian and global data center companies (including hyperscalers in India), fire protection systems (Deluge valves) at Saudi Aramco's Ras Tanura Sea Island site and fire protection equipment (Deluge valves, sprinklers etc.) for Oman's Integrated Power & Water Plant Project
- In June 2026, Lastfire issued test result certificates for HD Fire Protect's AR-SFFF F3 3×3% foam concentrate (Batch No. 2605/399) for Ethanol and Heptane fuel types.

Sector offerings (related to fire protection equipment)

Company name^	Residential	Commercial[1]	Industrial & Infra			
			Public infrastructure[2]	Oil and gas[3]	Data rooms, IT, server/ UPS rooms[4]	Other industries[5]
Fire protection equipment focused						
HD Fire Protect	✓	✓	✓	✓	✓	✓
Safex Fire Services	✓	✓	✓	✓	✓	✓
Newage Fire Fighting Company			✓	✓	✓	✓
Ceasefire Industries	✓	✓			✓	✓
De's Technico		✓	✓	✓	✓	✓

Company name^	Residential	Commercial[1]	Industrial & Infra			
			Public infrastructure[2]	Oil and gas[3]	Data rooms, IT, server/ UPS rooms[4]	Other industries[5]
Vimal Fire Controls		✓	✓	✓	✓	✓
Firetech Equipment & Systems			✓	✓		✓
Fluid Pumps & Equipment		✓		✓		✓
Fire protection equipment and other diversified segments						
Johnson Controls (India)	✓	✓	✓	✓	✓	✓
Honeywell	✓	✓	✓	✓	✓	✓

Note

^ The above table is arranged in the order of the latest available revenue from operations from highest to lowest (except for HD Fire Protect)

1 Includes commercial buildings, corporate houses, restaurants, museums, hospitality, libraries, etc

2 Public infrastructure includes airports, metros, defence and aviation, roads and rail tunnels, ports, railways, etc

3 Oil and gas includes petrochemicals and refineries

4 Includes data centres and transformer rooms

5 Other industries include power, power and transmission, power generation, pharmaceuticals, automobiles, metal processing, chemical processing and storage areas, vehicle engines, and the iron and steel industry

The above list of end-use segments is only indicative and not exhaustive

Kindly note that due to inaccessibility of Gunnebo India Private Limited's India website, the company is not considered in the above table.

Source: Company websites, annual reports available in the public domain/ filed with the RoC, rating rationales, Crisil Intelligence

Exports (FY22-25)*

Company name^	FY22		FY23		FY24		FY25	
	Rs million	% of total revenue	Rs million	% of total revenue	Rs million	% of total revenue	Rs million	% of total revenue
Fire protection equipment-focused								
HD Fire Protect[1]	879.87	37.86%	1,138.10	35.12%	1,232.60	33.05%	1,552.63	35.87%
Safex Fire Services	10.47	0.65%	20.63	0.62%	11.36	0.25%	16.25	0.29%
Newage Fire Fighting Company	225.71	8.92%	259.38	8.92%	195.24	7.37%	244.48	10.91%
Ceasefire Industries[2]	65.84	4.61%	82.09	4.89%	85.83	5.09%	0.00	0.00%
De's Technico[3]	260.91	44.74%	433.33	41.90%	602.00	48.81%	N.A.	N.A.
Vimal Fire Controls[4]	714.75	53.69%	836.12	61.07%	78.66	7.61%	16.66	1.43%
Firetech Equipment & Systems[5]	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Fluid Pumps & Equipment[5]	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Fire protection equipment and other diversified segments								
Johnson Controls (India)[6]	8,909.70	57.40%	12,639.90	59.46%	7,212.50	26.17%	15,685.1	51.23%
Honeywell[7]	716.90	7.42%	917.40	7.98%	984.00	7.20%	982.01	6.39%

Company name^	FY22		FY23		FY24		FY25	
	Rs million	% of total revenue	Rs million	% of total revenue	Rs million	% of total revenue	Rs million	% of total revenue
Gunnebo India[8]	319.72	7.75%	333.46	5.72%	48.88	0.73%	741.63	9.89%

Note:

**Financial data for fiscal 2026 is not available for the above peers, as they have not yet filed their fiscal 2026 financial statements*

For FY25, the number is Revenue from external customers (outside India)

^ The above table is arranged in the order of the latest available revenue from operations from highest to lowest (except for HD Fire Protect)

1 As per the HD Fire Protect annual report, the formula for exports was: (Total export turnover goods, gross + Export revenue services)/ Revenue from operations

2 As per the Ceasefire Industries Private annual report, the formula for exports was: Total export turnover goods, gross/ Revenue from operations

3 As per the De's Technico annual report, the formula for exports was: (Total export turnover goods, gross)/ Revenue from operations

4 As per the Vimal Fire Controls annual report, the formula for exports was: (Export Revenue Services)/ Revenue from operations

5 Revenue segmentation is not reported by the company

6 As per the Johnson Controls (India) Private Limited annual report, the formula for exports was: Foreign exchange earnings/ Revenue from operations

7 As per the Honeywell International (India) Private Limited's annual report, the formula for exports was: (Total export turnover goods, gross)/ Revenue from operations

8 As per the Gunnebo India Private Limited annual report, the formula for exports was: Revenue primary reportable segment (exports)/ Revenue from operations.

Kindly note that the above table accounts for export revenue from both product and services, wherever applicable

Source: Company websites, annual reports available in the public domain/ filed with the RoC, rating rationales, Crisil Intelligence

Key observations

- HD Fire Protect is India's largest exporter of fire protection equipment (products) with export revenue of Rs 1,552.63 million in FY25 forming 35.9% of total revenue from operation for the company in FY25

Key certifications*

Company name^	UL Solutions	FM Approvals	CE	VdS	ASME	Lloyd's Register
Fire protection equipment focused						
HD Fire Protect	✓	✓	✓	✓	✓	✓
Safex Fire Services Ltd.	✓	✓		✓		
Newage Fire Fighting Company	✓	✓	✓			
Ceasefire Industries Pvt. Ltd.	✓		✓	✓		
De's Technico Ltd.	✓					
Vimal Fire Controls	✓	✓	✓	✓		
Firetech Equipment and Systems Private Ltd.[1]	✓	✓	✓		✓	
Fluid Pumps and Equipment India Private Ltd.	✓	✓				
Fire protection equipment and other diversified segments						
Johnson Controls (India)	✓	✓	✓	✓		
Honeywell	✓	✓	✓	✓		✓

Note:

^ The above table is arranged in the order of the latest available revenue from operations from the highest to the lowest (except for HD Fire Protect)

** The certifications mentioned in the above table may apply solely to specific entities, business units or individual products and may not be applicable to the company in its entirety. Please note that the certifications listed in the above table are indicative and not exhaustive. The information has been sourced from the respective companies' websites.*

1 As per Firetech Equipment and Systems Private Ltd.'s website, Firetech products are tested by UL and FM to comply with the corresponding NFPA standards. Firetech's testing facility complies with the requirement of UL and FM standards.

Kindly note that due to inaccessibility of Gunnebo India Private Ltd.'s India website, the same is not considered in the above table

Source: Company websites, annual reports available in the public domain/filed with the RoC, rating rationales, Crisil Intelligence

Product wise certifications

Company name^	Fire suppression equipment							
	Sprinklers	Foam equipment & suppression systems[1]	Systems valves and accessories	Deluge valves, deluge skids and pre-action systems	Gas suppression systems	Custom engineered systems	Water spray nozzles	Monitors & monitor nozzles
Fire protection equipment focused								
HD Fire Protect	UL, FM	UL, FM, CE	UL, FM, ASME*	UL, FM	VdS		UL, FM, Lloyd's Register	UL, FM
Safex Fire Services	UL, FM		UL, FM	UL, FM	VdS			
Newage Fire Fighting Company	UL	UL	UL, FM				UL	UL
Ceasefire Industries		CE			VdS			
De's Technico		UL		UL			UL	
Vimal Fire Controls		UL			FM			UL
Firetech Equipment & Systems		UL	ASME*	UL			UL	UL
Fluid Pumps & Equipment		UL	UL	UL			UL	
Fire protection equipment and other diversified segments								
Johnson Controls (India)[3]	UL, FM, VdS	UL, FM, CE	UL, FM, VdS, CE	UL, FM, VdS	UL, FM		UL, FM	
Honeywell			UL, FM		UL, FM			

Note

The certifications mentioned in the above table may apply solely to specific entities, business units or individual products and may not be applicable to the company in its entirety. Please note that the certifications listed in the above table are indicative and not exhaustive. The information has been sourced from the respective companies' websites.

** The above players hold ASME certification for manufacturing of pressure vessels.*

For the purpose of above table, Crisil has considered pressure valves under systems valves and accessories

^ The above table is arranged in the order of the latest available revenue from operations from highest to lowest (except for HD Fire Protect)

1 Fire detection systems include alarms, notification appliances, fire detectors, notifier, smoke detectors, heat detectors, flame detectors, multi sensor detectors, fire alarm control panels etc.

2 Foam equipment & suppression systems include foam equipment/ devices, foam generators, foam concentrators, foam nozzles, foam suppression systems, foam monitor etc.

3 The data in the above table has captured information from the company's global website

The above list of offerings and end-use segments is only indicative and not exhaustive

Due to inaccessibility of Gunnebo India Private Limited's India website, the company is not considered in the above table.

Source: Company websites, annual reports available in the public domain/ filed with the RoC, rating rationales, Crisil Intelligence

Key observations

- HD Fire Protect has manufacturing facilities at Jalgaon and Thane, Maharashtra with presence of testing laboratories and R&D facilities
- HD Fire Protect possess global approval and certification for some of its products with approvals from agencies like UL Solutions Inc., FM Approvals LLC, VdS, ASME and Lloyd's Register
- Among the fire protection equipment focused peers considered above, HD Fire Protect is the only company to have all of the following certifications, UL Listing, FM Approval, CE, VdS, ASME-U Stamp and Lloyd's Register, across the following product categories- sprinklers, alarm valves & accessories, deluge valves, deluge skids & pre-action systems, foam equipment & suppression systems, monitors & monitor nozzles, systems valves & accessories, water spray nozzles, gas suppression systems. While not every certification applies to every product category, HD Fire Protect holds all of these certifications across its product portfolio.
- As of September 2026, HD Fire Protect has UL certifications for Foam Liquid Concentrates, Foam-discharge Outlets, Foam Monitors, Proportioners (Foam Concentrate), Sprinklers (Foam-Water)
- For the fire protection equipment focused peers considered above operating in the product categories, (sprinklers, alarm valves & accessories, deluge valves, deluge skids & pre-action systems, foam equipment & suppression systems, monitors & monitor nozzles, systems valves & accessories, water spray nozzles, custom engineered systems, gas suppression systems) HD Fire Protect has the maximum number of product categories with UL Solutions (6 out of 8) /FM Approvals (6 out of 8)
- HD Fire Protect is India's first fire protection equipment and systems manufacturer to secure listing with UL Solutions Inc. ("UL Listed") and approval of FM Approvals LLC ("FM Approved") for following products. (FM Approval of its monitors & monitor nozzles and UL Listed (UL Solutions) Pre-action system (UL Category-VKYL)
- HD Fire Protect is the first Indian fire protection equipment and systems manufacturer to receive FM approval for range of products used in low expansion foam system namely foam concentrates, bladder tanks, proportioners, topside discharge devices and foam water sprinkler discharge devices
- HD Fire Protect is the first Indian company focused on fire protection equipment and systems manufacturing to receive ASME U (pressure vessels) stamp certification
- HD Fire Protect is the first Indian fire protection equipment and systems manufacturer to receive UL Listing for deluge valves (1996)
- As of July 2026, HD Fire Protect holds patents in India, the United States and Saudi Arabia for "Pressure Operated Fluid Valve with Configurable Diaphragm Arrangement
- HD Fire Protect is recognized as a 2-Star Export House by the Directorate General of Foreign Trade, Government of India
- HD Fire Protect is among the few fire protection equipment and systems companies in India with fire protection products that have passed testing conducted by Chinese fire testing institutions, including the China National Quality Testing Centre for Fire Fighting Products (Guangdong), for fire protection equipment and system sales in China
- HD Fire Protect is an AEO Level 2 Authorized Economic Operator – LO Certificate is granted by the Customs authorities of the Government of India

- With 21 and 87 UL Listed and FM Approved certifications, as per UL product certifications and FM product certifications respectively, HD Fire Protect has the highest number of UL Listed and FM Approved product certifications amongst the fire protection equipment focused peers in India as of September 2026

Financial parameters

HD Fire Protect FY26 financials

Company name	FY26
Operating Income (Rs million)	4,894.19
Operating EBITDA (Rs million)	1,551.89
Operating EBITDA Margin (%)	31.71
PAT (Rs million)	1,167.86
PAT margin (%)	23.02
Return on Equity (%)	30.18
Return on Capital Employed (%)	40.21
Cash Conversion cycle	121.80
Gearing Ratio	-

Notes:
Numbers reclassified as per Crisil standards and may not match company-reported numbers
Formulae used are as follows:
Operating EBITDA: Operating revenue (Revenue from operations/Operating income) - Cost of Sales (cost of sales inclusive of Material costs, employee costs, consumables, power cost, other manufacturing and selling costs and other costs)
Operating EBITDA% = Operating EBITDA/operating income
PAT % = PAT/ (operating income+ non-operating income)
RoE = PAT/average of tangible net worth
RoCE = EBIT/average of [total debt + tangible net worth+ Deferred Tax Liability: |Asset|]
Gearing ratio = Total debt/tangible net worth
Cash conversion cycle = Trade receivable days - Trade payable days + Inventory days
*Inventory days= Inventories/ COS*365*
*Trade receivable days= Trade Receivables/ (Gross Sales+ Traded Goods Sales) *365*
*Trade payable days= Trade Payables/ Cost of material consumed*365*
Source: Company annual reports, Crisil Intelligence

Operating income

Company name – Rs million^	FY23	FY24	FY25	CAGR (FY2023-25)
Fire protection equipment focused				
HD Fire Protect	3,243.88	3,735.92	4,330.65	15.54%
Safex Fire Services Ltd.	3,312.39	4,510.34	5,552.54	29.47%
Newage Fire Fighting Company	2,906.88	2,648.54	2,240.44	-12.21%
Ceasefire Industries Pvt. Ltd.*	1,680.03	1,687.31	1,854.08	5.05%
De's Technico Ltd.	1,034.14	1,233.37	N.A.	-
Vimal Fire Controls*	1,369.06	1,033.91	1,165.73	-7.72%

Company name – Rs million^	FY23	FY24	FY25	CAGR (FY2023-25)
Firetech Equipment and Systems Private Ltd.	265.28	350.79	358.39	16.23%
Fluid Pumps and Equipment India Private Ltd.	78.65	97.82	123.37	25.24%
Fire protection equipment and other diversified segments				
Johnson Controls (India)	21,259.50	27,559.10	30,615.90	20.00%
Honeywell*	11,500.70	13,662.20	15,449.20	15.90%
Gunnebo India Pvt. Ltd.	5,683.66	6,663.24	7,496.36	14.84%

Note:
** Consolidated numbers*
^ The above table is arranged in the order of the latest available revenue from operations from the highest to the lowest (except for HD Fire Protect)
Financial data for fiscal 2026 is not available for the above peers, as they have not yet filed their fiscal 2026 financial statements
Financial numbers of these companies include verticals other than fire protection equipment and are reported at the company level
Numbers reclassified as per Crisil standards and may not match company-reported numbers
Source: Company annual reports, Crisil Intelligence

Key observations

- Among the fire protection equipment focused peers considered, HD Fire was the second-largest manufacturer of fire protection equipment and systems in India in terms of operating income (revenue from operations) in fiscal 2025 and the largest exporter by value (equipment) in fiscal 2025

Operating Earnings Before Interest, Taxes, Depreciation and Amortisation (Operating EBITDA)

Company name – Rs million^	FY23	FY24	FY25	CAGR (FY2023-25)
Fire protection equipment focused				
HD Fire Protect	928.26	1,096.10	1,410.23	23.26%
Safex Fire Services Ltd.	491.23	1,103.75	1,184.63	55.29%
Newage Fire Fighting Company	377.97	325.68	300.56	-10.83%
Ceasefire Industries Pvt. Ltd.*	26.72	-54.48	0.80	-82.65%
De's Technico Ltd.	116.23	137.64	N.A.	-
Vimal Fire Controls*	103.69	53.14	107.81	1.97%
Firetech Equipment and Systems Private Ltd.	27.52	30.19	36.64	15.37%
Fluid Pumps and Equipment India Private Ltd.	10.25	13.05	15.19	21.74%
Fire protection equipment and other diversified segments				
Johnson Controls (India)	3,724.30	3,344.80	3,305.60	-5.79%
Honeywell*	1,185.70	2,425.40	2,264.60	38.20%
Gunnebo India Pvt. Ltd.	416.87	625.43	692.87	28.92%

Note:
** Consolidated numbers*
^ The above table is arranged in the order of the latest available revenue from operations from the highest to the lowest (except for HD Fire Protect)
n.m.: Not meaningful
Financial data for fiscal 2026 is not available for the above peers, as they have not yet filed their fiscal 2026 financial statements
Financial numbers of these companies include verticals other than fire protection equipment and are reported at the company level

Numbers reclassified as per Crisil standards and may not match company-reported numbers
Operating EBITDA: Operating revenue (Revenue from operations/Operating income) - Cost of Sales (cost of sales inclusive of Material costs, employee costs, consumables, power cost, other manufacturing and selling costs and other costs)
Source: Company annual reports, Crisil Intelligence

Key observations

- Among the fire-protection-equipment-focused peer set considered, HD Fire Protect had the second highest Operating EBITDA of Rs 1,410.23 million in fiscal 2025 and the second highest CAGR (fiscals 2023-2025) of 23.26%

Profit after tax (PAT)

Company name – Rs million^	FY23	FY24	FY25	CAGR (FY23-25)
Fire protection equipment focused				
HD Fire Protect	702.25	879.20	1,092.00	24.70%
Safex Fire Services Ltd.	359.85	838.38	947.66	62.28%
Newage Fire Fighting Company	227.33	191.31	158.99	-16.37%
Ceasefire Industries Pvt. Ltd.*	14.77	-52.53	-13.88	Nm
De's Technico Ltd.	74.71	91.05	N.A.	-
Vimal Fire Controls*	127.24	80.32	40.22	-43.78%
Firetech Equipment and Systems Private Ltd.	10.95	13.24	13.16	9.63%
Fluid Pumps and Equipment India Private Ltd.	1.10	2.17	1.39	12.18%
Fire protection equipment and other diversified segments				
Johnson Controls (India)	2,262.50	2,004.50	1,994.20	-6.12%
Honeywell*	1,190.40	2,212.10	2,890.70	55.83%
Gunnebo India Pvt. Ltd.	491.54	545.91	697.71	19.14%

Note:
^ The above table is arranged in the order of the latest available revenue from operations from the highest to the lowest (except for HD Fire Protect)
** Consolidated numbers*
n.m.: Not meaningful
Financial numbers of these companies include verticals other than fire protection equipment and are reported at the company level
Financial data for fiscal 2026 is not available for the above peers, as they have not yet filed their fiscal 2026 financial statements
Numbers reclassified as per Crisil standards and may not match company-reported numbers
Source: Company annual reports, Crisil Intelligence

Key observations

- Among the fire-protection-equipment-focused peer set considered, HD Fire Protect had the highest PAT of Rs 1,092.00 million in fiscal 2025

Key financial ratios (fiscal 2025)

Company name^	Operating EBITDA%	PAT %	RoE%	RoCE%	Gearing ratio	Cash conversion cycle
Fire protection equipment focused						
HD Fire Protect	32.56	24.58	29.50	39.39	0.00	93
Safex Fire Services	21.33	16.73	35.60	48.11	0.00	87
Newage Fire Fighting Company	13.42	6.99	12.34	15.57	0.24	158
Ceasefire Industries*	0.04	-0.74	-1.55	0.82	0.22	99
De's Technico	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Vimal Fire Controls*	9.25	3.33	2.67	7.35	0.04	198
Firetech Equipment & Systems	10.22	3.67	15.30	18.13	0.67	88
Fluid Pumps & Equipment	12.32	1.13	3.23	4.98	2.85	244
Fire protection equipment and other diversified segments						
Johnson Controls (India)	10.80	6.46	22.45	31.44	0.16	-166
Honeywell*	14.66	17.51	32.24	43.86	0.07	6
Gunnebo India	9.24	8.87	62.22	88.55	0.00	-79

Note:
** Consolidated numbers*
^ The above table is arranged in the order of the latest available revenue from operations from highest to lowest (except for HD Fire Protect)
Financial data for fiscal 2026 is not available for the above peers, as they have not yet filed their fiscal 2026 financial statements
Financial numbers of these companies include verticals other than fire protection equipment and are reported at the company level
Numbers reclassified as per Crisil standards and may not match company-reported numbers
Formulae used are as follows:
Operating EBITDA% = Operating EBITDA/operating income
PAT % = PAT/ (operating income+ non-operating income)
RoE = PAT/average of tangible net worth
RoCE = EBIT/average of [total debt + tangible net worth+ Deferred Tax Liability: |Asset|]
Gearing ratio = Total debt/tangible net worth
Cash conversion cycle = Trade receivable days - Trade payable days + Inventory days
*Inventory days= Inventories/ COS*365*
*Trade receivable days= Trade Receivables/ (Gross Sales+ Traded Goods Sales) *365*
*Trade payable days= Trade Payables/ Cost of material consumed*365*
Source: Company annual reports, Crisil Intelligence

Key financial ratios (fiscal 2024)

Company name^	Operating EBITDA%	PAT %	RoE%	RoCE%	Gearing ratio	Cash conversion cycle
Fire protection equipment focused						
HD Fire Protect	29.34	22.98	28.41	37.45	0.00	84
Safex Fire Services Ltd.	24.47	18.36	47.40	64.50	0.01	93
Newage Fire Fighting Company	12.30	7.13	17.17	20.60	0.33	103
Ceasefire Industries Pvt. Ltd.*	-3.23	-3.08	-5.71	-3.82	0.20	129
De's Technico Ltd.	11.16	7.34	23.54	28.39	0.48	54
Vimal Fire Controls*	5.14	7.17	5.57	7.05	0.06	205
Firetech Equipment and Systems Private Ltd.	8.61	3.76	18.27	17.86	0.79	73
Fluid Pumps and Equipment India Private Ltd.	13.35	2.22	5.14	5.64	1.93	119
Fire protection equipment and other diversified segments						
Johnson Controls (India)	12.14	7.22	28.77	40.90	0.17	-202
Honeywell*	17.75	15.19	32.39	46.81	0.01	2
Gunnebo India Pvt. Ltd.	9.39	7.96	52.00	74.62	0.00	-128

Note:
** Consolidated numbers*
^ The above table is arranged in the order of the latest available revenue from operations from the highest to the lowest (except for HD Fire Protect)
Financial data for fiscal 2026 is not available for the above peers, as they have not yet filed their fiscal 2026 financial statements
Financial numbers of these companies include verticals other than fire protection equipment and are reported at the company level
Numbers reclassified as per Crisil standards and may not match company-reported numbers
Formulae used are as follows:
Operating EBITDA% = Operating EBITDA/ operating income
PAT % = PAT/ (operating income+ non-operating income)
RoE = PAT/average of tangible net worth
RoCE = EBIT/average of [total debt + tangible net worth+ Deferred Tax Liability: |Asset|]
Gearing ratio = Total debt/tangible net worth
Cash conversion cycle = Trade receivable days - Trade payable days + Inventory days
*Inventory days= Inventories/ COS*365*
*Trade receivable days= Trade Receivables/ (Gross Sales+ Traded Goods Sales) *365*
*Trade payable days= Trade Payables/ Cost of material consumed*365*
Source: Company annual reports, Crisil Intelligence

Key financial ratios (fiscal 2023)

Company name^	Operating EBITDA%	PAT %	RoE%	RoCE%	Gearing ratio	Cash conversion cycle
Fire protection equipment focused						
HD Fire Protect	28.62	20.95	25.29	33.46	0.00	126
Safex Fire Services Ltd.	14.83	10.82	30.77	42.19	0.01	65
Newage Fire Fighting Company	13.00	7.72	25.14	29.64	0.20	62
Ceasefire Industries Pvt. Ltd.*	1.59	0.87	1.58	2.27	0.08	125
De's Technico Ltd.	11.24	7.16	24.54	30.65	0.29	38
Vimal Fire Controls*	7.57	8.68	9.36	12.10	0.05	113
Firetech Equipment and Systems Private Ltd.	10.38	4.11	18.00	17.13	0.89	74
Fluid Pumps and Equipment India Private Ltd.	13.03	1.36	2.68	5.83	1.60	49
Fire protection equipment and other diversified segments						
Johnson Controls (India)	17.52	10.57	46.55	65.58	0.16	-250
Honeywell*	10.31	9.69	18.29	27.15	0.01	-27
Gunnebo India Pvt. Ltd.	7.33	8.17	46.96	67.16	0.00	-79

Note:
** Consolidated numbers*
^ The above table is arranged in the order of the latest available revenue from operations from the highest to lowest (except for HD Fire Protect)
Financial data for fiscal 2026 is not available for the above peers, as they have not yet filed their fiscal 2026 financial statements
Financial numbers of these companies include verticals other than fire protection equipment and are reported at the company level
Numbers reclassified as per Crisil standards and may not match company-reported numbers
Formulae used are as follows:
Operating EBITDA% = Operating EBITDA/ operating income
PAT % = PAT/ (operating income+ non-operating income)
RoE = PAT/average of tangible net worth
RoCE = EBIT/average of [total debt + tangible net worth+ Deferred Tax Liability: |Asset|]
Gearing ratio = Total debt/tangible net worth
Cash conversion cycle = Trade receivable days - Trade payable days + Inventory days
*Inventory days= Inventories/ COS*365*
*Trade receivable days= Trade Receivables/ (Gross Sales+ Traded Goods Sales) *365*
*Trade payable days= Trade Payables/ Cost of material consumed*365*
Source: Company annual reports, Crisil Intelligence

Key observations

- Among the peer set considered, HD Fire Protect had the highest operating margin (32.56%) and net profit margin (24.58%) for fiscal 2025
- Among the fire-protection-equipment-focused peer set considered, HD Fire Protect had the second-highest RoE (29.50%) and RoCE (39.39%) for fiscal 2025
- HD Fire Protect had zero gearing ratio in fiscal 2025
- Among the peer set considered, HD Fire Protect has the highest operating margin (29.34%) and net profit margin (22.98%) for fiscal 2024

- Among the fire-protection-equipment-focused peer set considered, HD Fire Protect had the second highest RoE (28.41%) and RoCE (37.45%) for fiscal 2024
- HD Fire Protect had zero gearing ratio in fiscal 2024
- Among the peer set considered, HD Fire Protect had the highest operating margin (28.62%) and net profit margin (20.95%) for fiscal 2023
- Among the fire-protection-equipment-focused peer set considered, HD Fire Protect had the second highest RoE (25.29%) and RoCE (33.46%) for fiscal 2023
- HD Fire Protect had zero gearing ratio in fiscal 2023

Competitive benchmarking with listed peers

As there are no direct publicly listed companies operating in fire protection equipment market in India, Crisil has analysed some key players operating in the industrials and engineering industry in India. The companies considered in this section operate within the capital goods and industrial equipment sector, supplying engineered products to infrastructure, real estate, power, oil & gas, industrial projects, etc. and often require regulatory clearances or certifications for the goods provided.

Note: The list of competitive peers considered in this section is not exhaustive but indicative in nature. Crisil has considered key players operating in the industrials and engineering market in India.

Data has been obtained from publicly available sources, including annual reports available in the public domain/ filed with the Registrar of Companies (RoC), investor presentations of listed players, regulatory filings, rating rationales, and/or company websites and social media pages. Financials in the competitive section have been re-classified by Crisil, based on annual reports available in the public domain/ filed with the RoC and financial filings by the relevant players. Financial ratios used in this report may not match with the reported financial ratios by the players on account of Crisil's standardisation and re-classification.

Financial overview

Key financials of Q1FY27

Company name (Rs million)	Revenue from operations	Operating EBITDA	Operating EBITDA Margin (%)	PAT	PAT margin (%)
Azad Engineering Ltd.*	1,725.99	643.62	37.29	351.60	19.96
Elgi equipment Ltd.*	10,662.00	1,593.00	14.94	1,033.00	9.54
Ingersoll-Rand (India) Ltd.	3,794.60	902.20	23.78	704.60	18.10
Kirloskar Pneumatic Company Ltd*	3,031.00	456.00	15.04	332.00	10.67
KSB Ltd.*#	6,013.00	508.00	8.45	398.00	6.46

Note:

** Consolidated numbers*

Kindly note that Q1FY27 values have not been restated as per Crisil Intelligence standards. These have been computed on the basis of the underlying values reported by the Company in its filings

 # Q1FY27 numbers for KSB Ltd is as of quarter ended 31 March 2026 because financials for KSB Ltd. are on a calendar year basis.

Formulae used are as follows:

Operating EBITDA= Revenue from operations- Total expenses+ Finance costs+ Depreciation and amortization costs

Operating EBITDA% = Operating EBITDA/ Revenue from operations

PAT % = PAT/ (Revenue from operations+ Other income)

Source: Company filings, Crisil Intelligence

Operating income

Company name (Rs million)	FY24	FY25	FY26	CAGR (FY24-26)
Azad Engineering Ltd.*^	3,415.12	4,578.34	5,903.75	31.48%
Elgi equipment Ltd.*	32,201.38	35,133.00	39,541.00	10.81%
Ingersoll-Rand (India) Ltd.	12,153.94	13,527.27	14,086.61	7.66%

Company name (Rs million)	FY24	FY25	FY26	CAGR (FY24-26)
Kirloskar Pneumatic Company Ltd.*	12,981.24	16,144.49	17,636.28	16.56%
KSB Ltd.*#	22,565.29	25,388.96	27,168.90	9.73%

Note:
** Consolidated numbers*
For FY25 and FY26, the numbers for Kirloskar Pneumatic Company Ltd are on consolidated basis. For FY24, the company has not reported consolidated numbers
 # Financials for KSB Ltd. are on a calendar year basis (e.g., in the above table, fiscal year 2025 is calendar year 2024, etc)
^FY26 financials have been updated as per quarterly fillings by the companies and may not be directly comparable with previous years
Numbers reclassified as per Crisil standards and may not match company-reported numbers
Source: Company annual reports, Crisil Intelligence

Exports and domestic revenue

Company name (Rs million)	FY24		FY25		FY26	
	Domestic	Exports	Domestic	Exports	Domestic	Exports
Azad Engineering Ltd.	425.89	2,981.82	388.12	4,185.42	N.A.	N.A.
Elgi equipment Ltd.	16,627.13	15,550.87	18,925.00	16,179.00	20,995.00	18,300.00
Ingersoll-Rand (India) Ltd.	9,803.49	2,177.51	11,149.90	2,213.03	11,385.10	2,538.61
Kirloskar Pneumatic Company Ltd.	12,539.20	687.00	15,047.26	1,239.01	16,537.18	1,055.08
KSB Ltd.#	19,473.30	2,999.08	21,700.34	3,500.22	22,130.58	4,665.73

Note:
 # Financials for KSB Ltd. are on a calendar year basis (e.g., in the above table, fiscal year 2025 is calendar year 2024, etc)
Source: Company websites, annual reports available in the public domain/ filed with the RoC, rating rationales, Crisil Intelligence

Operating Earnings Before Interest, Taxes, Depreciation and Amortisation (Operating EBITDA)

Company name (Rs million)	FY24	FY25	FY26	CAGR (FY24-26)
Azad Engineering Ltd.*^	1,197.56	1,663.47	2,177.48	34.84%
Elgi equipment Ltd.*	4,940.52	5,356.00	5,992.00	10.13%
Ingersoll-Rand (India) Ltd.	2,913.12	3,561.22	3,496.62	9.56%
Kirloskar Pneumatic Company Ltd.*	1,819.79	2,691.07	3,365.72	36.00%
KSB Ltd.*#	3,087.42	3,498.46	4,124.59	15.58%

Note:
** Consolidated numbers*
For FY25 and FY26, the numbers for Kirloskar Pneumatic Company Ltd are on consolidated basis. For FY24, the company has not reported consolidated numbers
 # Financials for KSB Ltd. are on a calendar year basis (e.g., in the above table, fiscal year 2025 is calendar year 2024, etc)
^FY26 financials have been updated as per quarterly fillings by the companies and may not be directly comparable with previous years
Operating EBITDA: Operating revenue (Revenue from operations/Operating income) - Cost of Sales (cost of sales inclusive of Material costs, employee costs, consumables, power cost, other manufacturing and selling costs and other costs)

Numbers reclassified as per Crisil standards and may not match company-reported numbers
Source: Company annual reports, Crisil Intelligence

PAT

Company name (Rs million)	FY24	FY25	FY26	CAGR (FY24-26)
Azad Engineering Ltd.*^	585.80	865.34	1,335.63	51.00%
Elgi equipment Ltd.*	3,121.00	3,502.00	4,302.00	17.41%
Ingersoll-Rand (India) Ltd.	2,223.87	2,675.22	2,560.28	7.30%
Kirloskar Pneumatic Company Ltd.*	1,332.88	2,112.83	2,542.84	38.12%
KSB Ltd.*#	2,087.33	2,474.75	2,704.94	13.84%

Note:
** Consolidated numbers*
For FY25 and FY26, the numbers for Kirloskar Pneumatic Company Ltd are on consolidated basis. For FY24, the company has not reported consolidated numbers
 # Financials for KSB Ltd. are on a calendar year basis (e.g., in the above table, fiscal year 2025 is calendar year 2024, etc)
^FY26 financials have been updated as per quarterly fillings by the companies and may not be directly comparable with previous years
Numbers reclassified as per Crisil standards and may not match company-reported numbers
Source: Company annual reports, Crisil Intelligence

Key financial ratios (fiscal 2026)

Company name	Operating EBITDA Margin (%)	PAT Margin (%)	RoE (%)	RoCE (%)	Tangible Net Worth	Fixed Asset Turnover Ratio	Inventory Days	Trade receivable days	Trade payable days	Cash conversion Cycle
Azad Engineering Ltd.*^	36.88	20.94	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Elgi equipment Ltd.*	15.15	10.60	23.87	27.39	19,715.00	4.27	77	68	86	60
Ingersoll-Rand (India) Ltd.	24.82	17.93	41.80	56.94	6,157.17	5.16	81	74	117	39
Kirloskar Pneumatic Company Ltd.*	19.08	14.20	21.56	28.41	12,548.57	3.39	62	109	103	69
KSB Ltd.*#	15.18	9.83	17.33	23.36	16,566.01	2.75	125	119	107	137

Note:
** Consolidated numbers*
For FY25 and FY26, the numbers for Kirloskar Pneumatic Company Ltd are on consolidated basis. For FY24, the company has not reported consolidated numbers
 # Financials for KSB Ltd. are on a calendar year basis (e.g., in the above table, fiscal year 2025 is calendar year 2024, etc)
^FY26 financials have been updated as per quarterly fillings by the companies and may not be directly comparable with previous years
Numbers reclassified as per Crisil standards and may not match company-reported numbers
Formulae used are as follows:
Operating EBITDA% = Operating EBITDA/operating income
PAT % = PAT/ (operating income+ non-operating income)
RoE = PAT/average of tangible net worth
RoCE = EBIT/average of [total debt + tangible net worth+ Deferred Tax Liability: |Asset|]

Fixed asset turnover ratio = Revenue from operations for the year/ Average of (Property, plant and equipment, Capital work-in-progress and Right-to-use assets)

Cash conversion cycle = Trade receivable days - Trade payable days + Inventory days

*Inventory days= Inventories/ COS*365*

*Trade receivable days= Trade Receivables/ (Gross Sales+ Traded Goods Sales) *365*

*Trade payable days= Trade Payables/ Cost of material consumed*365*

Source: Company annual reports, Crisil Intelligence

Key financial ratios (fiscal 2025)

Company name	Operating EBITDA Margin (%)	PAT Margin (%)	RoE (%)	RoCE (%)	Tangible Net Worth	Fixed Asset Turnover Ratio	Inventory Days	Trade receivable days	Trade payable days	Cash conversion cycle
Azad Engineering Ltd.*	36.33	18.67	8.49	10.52	13,930.26	1.09	237	184	292	129
Elgi equipment Ltd.*	15.24	9.81	23.27	25.75	16,325.00	4.25	75	65	71	69
Ingersoll-Rand (India) Ltd.	26.33	19.50	44.98	61.65	6,093.21	5.99	64	83	106	41
Kirloskar Pneumatic Company Ltd.*	16.67	12.87	20.91	26.59	11,034.99	3.75	61	110	89	82
KSB Ltd.*#	13.78	9.60	18.04	24.34	14,642.30	2.75	107	94	92	109

Note:

** Consolidated numbers*

For FY25 and FY26, the numbers for Kirloskar Pneumatic Company Ltd are on consolidated basis. For FY24, the company has not reported consolidated numbers

 # Financials for KSB Ltd. are on a calendar year basis (e.g., in the above table, fiscal year 2025 is calendar year 2024, etc)

Numbers reclassified as per Crisil standards and may not match company-reported numbers

Formulae used are as follows:

Operating EBITDA% = Operating EBITDA/operating income

PAT % = PAT/ (operating income+ non-operating income)

RoE = PAT/average of tangible net worth

RoCE = EBIT/average of [total debt + tangible net worth+ Deferred Tax Liability: |Asset|]

Fixed asset turnover ratio = Revenue from operations for the year/ Average of (Property, plant and equipment, Capital work-in-progress and Right-to-use assets)

Cash conversion cycle = Trade receivable days - Trade payable days + Inventory days

*Inventory days= Inventories/ COS*365*

*Trade receivable days= Trade Receivables/ (Gross Sales+ Traded Goods Sales) *365*

*Trade payable days= Trade Payables/ Cost of material consumed*365*

Source: Company annual reports, Crisil Intelligence

Key financial ratios (fiscal 2024)

Company name	Operating EBITDA Margin (%)	PAT Margin (%)	RoE (%)	RoCE (%)	Tangible Net Worth	Fixed Asset Turnover Ratio	Inventory Days	Trade receivable days	Trade payable days	Cash conversion cycle
Azad Engineering Ltd.*	35.07	15.82	13.80	18.14	6,450.63	1.19	219	189	222	186
Elgi equipment Ltd.*	15.34	9.52	24.85	26.74	13,780.06	4.21	83	69	79	73
Ingersoll-Rand (India) Ltd.	23.97	17.92	38.41	52.05	5,801.74	5.95	69	76	83	62
Kirloskar Pneumatic Company Ltd.	14.02	10.04	15.64	20.75	9,175.82	3.43	78	106	101	83
KSB Ltd.*#	13.68	9.18	17.24	23.57	12,795.10	2.65	120	81	91	110

Note:

** Consolidated numbers*

 # Financials for KSB Ltd. are on a calendar year basis (e.g., in the above table, fiscal year 2025 is calendar year 2024, etc)

Numbers reclassified as per Crisil standards and may not match company-reported numbers

Formulae used are as follows:

Operating EBITDA% = Operating EBITDA/operating income

PAT % = PAT/ (operating income+ non-operating income)

RoE = PAT/average of tangible net worth

RoCE = EBIT/average of [total debt + tangible net worth+ Deferred Tax Liability: |Asset|]

Fixed asset turnover ratio = Revenue from operations for the year/ Average of (Property, plant and equipment, Capital work-in-progress and Right-to-use assets)

Cash conversion cycle = Trade receivable days - Trade payable days + Inventory days

*Inventory days= Inventories/ COS*365*

*Trade receivable days= Trade Receivables/ (Gross Sales+ Traded Goods Sales) *365*

*Trade payable days= Trade Payables/ Cost of material consumed*365*

Source: Company annual reports, Crisil Intelligence

Abbreviations

Abbreviation	Full form
ABC	Class A (ordinary combustibles), Class B (flammable liquids), Class C (flammable gases)
AI	Artificial intelligence
ASME	American Society of Mechanical Engineers
B2B	Business-to-business
BIS	Bureau of Indian Standards
CAGR	Compound annual growth rate
CE	Conformité Européenne (French for 'European Conformity')
CFEES	Centre for Fire, Explosive and Environment Safety
CIS	Change in stocks
CO_2	Carbon dioxide
CPC	Central Pay Commission
CPI	Consumer Price Index
CPVC	Chlorinated polyvinyl chloride
CY	Calendar year
DESTPL	De'S Technico Pvt Ltd
DMIC	Delhi-Mumbai Industrial Corridor
DPIIT	Department for Promotion of Industry and Internal Trade
DRDO	Defence Research and Development Organisation
EEA	European Economic Area
EMS	Environmental management system
EN3	Europäische Norm (German for 'European Standard') for portable fire extinguishers
EoDB	Ease of Doing Business
ESG	Environmental, social and governance
EU	European Union
EV	Electric vehicle
FDI	Foreign direct investment
FE	Final estimate
FM	Factory Mutual
FRE	First revised estimates
FY	Fiscal year
GCC	Global capability centre
GDP	Gross domestic product
GFCE	Government final consumption expenditure
GFCF	Gross fixed capital formation

Abbreviation	Full form
GoI	Government of India
GST	Goods and Services Tax
GVA	Gross value added
HS	Harmonized System
IIP	Index of Industrial Production
ILO	International Labour Organization
IMARC	International Market Analysis Research and Consulting
IMF	International Monetary Fund
INR	Indian rupee
IoT	Internet of things
IS	Indian Standard
ISI	Indian Standards Institute
ISMS	Information security management system
ISO	International Organization for Standardization
IT	Information technology
LPG	Liquefied petroleum gas
LR	Lloyd's Register
LSTK	Lump sum turnkey
MBBL	Model Building Bye-Laws
MCA	Ministry of Corporate Affairs
MHA	Ministry of Home Affairs
mm	Millimetre
MNC	Multinational corporation
MoSPI	Ministry of Statistics and Programme Implementation
MSF	Million square feet
MW	Megawatt
NA	Not available
NBC	National Building Code
NCR	National Capital Region
NFPA	National Fire Protection Association
NICDP	National Industrial Corridor Development Programme
NNI	Net national income
NSO	National Statistical Office
OISD	Oil Industry Safety Directorate
OISD-GDN	Oil Industry Safety Directorate — Guideline Document
OISD-STD	Oil Industry Safety Directorate — Standard
OPBDIT	Operating profit before depreciation, interest and taxes/ Operating EBITDA

Abbreviation	Full form
OTT	Over-the-top
PAT	Profit after tax
PBIT	Profit before interest and tax
PE	Provisional estimate
PESO	Petroleum and Explosives Safety Organization
PFCE	Private final consumption expenditure
PIB	Press Information Bureau
PLI	Production Linked Incentive
PM	Prime minister
PPE	Personal protective equipment
PPP	Purchasing power parity
PV	Photovoltaic
Q1	First quarter
QMS	Quality management system
R&D	Research and development
RBI	Reserve Bank of India
RoC	Registrar of Companies
RoCE	Return on capital employed
ROE	Return on equity
Rs	Rupees
S&P	Standard & Poor's
SFAC	Standing Fire Advisory Committee
SFSL	Safex Fire Services Ltd
SPV	Special-purpose vehicle
STEC	Storage and Transport of Explosives Committee
SWOT	Strengths, weaknesses, opportunities and threats
UAE	United Arab Emirates
UDAN	Ude Desh ka Aam Nagarik
UK	United Kingdom
UL	Underwriters Laboratories
UN	United Nations
US	United States
UT	Union territory
VdS	VdS Schadenverhütung

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