

17th August, 2026



India Dies and Moulds Market Outlook to 2030F

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INDUSTRY OVERVIEW

Unless noted otherwise, the information in this section is derived from the “India Dies and Moulds Market Outlook to 2030F” (Ken Research Report, July 2026) as well as other publications and industry sources. Neither we nor any other person connected with the Issue have independently verified this information. The data may have been reclassified by us for presentation purposes. Industry sources and publications generally indicate that the information they contain has been obtained from sources believed to be reliable; however, their accuracy, completeness, and underlying assumptions are not guaranteed and their reliability cannot be assured. Moreover, such sources are often based on information available as of specific dates and may no longer reflect current market conditions or trends. They may also rely on estimates, projections, forecasts, and assumptions that may ultimately prove to be inaccurate.

The Ken Research Report, July 2026, has been prepared by Ken Research Private Limited at the specific request of our Company. The report's market research process involved both secondary (desktop) research and primary research, including consultations with leading industry participants and experts across the dies, moulds, tooling, and precision engineering ecosystem in India.

The research methodology employed is the Expert Opinion Methodology. Quantitative market data was obtained through primary research interviews and trusted digital sources. As such, the information presented is subject to change due to evolving market and business conditions. Ken Research's estimates and assumptions are derived from a mix of quantitative and qualitative analyses, including industry journals, company reports, trade associations, and publicly available information relevant to the Indian dies and moulds manufacturing sector. Forecasts, estimates, predictions, and other forward-looking statements in this report are inherently uncertain and may be affected by changes in assumptions, technological advancements, raw material price fluctuations, or unforeseen events. As a result, actual outcomes may differ materially from those projected.

Ken Research has compiled this report in an independent and objective manner and has made every effort to ensure its accuracy and completeness. The firm believes this study provides a fair representation of the Indian Dies and Moulds market, its key segments, growth drivers, and competitive dynamics, within the limits of the information available through primary and secondary research. However, this study is not exhaustive and does not reflect the performance of individual companies within the industry. Ken Research disclaims any liability for losses arising from the use of the information contained in this report. This report should not be interpreted as a recommendation to invest in or divest from any particular company or companies mentioned herein.

1. MACROECONOMIC OVERVIEW

1.1. GLOBAL MACROECONOMIC SCENARIO

GLOBAL ECONOMIC LANDSCAPE

The nominal Gross Domestic Product (GDP) at a global level is estimated to reach USD 126.3 Tn in CY'26 and witnessed a CAGR of 6.6% between CY'20-CY'26. The same is expected to grow at a CAGR of 4.6% during CY'26-CY'30.

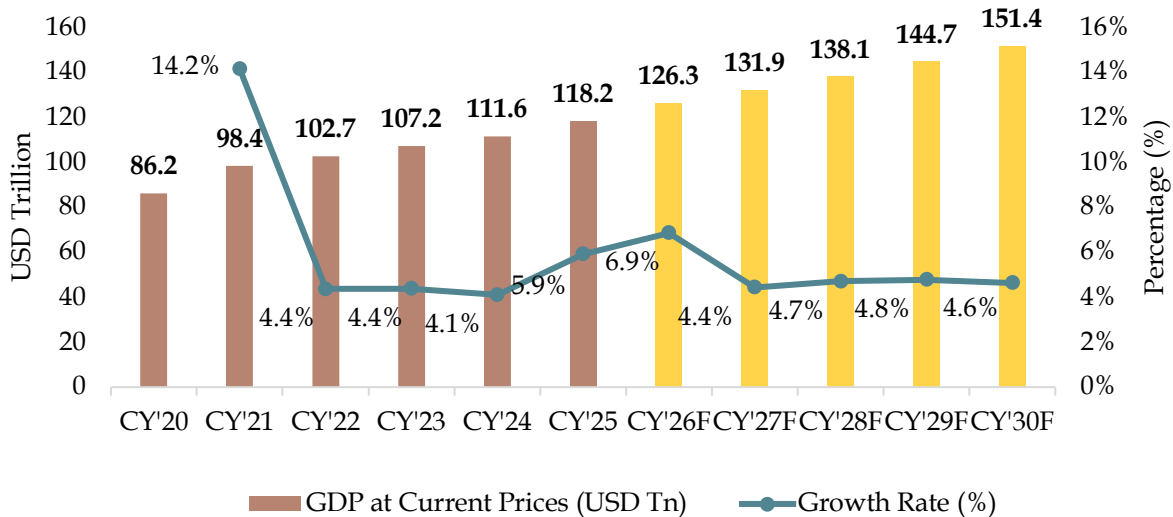
The global economic growth is primarily driven by fiscal and monetary stimulus, stabilized supply chains, increased consumer spending, and renewed Global economic growth is driven by fiscal and monetary stimulus, stabilized supply chains, increased consumer business investments. Additionally, subsiding inflation rates and eased fiscal policies in advanced economies support this growth.

However, global GDP is witnessing uncertainties such as sanctions and tariffs. For example, Russia's exclusion from the SWIFT network after the Ukraine invasion has complicated India–Russia trade, with rupee–ruble settlements often delayed and shipping costs rising. At the same time, the **U.S. decision to impose high tariffs** on a broad set of Indian exports including machinery affects India's competitiveness in one of its largest markets.

The global economic outlook **remains clouded by uncertainty, with escalating tariffs**, geopolitical frictions, and shifting policy signals weighing on trade and market sentiment. Businesses worldwide are rethinking supply chains amid rising costs, while financial markets remain volatile as central banks juggle inflation and growth concerns.

The escalation of the **Iran-U.S. conflict has increased geopolitical uncertainty**, leading to volatility in global energy markets and higher oil prices. As energy costs rise and supply chain disruptions intensify, global inflationary pressures and business investment risks increase, moderating GDP growth expectations over the forecast period. Prolonged conflict could further weaken global economic activity by disrupting trade routes and tightening financial conditions.

Figure 1-1: Global GDP in USD Trillion (at current prices) and Growth Rate in (%) Outlook, CY'20-CY'30F



Source: World Economic Outlook, 2026 (IMF)

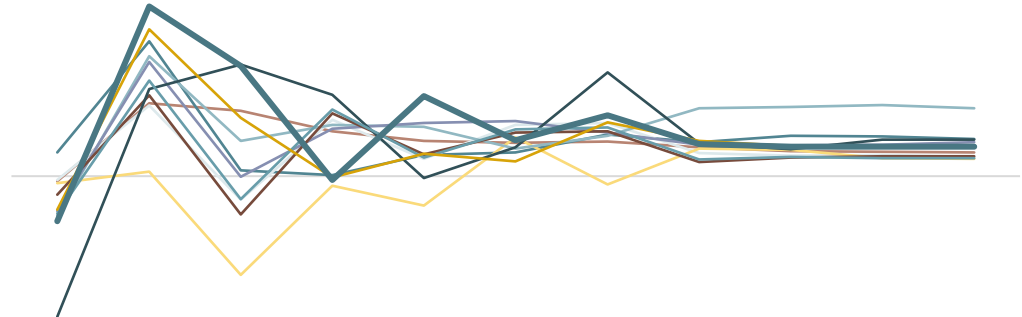
Note: F represents Forecasted figures

Major Economies Stabilize While India Sustains High Growth Trajectory

Global economic growth is expected to moderate over the forecast period as major economies transition to more stable growth trajectories. The U.S. economy is projected to maintain steady growth at around **5.3% in CY'26**, while Germany is expected to recover gradually, with GDP growth reaching **8.0% in CY'26** after a prolonged period of weak performance since CY'23. China, following a 3.6% growth rate in CY'25, is forecast to reach approximately **5.6% by CY'30F**.

Over the same period, **India has demonstrated strong economic resilience**, supported by robust domestic demand, expanding industrial activity, and sustained policy reforms. Despite challenges such as the aftermath of COVID-19, geopolitical tensions, and elevated interest rates, the country continues to record steady economic growth alongside increasing foreign trade and investment.

Figure 1-2: Nominal GDP Growth at Current Prices of Major Economies (Growth Rates, in %), CY'20-CY'30F



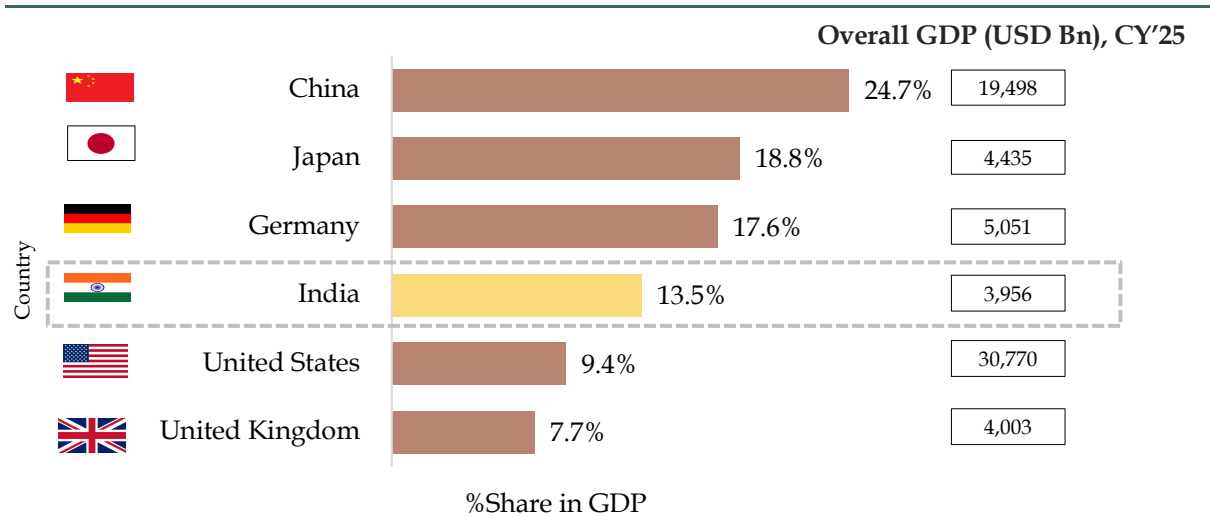
	CY'20	CY'21	CY'22	CY'23	CY'24	CY'25	CY'26F	CY'27F	CY'28F	CY'29F	CY'30F
USA	-0.8%	11.0%	9.8%	6.7%	5.3%	5.0%	5.3%	4.3%	3.8%	3.7%	3.6%
China	3.5%	20.3%	0.8%	0.2%	3.1%	3.6%	6.2%	5.2%	6.1%	6.0%	5.6%
Germany	-0.6%	10.7%	-3.5%	8.5%	2.6%	7.8%	8.0%	3.5%	3.1%	3.2%	2.9%
Japan	-1.1%	0.7%	-14.9%	-1.4%	-4.4%	5.9%	-1.3%	4.2%	4.0%	2.7%	2.7%
India*	-5.9%	18.1%	5.4%	7.7%	7.4%	4.1%	6.0%	10.3%	10.5%	10.7%	10.3%
United Kingdom	-5.3%	17.2%	-0.1%	7.2%	8.0%	8.3%	6.5%	4.7%	4.7%	4.8%	5.1%
France	-2.8%	12.2%	-5.8%	9.4%	3.3%	6.6%	6.7%	2.1%	2.8%	3.0%	3.0%
Brazil	-21.2%	13.2%	16.8%	12.3%	-0.2%	4.3%	15.6%	5.0%	4.1%	5.5%	5.5%
Italy	-5.6%	14.4%	-3.4%	10.1%	2.8%	7.0%	7.4%	2.5%	2.9%	2.7%	2.7%
Canada	-5.0%	22.1%	8.8%	-0.2%	3.3%	2.2%	8.1%	5.3%	4.5%	4.5%	4.4%
Singapore	-6.8%	25.6%	16.6%	-0.6%	12.1%	5.4%	9.2%	4.8%	4.5%	4.4%	4.4%

Source: World Economic Outlook, 2026 (IMF) & Ken Research Analysis

Note: F represents Forecasted figures

CONTRIBUTION OF MANUFACTURING SECTOR ACROSS GDP OF MAJOR ECONOMIES

As of CY'25, Global manufacturing contributes 15% to the world's GDP, reflecting its immense impact on economic development. The manufacturing sector continues to be the dominant contributor to GDP in developed economies, reflecting their shift away from manufacturing and primary sectors towards knowledge, technology and consumption-driven growth models. Contribution of manufacturing sector of major economies depict a clearer perspective of this dynamic.

Figure 1-3: Contribution of Manufacturing Sector (in %) in GDP (in USD Billion) of Major Economies, CY'25

Source: World Bank, IMF & Ken Research Analysis
 CY'25 represents calendar year ending Dec 2025

As per World Bank projections for CY'25, **China leads globally, with manufacturing accounting for 24.7% of its overall GDP.** Japan and Germany follow closely, with a 18.8% and 17.6% share. These figures underscore the maturity and high-value nature of manufacturing-driven economies.

In comparison, India (13.5%), United States (9.4%) and United Kingdom (7.7%) show relatively lower manufacturing sector contributions. This contrast highlights the transitional nature of these economies, which continue to rely substantially on industrial and manufacturing activity, even as they gradually expand their services base.

India's manufacturing sector, despite being a critical contributor to exports, industrial employment, and domestic value addition, remains under-leveraged in terms of its share in GDP compared to global peers such as China and other East Asian economies. This reflects significant growth opportunities, particularly where demographic trends, infrastructure upgrades, supply-chain diversification, and policy initiatives like Make in India and the PLI scheme could support a larger shift toward a manufacturing-led growth model in the medium term.

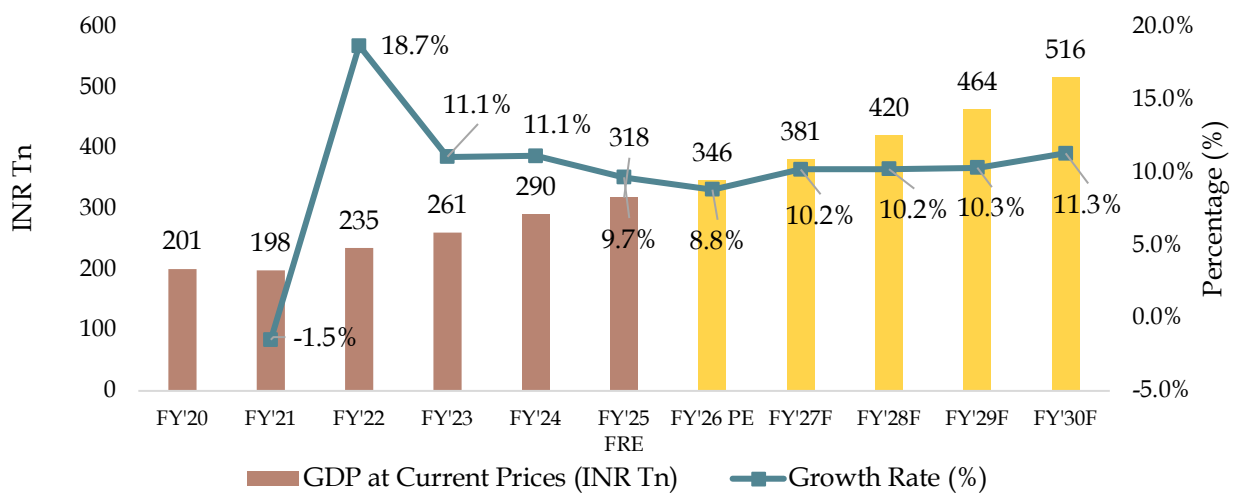
1.2. INDIAN ECONOMIC OUTLOOK

OVERVIEW OF INDIAN ECONOMIC ENVIRONMENT

“India has emerged as the fastest-growing major economy in the world with nominal GDP growth rate, backed by its robust democracy and strong partnerships.”

India's investment appeal has strengthened though volatility due to tariff on India may put pressure on growth. However, domestic production and internal reforms will ensure the GDP growth remains healthy.

Figure 1-4: Indian GDP (at current prices in INR Trillion) and Growth Rate (in %), FY'20 - FY'30F

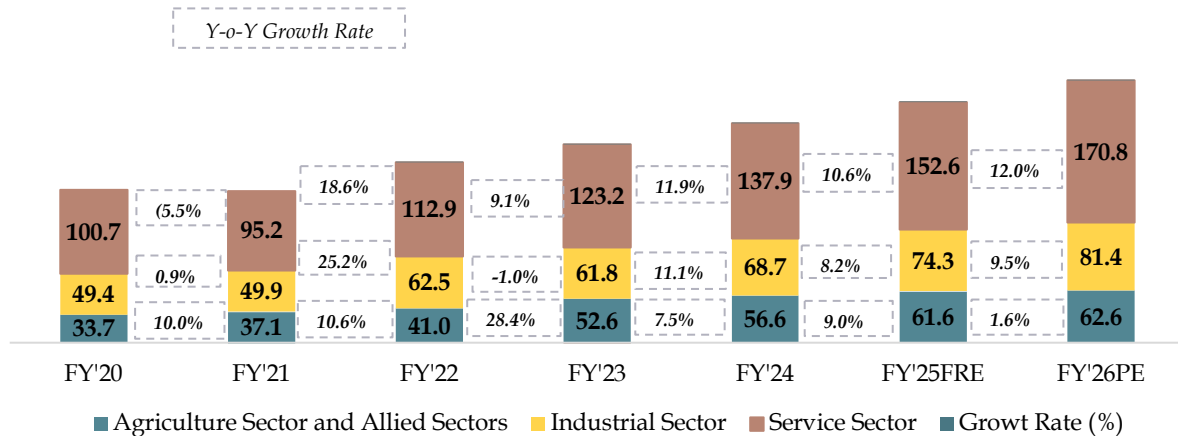


Source: Ministry of Statistics and Programme Implementation, World Economic Outlook, Ken Research Analysis
 Note: FY represents Financial Year (April-March); F represents Forecasted figures, FRE represent First Revised Estimates; PE represent Provisional Estimate

SECTORAL GROSS VALUE ADDITION COMPOSITION

“Of the three major sectors, the agriculture sector has seen the highest CAGR in the last 6 years”

Figure 1-5: Sectoral Gross Value Addition to Indian Economy (in INR Tn) and Growth Scenario (in %), FY'20-FY'26PE



Source: Ministry of Statistics and Programme Implementation (MoSPI) & Ken Research Analysis

Note: FY represents Financial Year (April-March); Note: Data for FY'26PE * are Provisional Estimates, FRE refers to First Revised Estimates

Industrial Sector Growth as a Demand Driver for Tooling Industry:

The industrial sector grew by **8.2%** in **FY'25** owing to positive business optimism and strong growth in new orders that supported manufacturing output. In **FY'26PE**, the industrial sector grew by **9.5%**, reaching **INR 81.4 trillion**. This growth is likely to be driven by continued momentum in infrastructure spending, and supportive government policies under the Production Linked Incentive (PLI) scheme. The industrial growth was mainly supported by sustained momentum in the manufacturing and construction sectors. Within manufacturing, industries such as **construction and automotive** witnessed higher production growth during the quarter Q1FY'26.

The demand for **high-precision moulds and dies** is escalating from the growth of aforementioned sectors, driven by the need for mass production, product standardization, and improved cost efficiency.

Agricultural Sector Growth contributing to Tooling Industry:

Agriculture Sector remained resilient during the pandemic in FY'21, but growth slowed to 7.5% in FY'24 due to weak monsoons. This underscores the need to scale micro-irrigation, which covers ~95 lakh hectares but only ~15% of its potential. With 50–90% higher water efficiency and yield gains above 40%, wider adoption can safeguard farm output against erratic rainfall.

In FY'25, the agriculture sector grew by **9.0% y-o-y**, with recovery by **favourable monsoon forecasts**, which have **recorded high wheat and rice production**, and continued **government interventions** such as higher MSPs and improved irrigation support resulting in **increased**

demand for the tooling market, particularly for moulds and dies used in agricultural machinery and equipment. While in **FY'26**, growth is projected to moderate to **~1.6% y-o-y**. Agricultural growth moderated in FY2026 primarily due to the high base of FY2025, normalization in crop production following a strong harvest, and softer agricultural price growth, despite continued support from favourable monsoon conditions.

Growth of Real-Estate as Demand Driver for Tooling Industry:

Across the real estate and financial services sector contributed 27.0% to overall GDP in FY'26, aided by ongoing urbanization, implementation of the Real Estate (Regulation and Development) Act (RERA), and government housing schemes such as PM Awas Yojana (Urban). These measures have enhanced transparency, boosted housing demand, and facilitated institutional participation. Meanwhile, the rise of professional services like IT services, legal, consulting, and business support services are boosting commercial real estate development in the country further resulting in a higher need for tooling to support the production of construction materials, fixtures, fittings, and allied infrastructure components.

GROWTH TREND OF INVESTMENTS IN INDIA

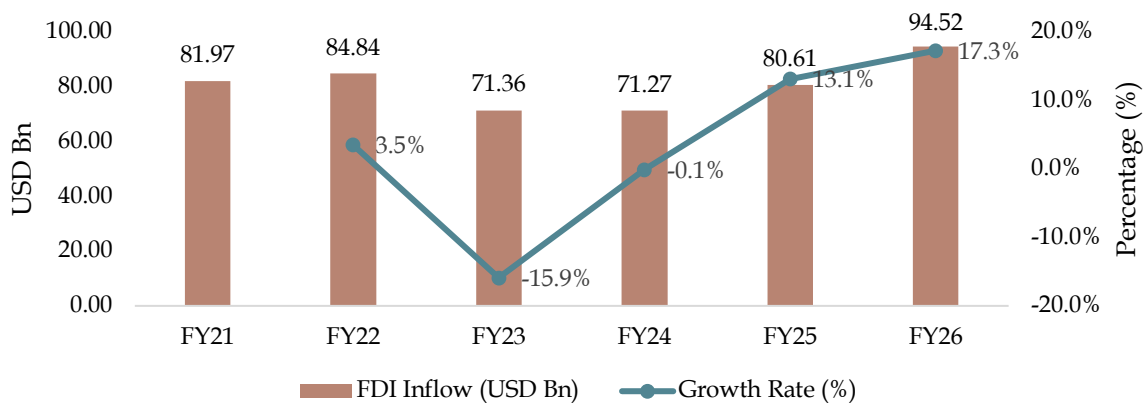
India is one of the most attractive FDI destinations in the world with a total FDI inflow of USD 94.52 Bn in FY26.

India witnessed **17.1% y-o-y** increase over the FY'25 and continues to witness sustained investor interest, driven by country's macroeconomic resilience and ongoing reforms. The Government has put in place an investor friendly Foreign Direct Investment (FDI) policy under which most sectors except certain strategically important sectors are open for 100% FDI under the automatic route.

Measures taken by the Government on FDI Policy reforms have resulted in increased FDI inflow in the country over the years. FDI inflow in India stood at USD 36 billion in 2013-14 and registered its highest ever annual FDI inflow of USD 84 billion in FY'22.

In FY24, total FDI inflows stood at USD 71.27 billion, and FDI equity inflows amounted to USD 44.42 billion. Top 3 States receiving highest FDI Equity Inflow during FY 2023-24 are Maharashtra (39%), Karnataka (13%), and Delhi (12%).

FDI in manufacturing remained robust, supporting key sectors like automotive, plastics, consumer goods, and electronics amid ongoing policy reforms. This acts as a driver for increasing tooling demand across these industries

Figure 1-6: Foreign Direct Investment in USD Billion and Y-o-Y Growth Rates, FY'21-FY'26

Source: Invest India, Make in India, Press Information Bureau & Ken Research Analysis

Note: FY represents the Financial Year ending on March 31

GLOBAL MANUFACTURING TRENDS AND TOOLING REQUIREMENTS

Global manufacturing is undergoing structural change, driven by supply chain, technology, and sustainability imperatives. Companies are redesigning value chains, with nearly 90% of executives prioritizing regional supply chain strategies to enhance resilience (Source: World Economic Forum). At the same time, digitalization, focus on sustainability goals, clean technologies and focus on competitive manufacturing as global trade grows is influencing capital allocation. So, to draw capital toward themselves manufacturers need to sustain competitiveness, while also addressing workforce shortages through upskilling, and adopting flexible production and supplier collaboration models.

Diversification of Supply Chains are Shifting Tooling Demand to India

Global manufacturing is undergoing a realignment as firms diversify supply chains beyond China due to rising costs, trade frictions, and geopolitical pressures. This has direct implications for the tooling industry, where dies, moulds, and precision tools remain indispensable inputs for large-scale production. This is because opportunities earlier going to China; are now migrating back to India; due to increased manufacturing, lower TAT and good quality.

India's tooling (moulding boxes for metal foundry, HS 8480) exports are growing rapidly, reaching USD 229 million in CY'25 from USD 161.5 million in CY'19. While India's import growth shows a gradual decline at a CAGR of 4.8% from CY'19–CY'25, the import value grew from USD 828.1 million in CY'19 to USD 1.1 billion in CY'25, underscoring domestic production satisfying a persistent gap.

This imbalance is increasingly viewed as a strategic opportunity as global manufacturers adopt supplementing China with alternative hubs sourcing strategies (China plus 1). (Source: Trademap)

INDUSTRIAL GROWTH IN INDIA DRIVING TOOLING REQUIREMENTS

India's industrial growth, driven by initiatives like the National Infrastructure Pipeline (NIP), Make in India etc. are fueling demand for tooling, as sectors such as infrastructure, automotive, and electronics expand and rely on precision tools for manufacturing.

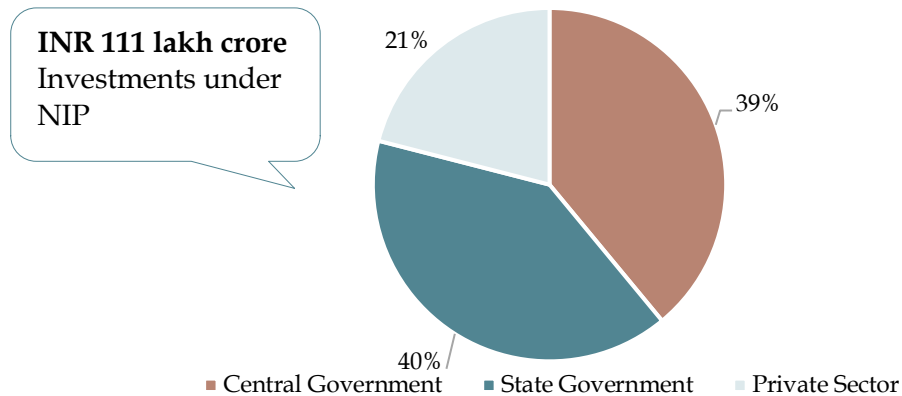
National Infrastructure Pipeline (NIP)

The **National Infrastructure Pipeline (NIP)** was launched in **2019** as a five-year initiative (FY2020–2025) by the Government of India to invest **INR 111 lakh crore during FY'20-FY-25** in social and economic infrastructure projects across sectors like energy, transport, water, and housing. Its objective is to drive India's long-term infrastructure growth by enhancing project execution, attracting private investment, and supporting broader goals like urban transformation, climate resilience, and sustainable mobility. It is responsible for rising budgetary allocations particularly to infrastructure ministries and as of Aug 2026, the pipeline has expanded to **8,716 projects, USD 2,238.8 billion total project cost, 1,093 projects under development, across 64 sub-sectors**. (Source: India Investment Grid). CII has proposed a successor ₹150 lakh crore NIP for 2026-32

The funding mix comprises **39% from the central government, 40% from state governments, and 21% from the private sector**, with instruments like **Infrastructure Investment Trusts (InvITs), Public-Private Partnerships (PPPs), and asset monetization** frameworks enabling greater private sector participation.

With these massive investments in sectors like transport, energy, housing, and urban development, is driving large-scale manufacturing and construction activity, **which in turn fuels demand for tooling such as moulds, dies, and precision components, making the tooling industry a key beneficiary of India's infrastructure push.**

Figure 1-7: Investment Share of Centre, State & Private Sector in NIP implementation In Terms of Contribution (in %), FY'20-25



Source: National Infrastructure Pipeline & Ken Research Analysis

Jal Jeevan Mission

The **Jal Jeevan Mission (JJM)** continues to be a key structural driver for India's water infrastructure sector, with functional tap water connections reaching over **81% of rural households** by early 2026. In March 2026, the Union Cabinet approved the restructuring and extension of the Mission **until December 2028 under JJM 2.0**, increasing the total programme outlay to **₹8.69 lakh crore** and shifting the focus towards sustainable service delivery, operation & maintenance, and digital water infrastructure management. The expanded investment is expected to accelerate demand for **PVC and CPVC pipes, pipe fittings, valves, sanitary ware, and drainage systems**, thereby strengthening demand for pipe, pipe fitting, and industrial moulds used in the manufacturing of these components.

Swachh Bharat Mission

The Swachh Bharat Mission (SBM), launched in 2014 to achieve universal sanitation and eliminate open defecation, continues to drive investments in sanitation and waste management infrastructure across India. Under Swachh Bharat Mission 2.0, the government's focus has shifted towards scientific solid waste processing, wastewater management, garbage-free cities, and sustaining ODF outcomes, with implementation and fund releases continuing through FY2026–27. This sustained investment is expected to increase demand for sanitary ware, PVC and HDPE drainage systems, plastic storage tanks, dustbins, and wastewater infrastructure. Consequently, it will strengthen demand for injection moulds (toilet seats, cisterns, fittings), blow moulds (water tanks, bins, containers), and extrusion dies (pipes, couplers, and drainage fittings), supporting long-term growth in India's dies and moulds industry.

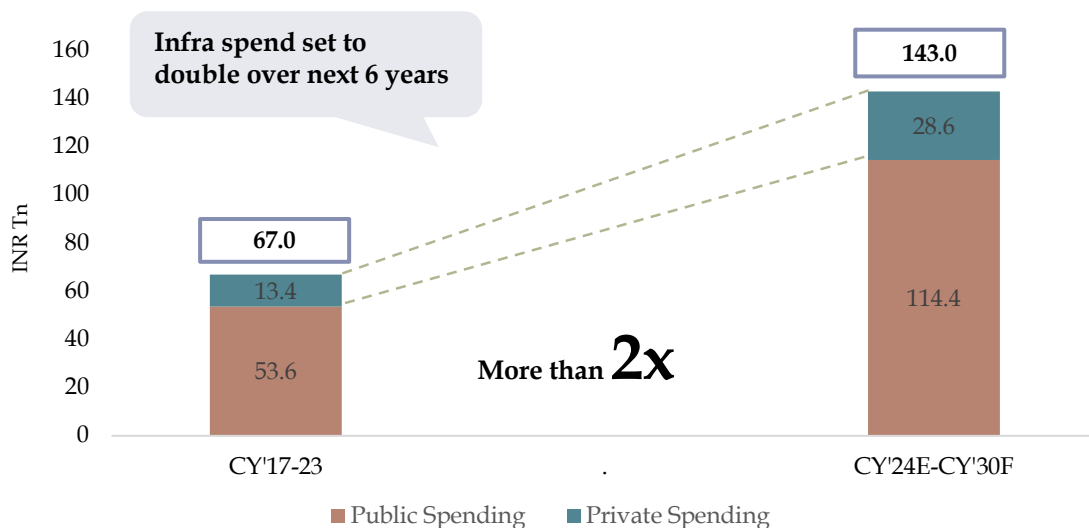
INVESTMENT IN INDIA'S INFRASTRUCTURE INDUSTRY

Roads, railways, airports, digital networks, housing, water supply, and clean energy systems have expanded access to essential services. These systems also influenced how people travel, connect digitally, and participate in economic activity. After 2014, infrastructure development has increasingly focused on scale, integration, and long-term capacity creation. A major shift during this period was the integration of infrastructure planning, as opposed to the earlier practice of fragmented project execution. **Public capital expenditure increased from about ₹2 lakh crore in FY15 to ₹12.2 lakh crore in FY27.**

Between **2017 and 2023**, Infrastructure investments about **INR 67 trillion took place in India**, and over **INR 143 trillion** is expected between **2024 and 2030**. Infrastructure demand stayed stable, though government capex slowed in **FY25 due to the General Elections**. This was offset by **private real estate** momentum in urban and semi-urban areas, driven by housing completions, renovation-led replacement demand, and rising investment in affordable and mid-segment housing. This highlights more than a two-fold increase (Source: CRISIL). **Government agencies, both central and state, account for nearly 80% of this expenditure**, underscoring the state's dominant role in funding and executing projects.

This commitment to infrastructure development driven by the Government of India **creates opportunity for tooling equipment and Mould manufacturers**. Programs like the **National Infrastructure Pipeline (NIP)**, and the **National Monetization Pipeline (NMP)** are enabling structured private participation, asset monetization, and long-term contracting models, making the infrastructure sector increasingly attractive for service providers, investors, technology firms and supply chain players.

Figure 1-8: India's Infrastructure Spend in terms of Value (in INR trillion), CY'17-CY'23 & CY'24E-CY'30F



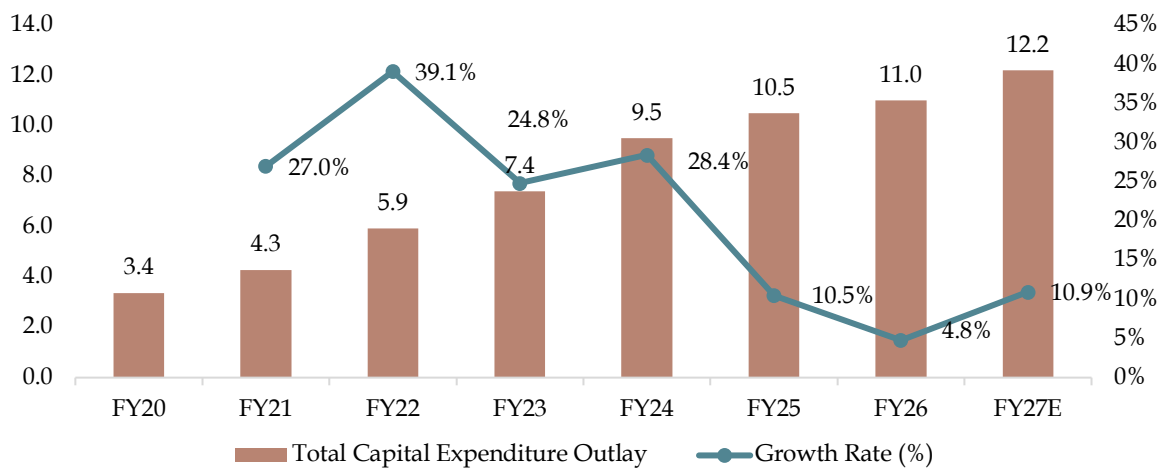
Source: 2023 Infrastructure Yearbook of CRISIL Limited, Ken Research Analysis

Note: F represents Forecasted figures

CAPEX CYCLE IMPACT ON DEMAND FOR TOOLING

India's infrastructure growth trajectory is shaped by the scale and direction of public capital outlay, making Union Budget allocations a critical indicator of long-term policy priorities and execution capacity.

Figure 1-9: Total Capital Expenditure Outlay Under Union Budget of India (in INR lakh crore) and Y-o-Y Growth Rate (%), FY20-FY27E



Source: Union Budget, Ken Research Analysis

Note: FY27E indicates estimated figures

Capital outlay under the Union Budget has grown at a CAGR of ~20.2% from FY20 to FY27, rising from INR 3.4 lakh crore to INR 12.2 lakh crore. The capital outlay saw its steepest annual jump in FY22 at 39.1%, followed by continued double-digit increase in FY23 (24.8%) and FY24 (28.4%). While the pace of growth has moderated to 4.8% in FY26.

Despite the decreasing growth rate, the capital outlay sits at an all-time high in FY26, where the fiscal deficit is projected to decline steadily to **4.3% of GDP signaling a balanced fiscal approach that supports long-term growth without compromising macroeconomic stability**. (Source: Union Budget FY26).

Rising capital expenditure across infrastructure, transport, energy, and housing will drive industrial and construction activity, **increasing demand for precision tooling equipment such as moulds** used in automotive, consumer goods, packaging, and electrical sectors.

These targeted allocations are part of the government's broader capex strategy to **crowd-in private and foreign investment** by anchoring early-stage infrastructure projects. This

approach not only builds investor confidence but also aims to **boost productivity and long-term GDP growth**.

Capital-intensive tooling assets replacement cycles typically ranges from 3-7 years depending on production volume, material wear, and maintenance practices. Stamping dies often sustain 5–10 years of use in automotive and metal forming industries. Fixtures and jigs usually have shorter lives of around 3–5 years, though they can often be refurbished.

Make in India

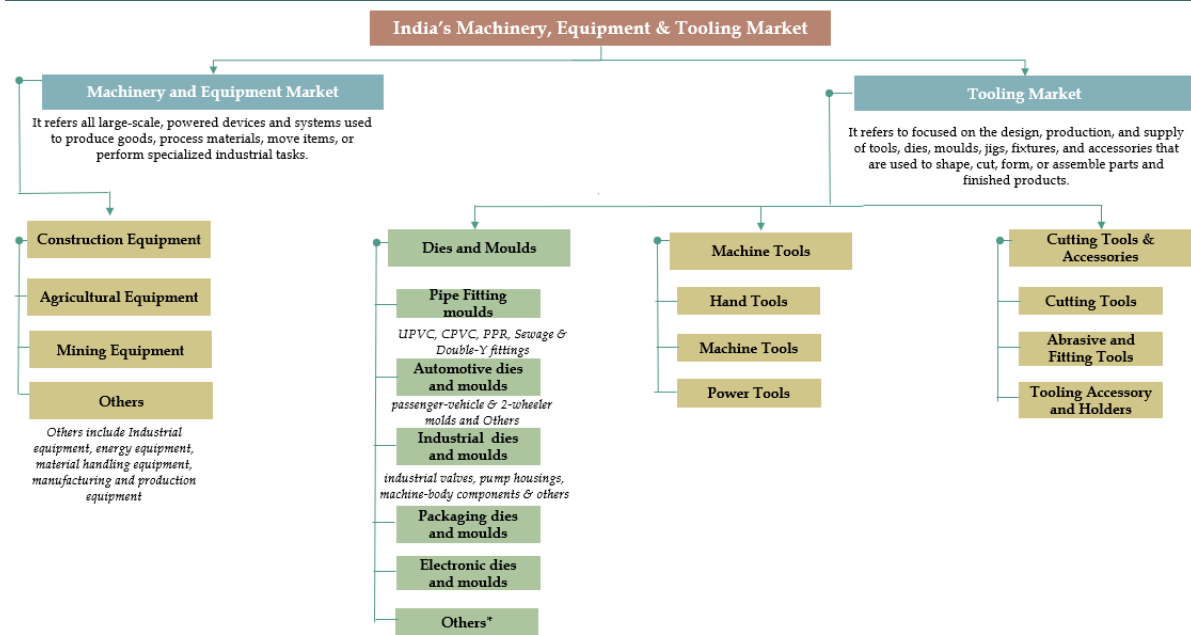
The Make in India initiative, launched in 2014 to boost domestic manufacturing and reduce import dependence, has expanded industrial capacity. This manufacturing growth has directly increased demand for precision tooling and moulds, which are essential for producing components at scale. Rising localization in automotive plastics, white goods, FMCG packaging, and construction materials has translated into higher orders for injection moulds, blow moulds, and extrusion moulds. As Make in India accelerates sectoral manufacturing output and encourages global players to establish production bases in India, it strengthens the domestic tooling ecosystem, positioning the moulds market as a critical enabler of India's industrial expansion.

2. OVERVIEW OF INDIA'S TOOLING MARKET

2.1. TAXONOMY OF INDIA'S TOOLING MARKET AND POSITION OF DIES & MOULDS

The Dies and Moulds market forms a crucial segment of the country's **Tooling Market landscape**, serving as the backbone for precision manufacturing plastic moulding products across automotive, pipe fittings, industrial components and electronics sectors. With sustained growth driven by rising demand in automotive and infrastructure, as well as advancements in materials and processes, Indian manufacturers are increasingly adopting sophisticated **Dies and Moulds** to boost quality and efficiency. Enhanced by technology upgrades such as automation, CNC, and rapid prototyping, the market continues to expand its footprint, underscoring its essential role in supporting industrial innovation and competitive manufacturing.

Figure 2-1: Taxonomy of India's Machinery Equipment & Tooling Market



Source: Ken Research Analysis

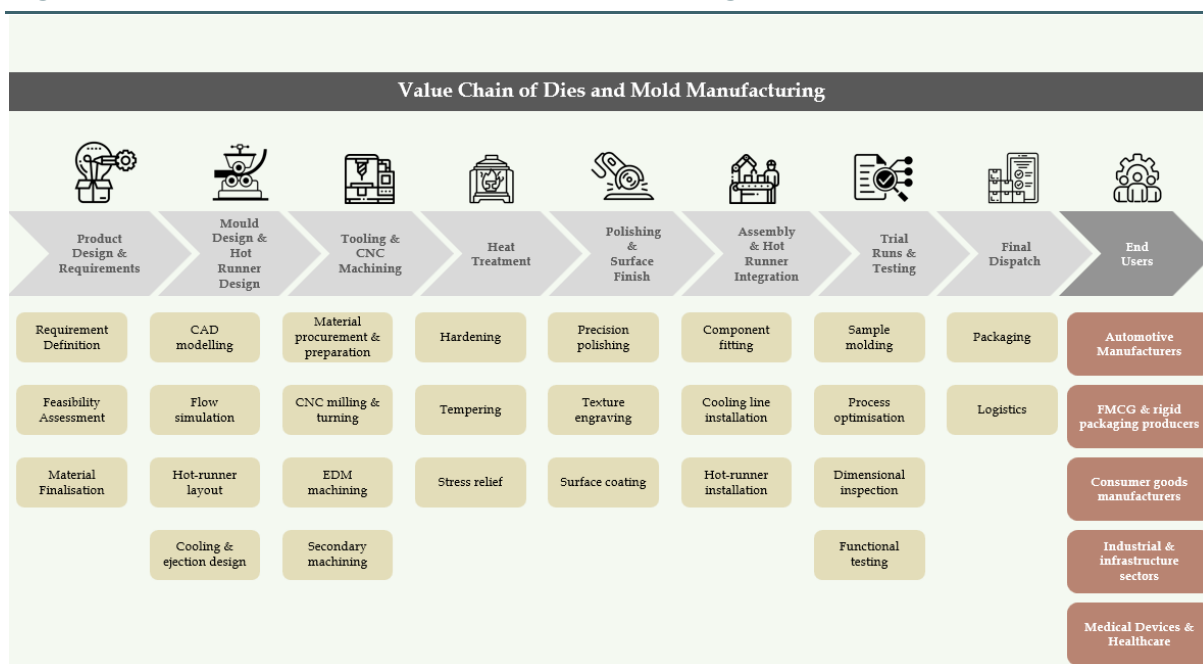
Note 1: Others* include medical dies and moulds, consumer goods dies and moulds, aerospace dies and moulds.

2.2. VALUE CHAIN OF DIES & MOULDS & INTEGRATION OF HOT RUNNERS

The value chain progresses from Product Design & Requirements to Moulds Design (2D/3D), Procurement, Tooling & CNC Machining, Heat Treatment, Polishing & Surface Finish, and Assembly & **Hot-Runner Integration**, followed by Trial Runs & Testing and Final Inspection & Dispatch, supplying end users in automotive, electronics, packaging, medical, household, and industrial sectors.

Hot runner systems are integrated moulds components that deliver molten plastic directly into cavities, eliminating the need for solidified runners. They improve cycle time, reduce material waste, and enhance part quality-especially in high-volume, multi-cavity moulds used in packaging, medical, and consumer goods. By maintaining consistent temperature and flow, hot runners enable precision moulding and support automation in modern toolmaking.

Figure 2-2: Value Chain of Dies & Moulds Manufacturing



Source: Interviews with Industry Experts, Industry Articles & Ken Research Analysis

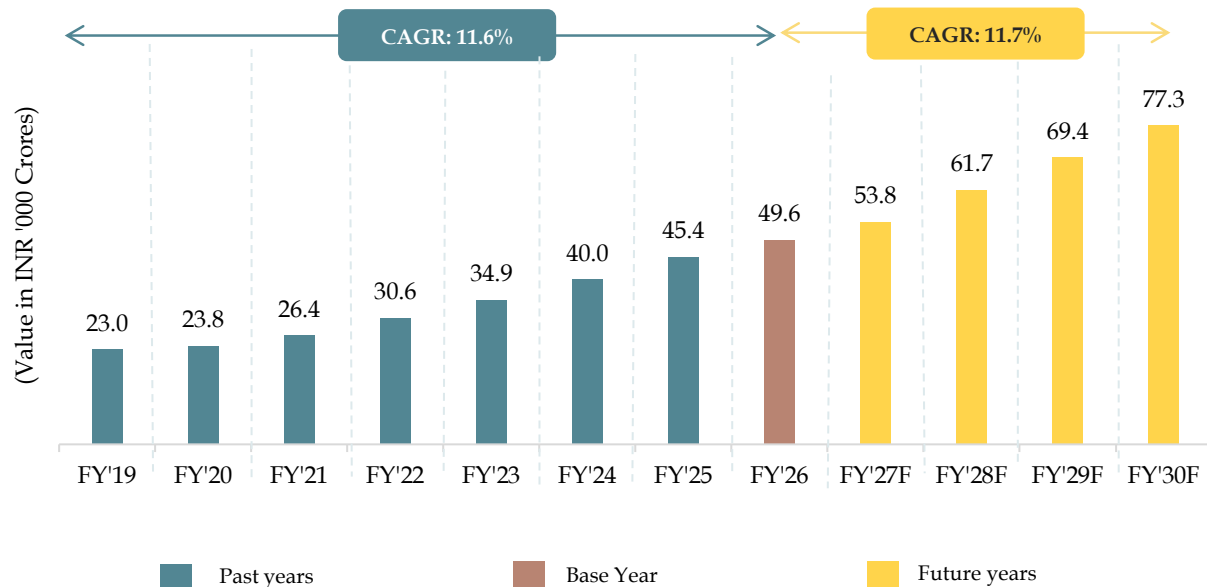
3. INDIA'S DIES AND MOULDS MARKET

3.1. INDIA DIES AND MOULDS MARKET SIZE AND SEGMENTATION, FY'19 - FY'26 - FY'30F

India Dies and Moulds Market was valued at **INR 49,560 crore in FY'26**, witnessing a **CAGR of 11.7%** between **FY'26 and FY'30F**. This growth is underpinned by key drivers:

- PLI and localization-linked capex:** The Production Linked Incentive (PLI) Scheme for Automobile and Auto Components has attracted cumulative investments of ₹44,326 crore as of March 2026, accelerating the establishment of new manufacturing facilities and localization of advanced automotive components. The resulting expansion in automotive production capacity is expected to drive sustained demand for high-precision dies and moulds used in metal stamping, plastic injection moulding, die casting, and component manufacturing (Source PIB).
- Import substitution:** Currently ~34% of moulds are imported; but policy such as Make in India and industry co-ops is making efforts to cut this reliance and increase domestic manufacturing capacity (Source: Tool & Gauge Manufacturers Association of India).

Figure 3-1: India Dies and Moulds Market Size on the Basis of Revenue (in INR '000 Crore), FY'19-FY'30F



Source: Interviews with Industry Experts, Industry Articles & Ken Research Analysis

Note 1: Market is calculated on the basis of Manufacturers

Note 2: FY represents Financial Year (April-March)

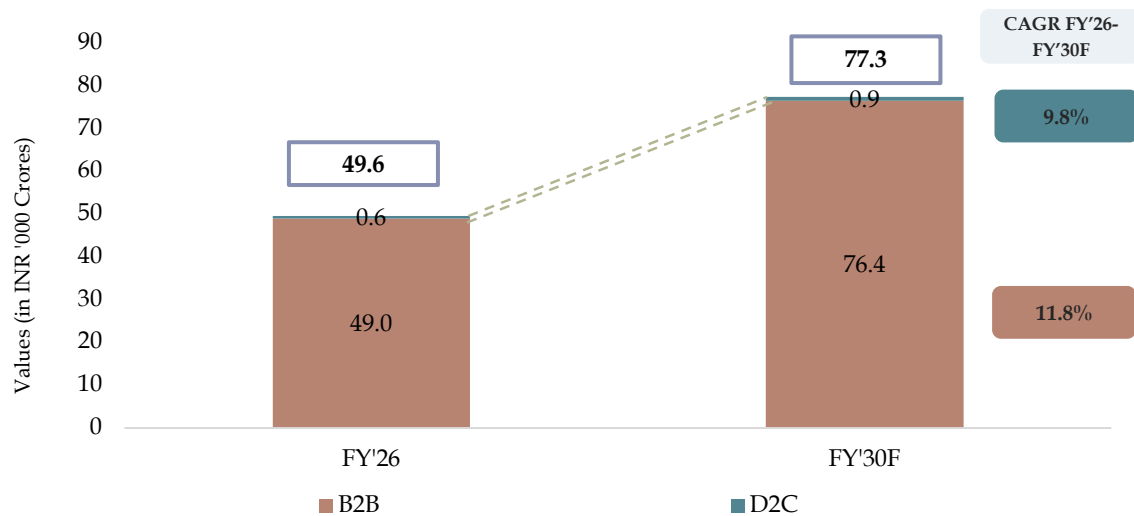
Note 3: F represents Forecasted figures

MARKET SEGMENTATION OF DIES AND MOULDS MARKET BY DISTRIBUTION CHANNEL, FY'26 - FY'30F

The Automotive industry sector is one of the largest end user industries for moulds and dies. The bulk purchase by Original Equipment Manufacturers (OEMs)/Tier-1 leads to higher procurement via i.e. B2B channels rather than retail.

Government push like Make-in-India, Vision 2030, PLI & EV schemes aim to grow domestic manufacturing & local supplier ecosystems; Original Equipment Manufacturers prefer qualified local tool vendors through long-term supplier development, reducing open retail demand.

Figure 3-2: India Dies and Moulds Manufacturing Market Segmentation by Distribution Channel on the basis of Revenue (in INR '000 Crore), FY'26 - FY'30F



Source: Interviews with Industry Experts, Industry Articles & Ken Research Analysis

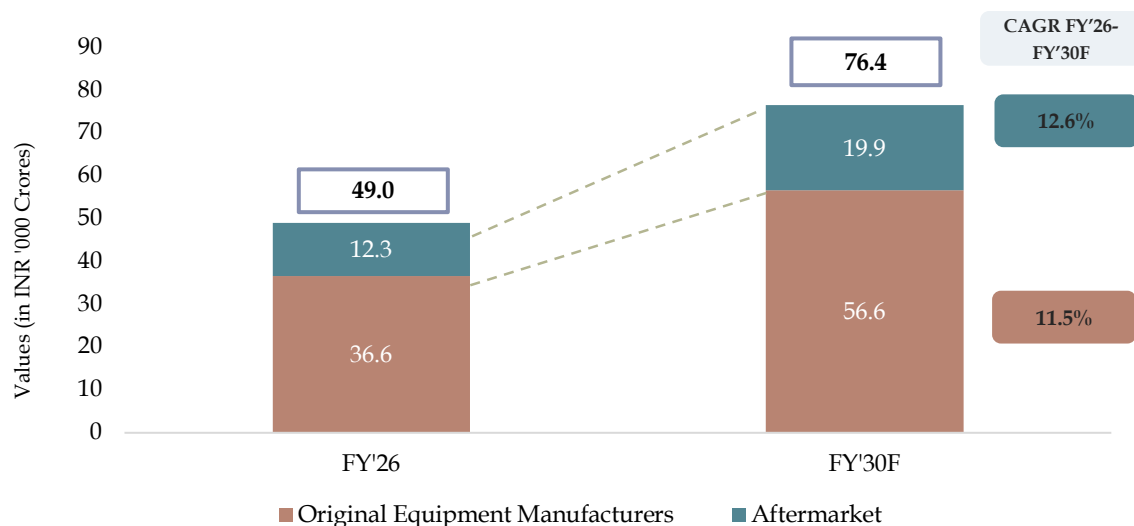
Note 1: FY represents Financial Year (April-March)

Note 2: Market is calculated on the basis of Manufacturers

Note 3: F represents Forecasted figures

Original Equipment Manufacturers is the key distribution channel which provides large, consistent tooling demand tied to mass-production programs-making them the natural hub for die and moulds demand. Aftermarket is more fragmented catering to repairs, spares and unattractive for tooling vendors.

Figure 3-3: India Dies and Moulds Market Segmentation By Distribution Channel (B2B) on the basis of Revenue (in INR '000 Crore), FY'26 - FY'30F



Source: Interviews with Industry Experts, Industry Articles & Ken Research Analysis

Note 1: FY represents Financial Year (April-March)

Note 2: Market is calculated on the basis of Manufacturers

Note 3: F represents Forecasted figures

MARKET SEGMENTATION OF DIES AND MOULDS MARKET BY APPLICATION, FY'26 - FY'30F

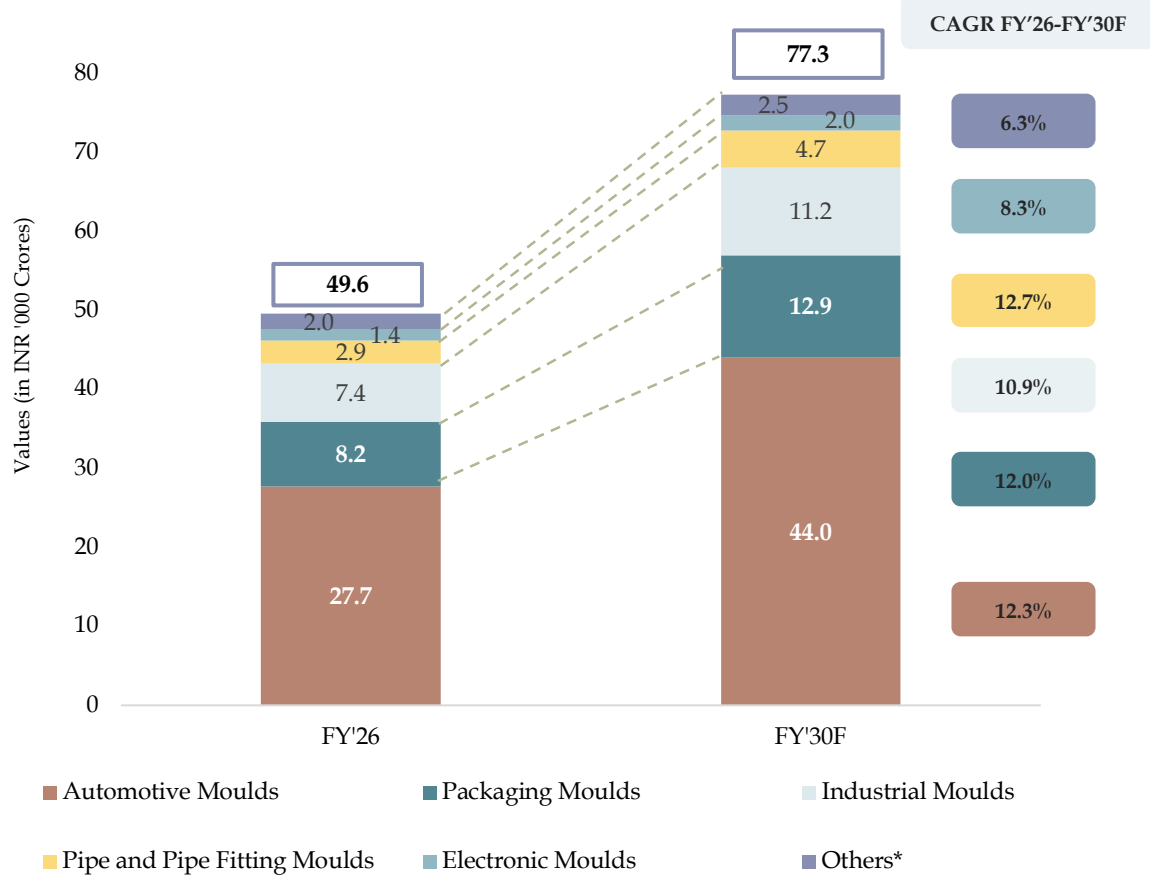
Automotive dies and moulds lead with INR 27.7 thousand Crore in FY'26, growing at a 12.3% CAGR during FY'26-FY'30 to reach INR 44.0 thousand Crore by FY'30. Growth stems from automobile exports in FY26, that touched an all-time high of 66.40 lakh units, achieving an annual growth rate of 24% (Source: Society of Indian Automobile Manufacturers).

Pipe fittings dies and moulds growth is supported by government programs like Jal Jeevan Mission and Smart Cities. The PM Rashtriya Krishi Vikas Yojana and Krishonnati Yojana propose a combined outlay of ~INR 1 lakh crores for FY2025–31, with sub-schemes like “Per Drop More Crop” promoting water-use efficiency via micro-irrigation technologies such as drip and sprinkler systems (Source: ICRA), all of which require components made used pipe fitting moulds.

Industrial dies and moulds, is expected to witness a CAGR of 10.9% during FY'26-FY'30F, benefiting from strong momentum coming from manufacturing PMI throughout the forecast period, with new orders at their fastest pace and the Index of Industrial Production (IIP) has

witnessed 5.1% year-on-year growth in May 2026 promoting production of industrial moulds (Source: Ministry of Statistics & Programme Implementation).

Figure 3-4: India Dies and Moulds Market Segmentation By Application on the basis of Revenue (in INR '000 Crore), FY'26 - FY'30F



Source: Interviews with Industry Experts, Industry Articles & Ken Research Analysis

Note 1: Market is calculated on the basis of Manufacturers

Note 2: Others include Consumer goods Moulds, Medical Moulds etc.

Note 3: FY represents Financial Year (April-March)

Note 4: F represents Forecasted figures

4. DEEP-DIVE OF INDIA'S DIES AND MOULDS MARKET BY MAJOR APPLICATIONS

4.1. INDIA PIPE FITTING DIES AND MOULDS MARKET SIZE, FY'19 - FY'26 - FY'30F

It is projected to be growing at CAGR of 12.7% during FY'26 and FY'30 the growth is underpinned by various factors like:

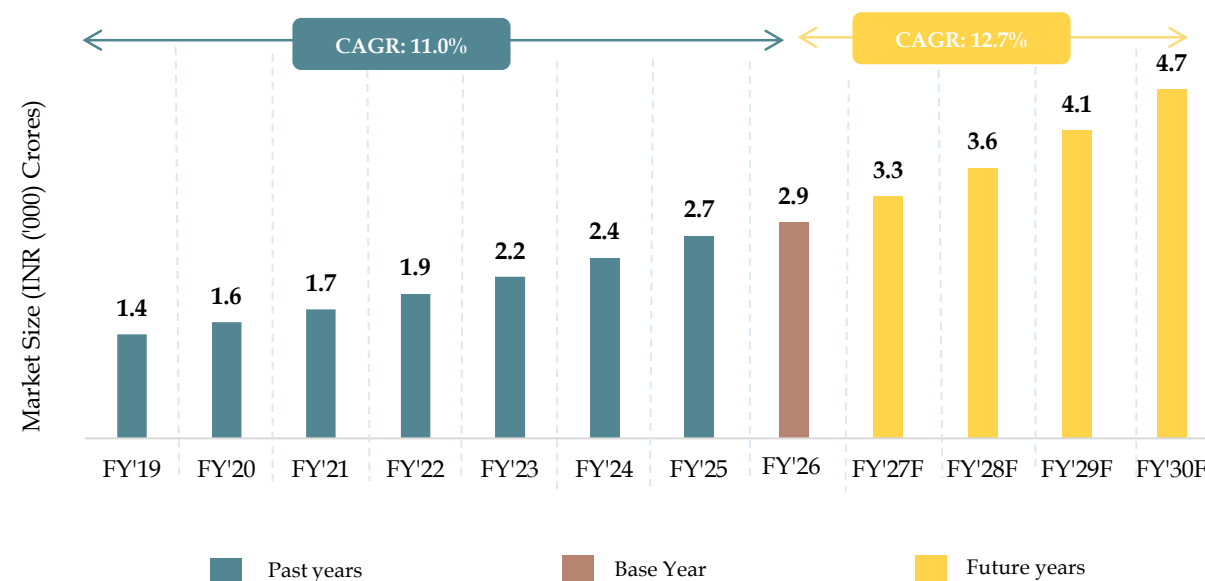
- Large enterprises in the pipe fitting sector maintain 200–500+ SKUs, each requiring a dedicated injection Moulds, sustaining continuous tooling demand.

India's real estate is expected to reach US\$ 1 trillion by 2030, up from US\$ 200 billion in 2021, it is expected to contribute 13% to the country's GDP in 2025.

- Drip and micro-irrigation market projected to growing rapidly underpinned by increase in advancement in agricultural sector requiring specialized moulds.

Some of the key government schemes driving growth for Pipe Fittings Market:

- **Pradhan Mantri Krishi Sinchayee Yojana (PMKSY, 2015):** It is focused on expanding irrigation, it has completed **66+ projects** and created **~29 lakh hectares of potential**, boosting demand for large PVC (Polyvinyl Chloride) and HDPE (High Density Polyethylene) pipes, fittings, and heavy-duty moulds.
- **Per Drop More Crop (PDMC, 2023–25):** It promotes drip and sprinkler irrigation, covering ~97 lakh hectares and driving demand for precision fittings and multi-cavity moulds.
- **Micro-Irrigation Fund (MIF, 2018):** It provides concessional finance to states, spurring high-volume tooling for drip connectors and couplers, especially in Tamil Nadu and Gujarat.
- **PMKSY Phase II (2022–27):** Surface Minor Irrigation (SMI) and Repair, Renovation & Restoration (RRR) has restored 3.9 lakh hectares, increasing demand for medium-diameter pipes, couplers, and associated dies.
- **Prime Minister Dhan-Dhaanya Krishi Yojana (2025):** This initiative is targeting 100 districts, it will sustain rural pipeline, pump, and fittings demand, reinforcing irrigation as a long-term driver for the pipe fitting moulds.

Figure 4-1: India Pipe Fitting Dies and Moulds Market Size on the Basis of Revenue (in INR '000 Crore), FY'19- FY'30F

Source: Interviews with Industry Experts, Industry Articles & Ken Research Analysis

Note 1: Market is calculated on the basis of Manufacturers

Note 2: FY represents Financial Year (April-March)

Note 3: F notes Forecasted figures

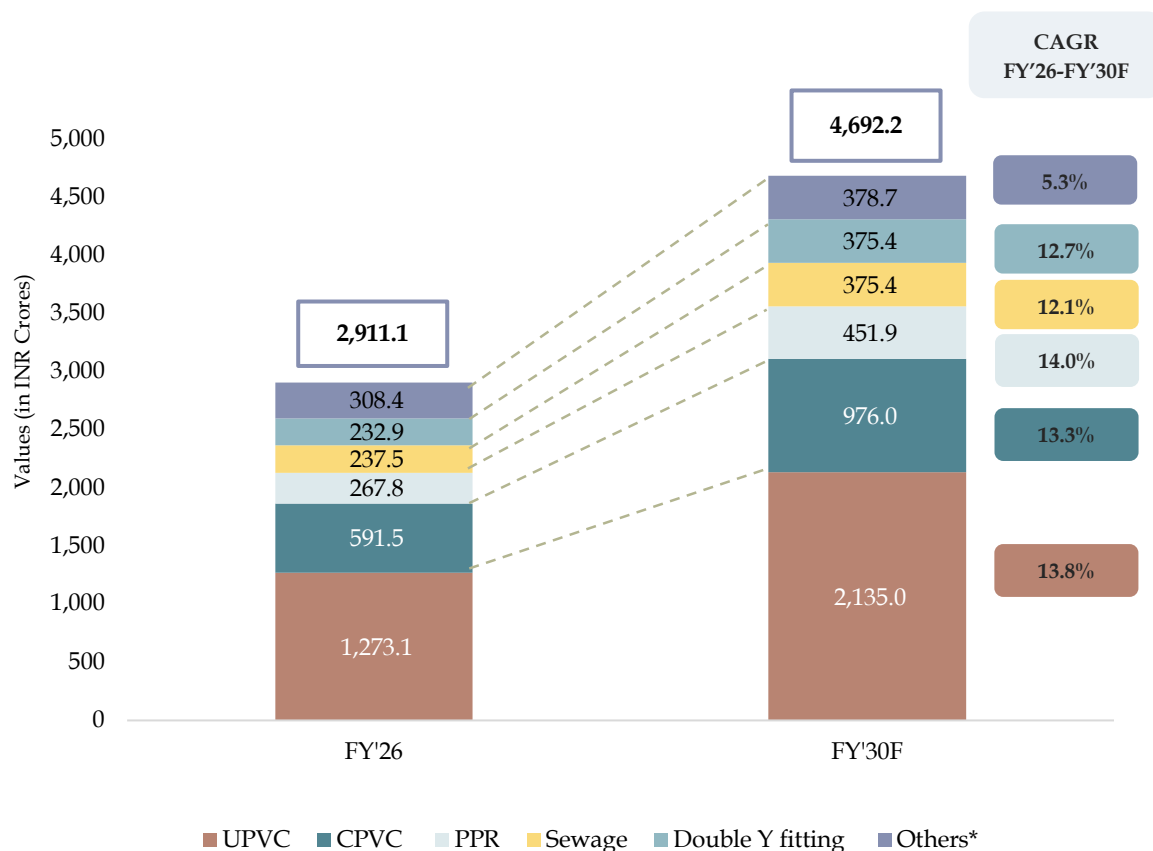
MARKET SEGMENTATION OF INDIA PIPE FITTING DIES AND MOULDS MARKET BY TYPE, FY'26 - FY'30F

UPVC moulds are driving demand under pipe fitting moulds market as the largest segment, and the segment with CAGR of 13.8% from FY'26- FY'30. This is majorly because of government initiatives and agricultural demand as shown under:

- Overall plastic pipes market in India was valued at over INR 65 thousand crore in FY'26 and is projected to grow significantly. UPVC pipes constitute largest share of ~65% in market by volume. (Source: ICRA)
- The allocation towards PMAY-Urban has been increased by 54% to INR 23,300 crore for FY'26 BE from Rs. 152 billion for FY'25 RE. The continued focus on PMAY-Urban is likely to support the demand for affordable housing in the urban real estate segment (Source: ICRA). (Note: BE refers to Budgeted Estimates and RE refers to Revised Estimates)

With evolving requirements and technological advancements, moulds are periodically replaced. In recent years, CPVC and UPVC have witnessed significant growth in market share, reflecting a clear shift in demand.

Figure 4-2: India Pipe Fittings Dies and Moulds Market Segmentation by Type on the basis of Revenue (in INR Crore), FY'26 - FY'30F



Source: Interviews with Industry Experts, Industry Articles & Ken Research Analysis

Note 1: Market is calculated on the basis of Manufacturers

Note 2: FY represents Financial Year (April-March)

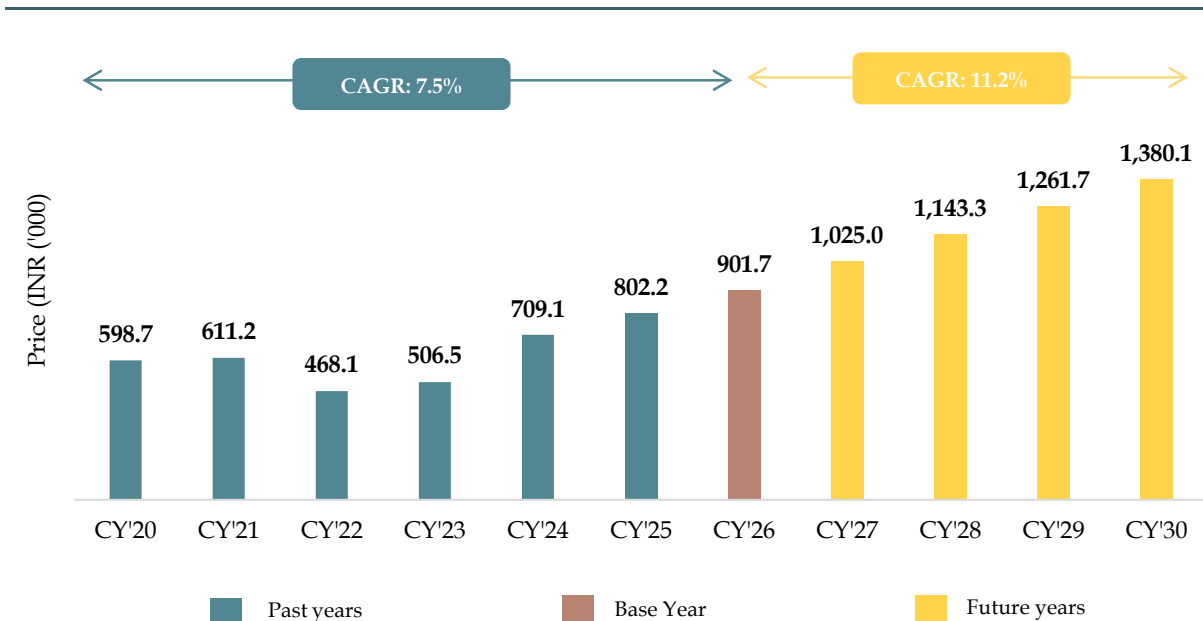
Note 3: Others include HDPE fittings, PP fittings, Compression fittings, composite fitting.

PRICE TRENDS AND CAPACITY UTILIZATION OF INDIA'S PIPE FITTING MOULDS MANUFACTURING FACILITIES

The significant fluctuations in PVC resin prices between CY'21 and CY'22, where prices fell by nearly 58% from their peak (~USD 1,900/MT in Oct-21 to ~USD 850-900/MT by late CY'22), had initially restricted moulds demand due to uncertainty in project cost planning. However, by CY'24, PVC prices have largely stabilized at in India and globally, restoring confidence among manufacturers and driving consistent order flows. **In the initial months of CY'25**, prices eased further by about 24% over the past two years to ~USD 780-800/MT, providing additional cost stability and supporting stronger order momentum. PVC resin prices in India declined in 2026 due to higher import availability (particularly from China), improved domestic supply, and softer international prices, although there were short-term fluctuations during the year.

With stability in raw material costs, moulds manufacturers have been able to maintain and even increase their average selling prices (ASPs), supported by rising demand from pipes, fittings, automotive, and packaging sectors. Demand is driven by housing, irrigation, and infrastructure investments, which translates into higher moulds requirements and better pricing power for moulds makers (Source: Prince Pipes).

Figure 4-3: Average Selling Price Trends of Pipe Fitting Dies and Moulds (in '000 INR) and Annual Growth rate (in %), CY'20-CY'30



Source: Trademap, Industry Articles & Ken Research Analysis

Note: CY represents Calendar Year

Capacity utilization of domestic moulds factories has shown a relatively stable trend over the past three years, reflecting a balanced demand-supply scenario. Utilization improved from 73% in FY'23 to 75.2% in FY'24, driven by a surge in demand from pipes, fittings, packaging, and automotive sectors, alongside backlog clearance from previous years. However, in FY'25, utilization slightly softened to 74%, largely due to short-term demand moderation and the impact of capacity expansions undertaken by leading moulds manufacturers. Despite this marginal dip, the industry continues to operate at healthy levels, supported by stable raw material prices, increasing adoption of multi-cavity, high-precision moulds, and sustained diversified demand through infrastructure and construction growth, indicating strong potential for capacity absorption in the medium term.

Capacity utilization of domestic moulds factories is estimated to have increased to ~76–77% in FY'26, supported by stronger demand from the pipes & fittings, packaging, automotive, and electrical sectors, along with stable PVC resin prices and improved order inflows. Capacity absorption improved following the capacity expansions undertaken in FY'25, while healthy infrastructure and construction activity continued to support production. (Source: FICCI and Motilal Oswal).

PIPE FITTING MOULDS MARKET IS DRIVEN BY RISING PLASTIC PIPE FITTINGS MARKET IN INDIA

Global Plastic Pipe Fitting Market is forecasted to reach 340 thousand crores in the next 10 years, whereas the Indian plastic pipes fittings market is projected to grow from INR 64.3 thousand Crore in FY'26 to INR 85.0 thousand crore by FY'30, reflecting a CAGR of about 7.2% during FY'26-FY'30.

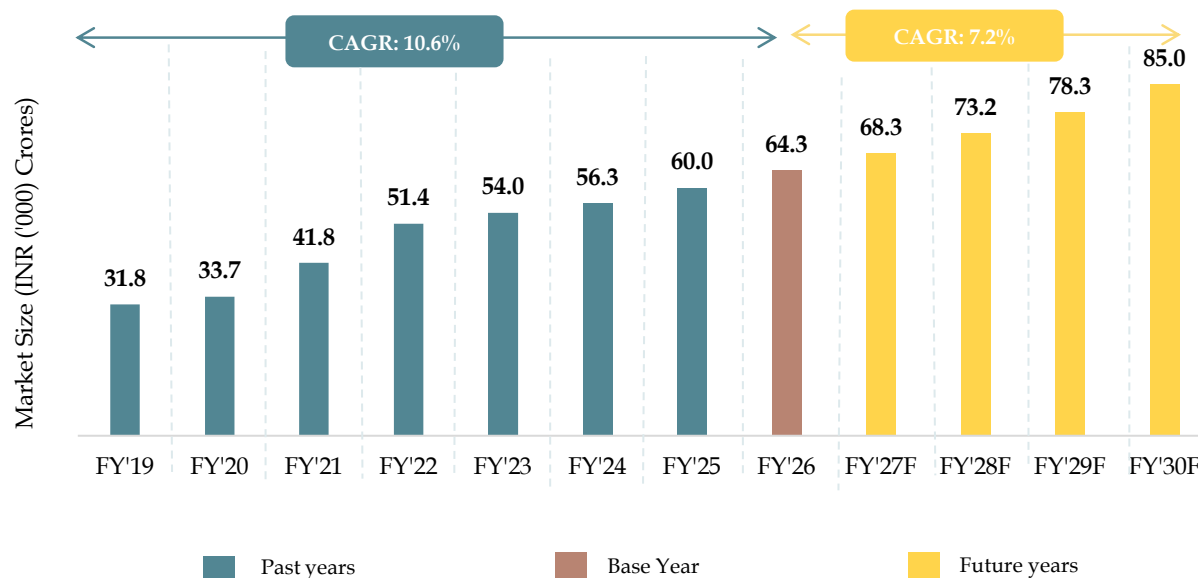
Key growth drivers include government-led infrastructure projects such as the **Jal Jeevan Mission**, **Atal Mission** for Rejuvenation and Urban Transformation (AMRUT), and the Smart Cities Mission, all of which are boosting demand for water supply and drainage systems. **AMRUT**, launched in 2015, focuses on ensuring universal coverage of water supply and sewerage in 500 cities, along with promoting stormwater drainage, urban transport, and green spaces-creating consistent requirements for pipelines, fittings, and related moulds. **The Smart Cities Mission**, spanning 100 cities, emphasizes integrated water management, wastewater recycling, and modern urban infrastructure, driving adoption of advanced piping networks and precision fittings. Additional factors supporting demand include increasing urbanization, rising housing construction under schemes like **Pradhan Mantri Awas Yojana (PMAY)**, expansion of irrigation through drip and sprinkler systems, and greater use of CPVC and HDPE pipes in industrial and chemical applications.

Agricultural irrigation schemes such as the **Pradhan Mantri Krishi Sinchayee Yojana (PMKSY)**, **Per Drop More Crop (PDMC)**, the **Micro-Irrigation Fund (MIF)**, and initiatives under **Surface Minor Irrigation (SMI)** and **Repair, Renovation & Restoration (RRR)**, which have expanded the use of drip and sprinkler systems across millions of hectares. These programs have substantially increased demand for PVC and HDPE pipes and fittings, thereby driving recurring requirements for dies and moulds. Urban housing expansion, water infrastructure projects, and retrofit activities continually introduce new SKUs, diameters, and standards. Although a mould typically endures around **one million shots**, brand updates or revisions in BIS/ASTM standards often necessitate earlier replacement of tools or inserts, making this a consistent repeat-order market.

This steady expansion in pipe fitting production directly supports the moulds and dies market. Manufacturing these products requires precision injection moulds, extrusion dies, and multi-cavity tooling, leading to higher demand for advanced moulds as capacity expands. Additionally, the UPVC, CPVC and HDPE pipes is driving the need for more durable, high-performance moulds, further linking moulds and dies demand to the overall growth of the plastic pipes fittings sector. An **opportunity** exists to plan capacity for duplicate or high-cavity tools when customers secure large-volume projects, ensuring timely fulfillment without production bottlenecks. Maintaining modular insert designs ready for **CPVC/PPR socket specification changes or logo and QR embossing updates** can also help toolmakers respond

faster to customer revisions, reducing downtime and capturing repeat business efficiently.

Figure 4-4: India Plastic Pipes Fitting Market on the basis of Revenue (in INR '000 crore), FY'19-FY'30F



Source: Industry Articles & Ken Research Analysis

Note: FY represents Financial Year (April-March)

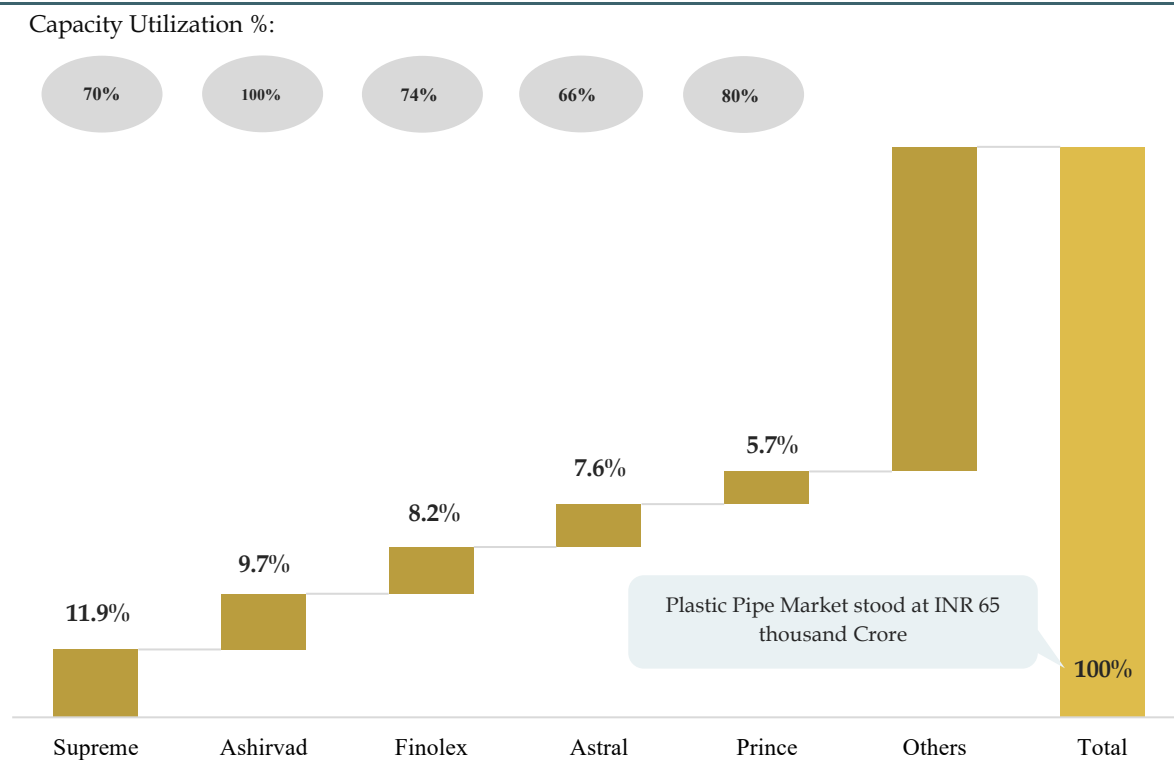
The Indian plastic pipes fittings market shows a fragmented structure, where organized players are gradually expanding their presence to capture a larger share of demand. With the market projected to reach INR 85.0 thousand crore by FY'30, capacity additions are expected across leading manufacturers as well as regional players.

In the pipe fitting market, pipe manufacturers allocate about ~45% of their average spend to moulds, underlining the critical role of tooling in production. **Steel continues to command the largest share of revenues, but advanced polymers and alternative materials are expanding at the fastest pace.** This shift is creating opportunities for suppliers of precision moulds, particularly for advanced material fittings, as manufacturers look to adapt their product mix and meet evolving market requirements. By FY'30, this share is expected to moderate to around ~40%, reflecting efficiency gains and the adoption of advanced manufacturing technologies, while moulds will continue to remain a core cost driver.

Moreover, the recurring demand for moulds is coming from the shift from metal to plastic fittings, driven by corrosion resistance and ease of installation. Manufacturers are introducing **new SKUs across** pressure ratings, sizes, and applications, while also refreshing designs to incorporate branding features such as embossed **logos, QR codes, and socket modifications.**

In addition, regular updates are needed to ensure compliance with evolving international standards like ASTM and ISO, reinforcing the need for continuous investment in precision moulds.

Figure 4-5: Share of Major Plastic Pipe Players in India Based of Revenue (in %), FY'26



Source: Industry Articles & Ken Research Analysis

Other include Apollo Pipes Ltd., Captain Pipes Ltd, Dutron, Skipper Ltd., and many other players.

Capacity Utilization represented as:

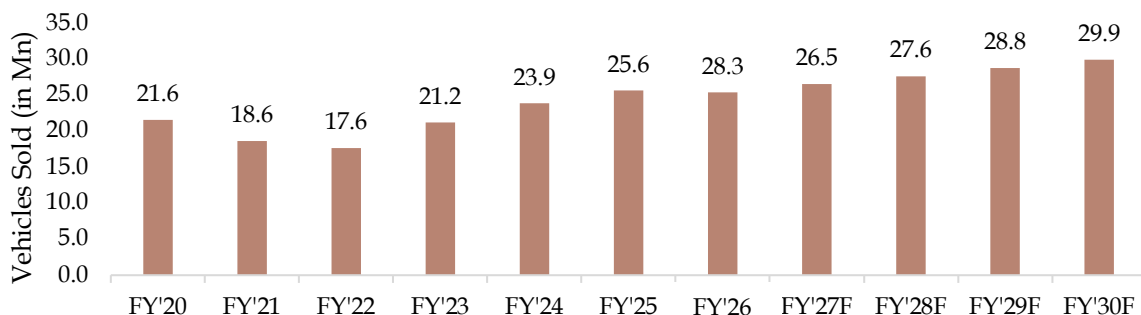
4.2. INDIA AUTOMOTIVE DIES AND MOULDS MARKET SIZE, FY'19 - FY'30F

India's automobile sales reached a record 28.3 million units in FY2026, driven by tax cuts, lower interest rates, and improved consumer affordability, boosting demand across all major vehicle segments (Source: IBEF) directly boosting demand for moulds and dies.

Each new vehicle typically requires 100–300+ moulds and dies, worth INR 2–5 crore per set (Source: SIAM & ACMA), with shorter 3–4-year model cycles and variant proliferation driving more frequent tooling orders. The EV shift further adds requirements for specialized moulds for battery casings, motor housings, and lightweight structures.

Government-led localization under the Auto PLI Scheme and Original Equipment Manufacturer push for **domestic sourcing are creating opportunities for Indian toolmakers to supply high-precision, faster-turnaround tooling**. To capture this growth, players must invest in advanced manufacturing and align capacity with Original Equipment Manufacturer model pipelines, especially in premium and EV segments.

Figure 4-6: Vehicles sold in India (in Mn), FY'19-FY'30F



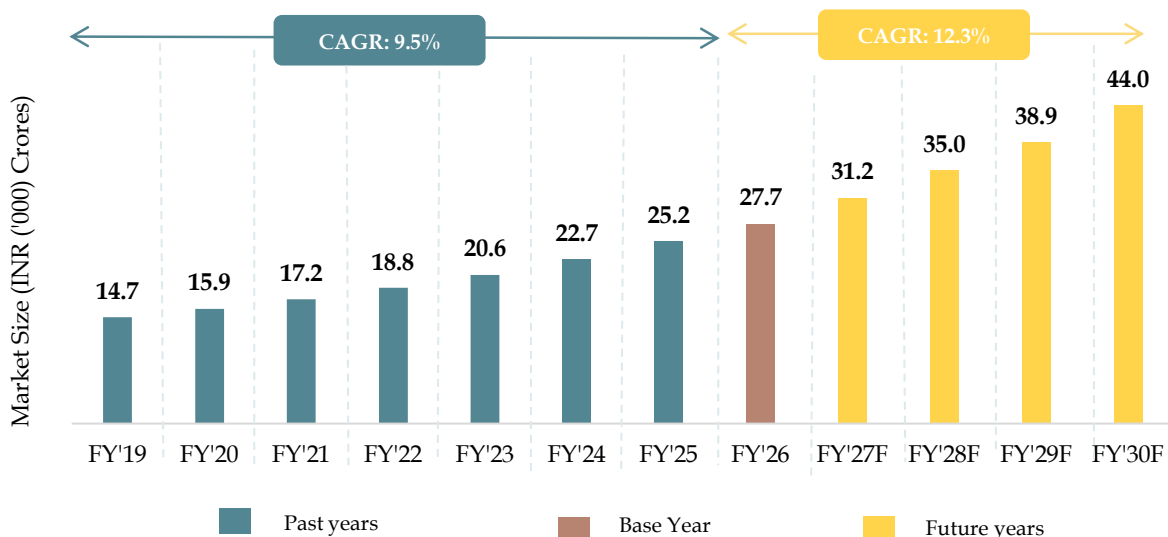
Source: SIAM & Ken Research Analysis

India's electric vehicle (EV) sales continued to rise in FY26, reaching 2.45 million units, up from 2.05 million in FY25.

- India is emerging as a global hub for auto component sourcing and the industry exports expected to reach the target of US\$ 100 billion by 2030. (Source: IBEF)
- Pune, being an automotive manufacturing hub and housing major automotive OEMs and suppliers offers high opportunities for automotive dies and moulds.
- India produced 28 million motor vehicles in FY'26, each new vehicle model requiring 100–300+ unique moulds for components like bumpers, dashboards, and lighting assemblies. (Source: IBEF)

- Rising demand for lightweight automotive parts is creating strong requirements for specialized moulds, wherein integration of hot runner systems improves efficiency and supports high-volume production.

Figure 4-7: India Automotive Dies and Moulds Market Size on the Basis of Revenue (in INR ‘000 Crore), FY’19-FY’30F



Source: Interviews with Industry Experts, Industry Articles & Ken Research Analysis

Note 1: Market is calculated on the basis of Manufacturers

Note 2: FY represents Financial Year (April-March)

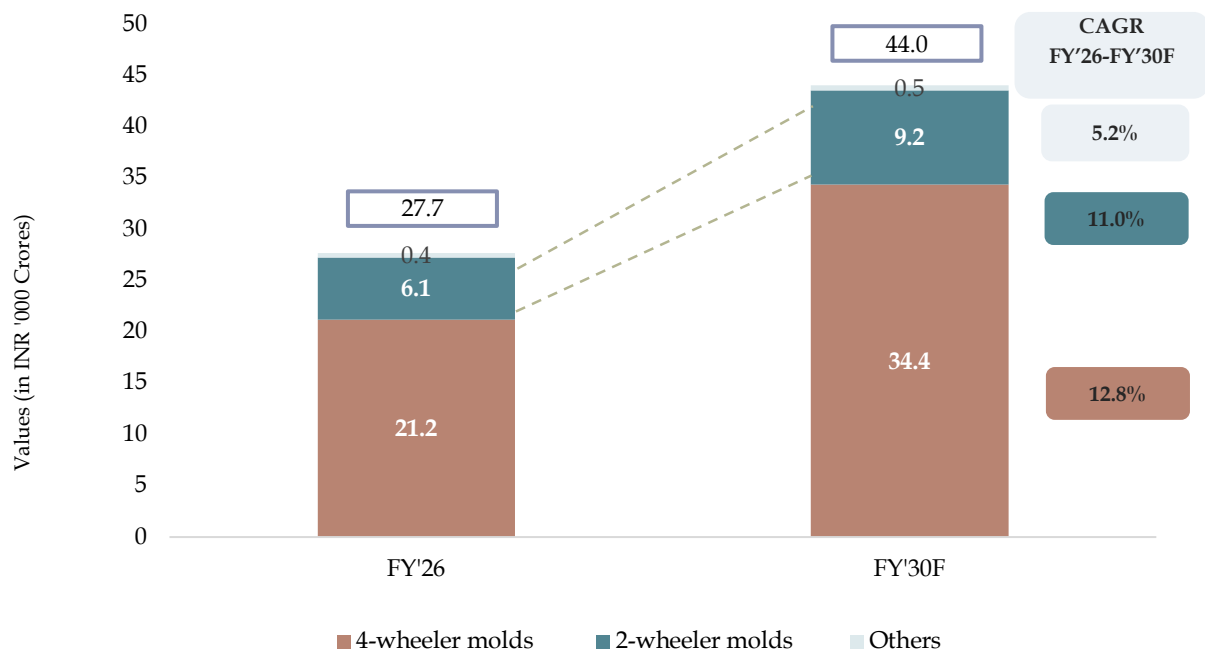
Note 3: F notes Forecasted figures

MARKET SEGMENTATION OF AUTOMOTIVE DIES AND MOULDS MARKET BY TYPE, FY'26 - FY'30F

4-wheeler vehicle Dies and Moulds are the dominant segment under Automotive moulds due to factors like frequent changes in designs, rise in SUV demand.

- India's passenger vehicle sales reached a record 46.43 Lakh units in FY2025–26, registering 7.9% year-on-year growth, driven by sustained demand for utility vehicles, improved consumer affordability from tax cuts, and lower interest rates. This increase boosts demand for moulds used in components like bumpers, dashboards, and lighting, while new models, facelifts, and rising aftermarket needs further drive moulding requirements (Source: SIAM).
- Indian dies and moulds makers are increasingly adopting CAD/CAM, 3D printing, and high-speed CNC machining, enabling them to handle complex PV moulds that were earlier imported.

Figure 4-8: India Automotive Dies and Moulds Market Segmentation by Type on the basis of Revenue (in INR '000 Crore), FY'26 - FY'30F



Source: Interviews with Industry Experts & Ken Research Analysis

Note 1: Market is calculated on the basis of Manufacturers

Note 2: Others include 3 wheelers, off road vehicles, recreational vehicles.

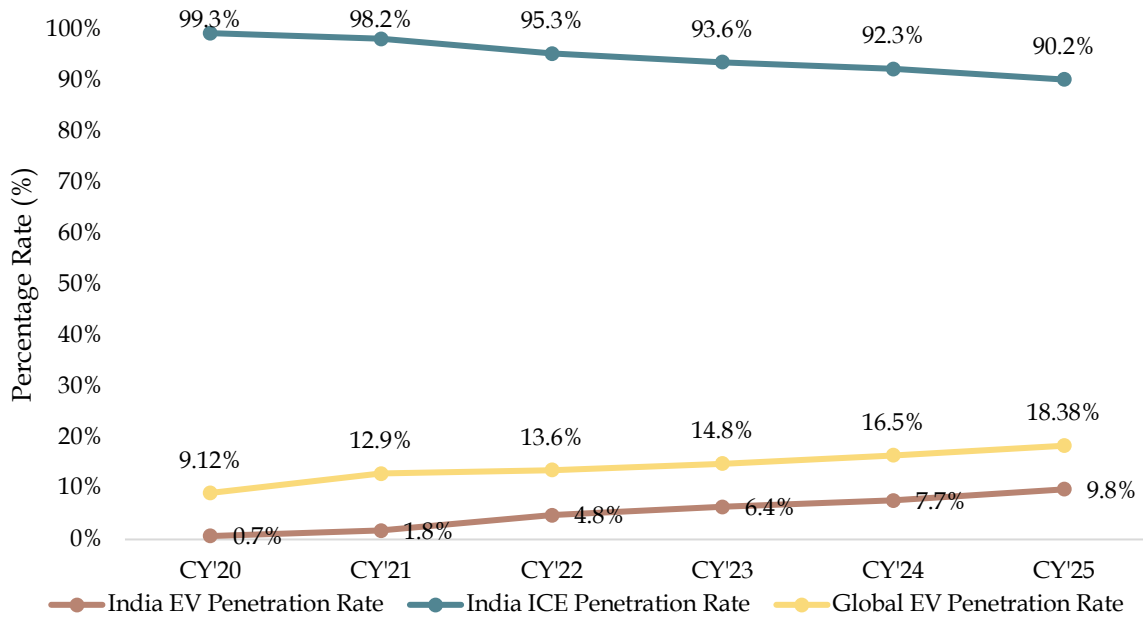
Note 3: FY represents Financial Year (April-March)

Note 4: F notes Forecasted figures

EV PROMOTION & SUPPLY CHAIN LOCALIZATION DRIVING AUTOMOTIVE MOULDS

EV penetration in India grew from 0.7% in CY'20 to 9.8% in CY'25. The market is projected to expand at a CAGR of 49% from CY'20 to CY'30 (Source: Invest India), driven by policy incentives, localized manufacturing, and rising consumer adoption, with a national target of 30% penetration by CY'30 (Source: NITI Aayog). This growth is accelerating domestic automobile production and localization of assembly and components, thereby increasing tooling needs and demand for automotive moulds.

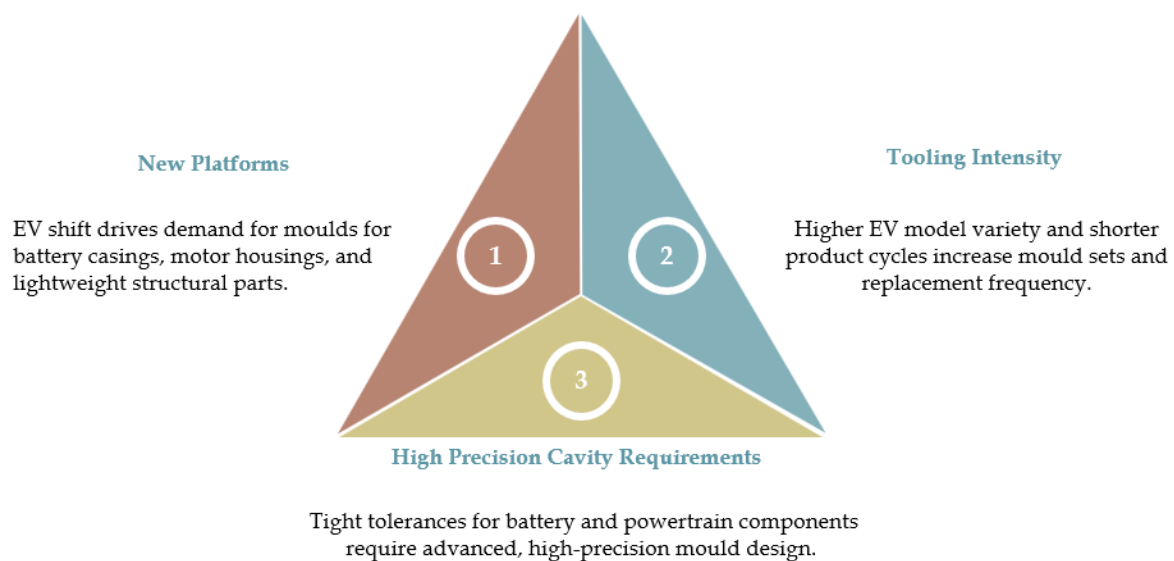
Figure 4-9: India and Global EV Penetration Rate (%) vs. India ICE – Internal Combustion Engine Penetration Rate (%) Outlook, CY'20–CY'25



Source: NITI Aayog & Ken Research Analysis

With EV-led localization setting the stage, the automotive moulds manufacturing landscape is evolving towards **new platform development, greater tooling intensity, and stringent precision requirements.**

Figure 4-10: Impact of Localized EV Production on Automotive Moulds Manufacturing Requirements



Source: Ken Research Analysis

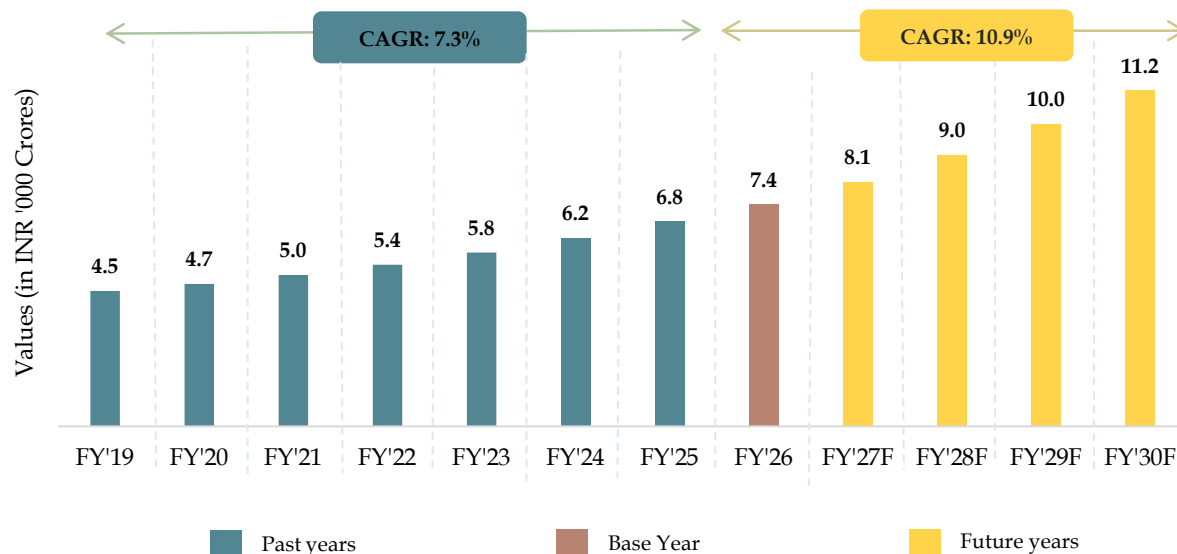
Localization of Global Original Equipment Manufacturers: With India becoming a key auto hub, global Original Equipment Manufacturers like Maruti-Suzuki, Hyundai, Kia, Toyota, VW, etc. are localizing production to reduce imports and meet cost-competitiveness. This shift drives higher demand for locally tooled moulds and dies, as every new vehicle platform launched in India requires extensive tooling for body panels, bumpers, interiors, and lights.

EV Component Tooling: The rapid growth of EVs is creating new mould requirements beyond conventional ICE (internal combustion engine) tooling. EV-specific parts like battery casings, motor housings, lightweight plastic enclosures, and connectors require high-precision injection moulds and hot runner systems. With EV penetration expected to reach 15–20% of sales by 2030 (Source: NITI Aayog, SIAM), this segment is emerging as a strong structural demand driver for automotive tooling.

4.3. INDIA INDUSTRIAL DIES AND MOULDS MARKET SIZE, FY'19 - FY'30F

The growth in India's Industrial sector has a direct impact on the tooling market as manufacturing require more and more consumables. Few drivers seen are:

- The Capital Goods sector's production value has nearly doubled, from INR 2.29 lakh crore in FY'15 to INR 4.29 lakh crore in FY'24, supported by the Make-in-India program's emphasis on domestic design and manufacturing.
- The **Production Linked Incentive (PLI) scheme**, has an outlay of **INR 1.97 lakh crore** across 14 sectors, is designed to enhance manufacturing competitiveness and boost exports. This is expected to increase demand for precision tooling, including dies and moulds. (Source: Press Information Bureau)
- Recent approval of 12 projects under the National Industrial Corridor Development Programme (NICDP), involving an investment of INR 28,602 crore, will drive localized manufacturing, thereby increasing demand for industrial precision moulds. (Source: Press Information Bureau)

Figure 4-11: India Industrial Dies and Moulds Market Size on Revenue (in INR '000 Crore), FY'19-FY'30F

Source: Interviews with Industry Experts, Industry Articles & Ken Research Analysis

Note 1: Market is calculated on the basis of Manufacturers

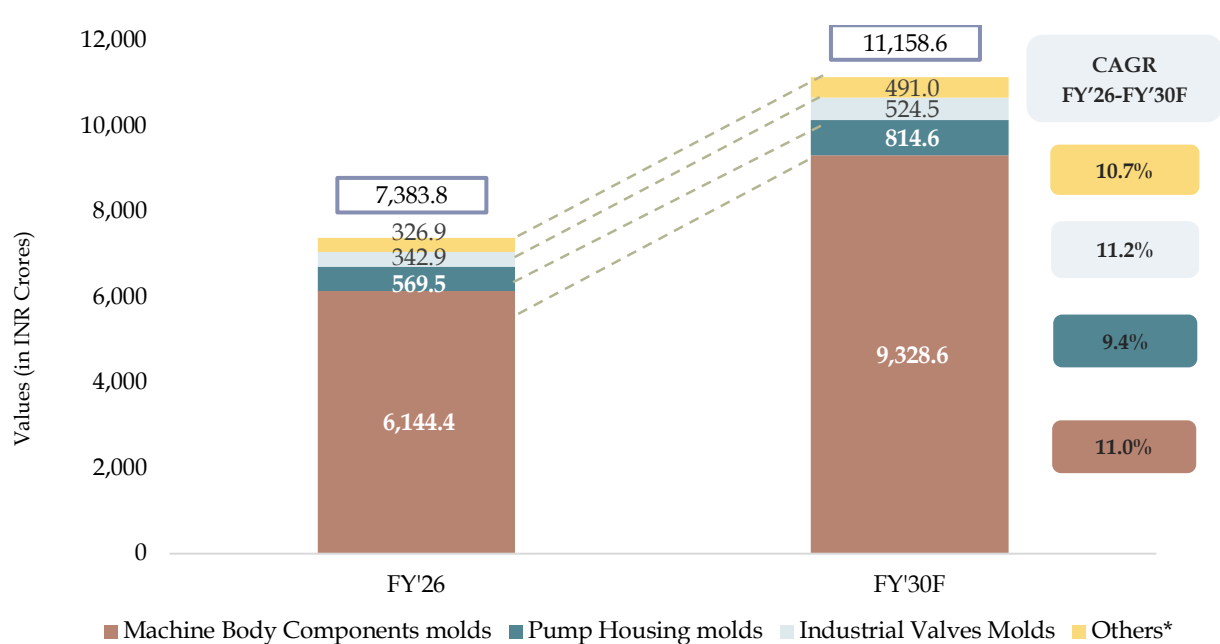
Note 2: FY represents Financial Year (April-March)

Note 3: F notes Forecasted figures

MARKET SEGMENTATION OF INDUSTRIAL DIES AND MOULDS MARKET BY TYPE, FY'26 - FY'30F

Machine body part components account for the largest share of the Industrial Dies and moulds market, these components typically require highly durable and precise moulds capable of handling large dimensions, complex geometries, and demanding material properties. A wide variety of mould types are employed, including sand casting moulds for producing massive machine beds and housings, die casting moulds for lighter but high-strength parts like gear cases and motor frames, and investment casting moulds for intricate, high-accuracy components. These form the backbone of tooling requirements across heavy engineering, capital goods, and allied sectors.

Their dominance is underpinned by the rapid expansion of India's manufacturing sector, which is projected to grow at a CAGR of 6–7% FY'24–FY'30, supported by policy initiatives such as Make in India, PLI schemes and infrastructure outlays.

Figure 4-12: India Industrial Dies and Moulds Market Segmentation by Type on the basis of Revenue (in INR Crore), FY'26 - FY'30F

Source: Interviews with Industry Experts & Ken Research Analysis

Note 1: Market is calculated on the basis of Manufacturers

Note 2: Others* include Compressors & impellers, industrial enclosures, custom aux components

Note 3: F indicates Forecasted figure

Note 4: FY represents Financial Year (April-March)

KPI'S OF DIFFERENT TYPES OF INDUSTRIAL DIES AND MOULDS

Industrial moulds are critical in producing valves, pump housings, and machine body components, each with different demands on speed, quality, and durability. While valves emphasize precision and pump housings balance complexity with efficiency, machine components require robust moulds to handle large structures. Combined with proper maintenance, these innovations reduce waste, extend tool life, and make moulds a key driver of cost efficiency and quality in manufacturing.

Table 4-1: Segment Specific KPIs for Industrial Dies and Moulds

Segment	Average Cycle Time	Scrap Rate	Tool Life
Industrial Valves	~10–30 sec (small/medium parts) ~60 sec (larger valve bodies)	<5% scrap (typical scenario) ~1% (best-in-class); up to 20% (legacy setups)	500k–1M+ shots (Class 101/102); >1M possible with maintenance

Segment		Average Cycle Time	Scrap Rate	Tool Life
Pump Housings		~30–60 sec (Larger parts)	<5% scrap (typical); ~1–3% (modern operations)	0.5–1M+ shots (High-volume moulds (Class 101/102))
Machine Components	Body	~30–90 s optimized cycles sub-1 min (Large housings/panels)	<5% (typical), ~0.5–2% (best-in-class)	500k–1M+ cycles (Class 101/102 moulds)

Source: Interviews with Industry Experts & Ken Research Analysis

Note: Average Cycle Time refers to average time it takes to complete one full cycle of a process

Scrap Rate refers to the percentage of materials, parts, or products that are rejected (defective or unusable) compared to the total produced.

Tool Life refers to the usable lifespan of a tool (like a cutting tool, drill, or moulds) before it becomes too worn to produce quality parts.

FACTORS CONTRIBUTING TO GROWTH OF INDUSTRIAL DIES & MOULDS

Infrastructure Spending and Government led Initiatives are spurring demand for precision tooling

India's infrastructure expansion, led by large-scale public capital outlay and supported by private participation, is emerging as a critical growth driver for industrial activity. Between 2017 and 2023, investments totaled ~INR 67 trillion, with a further INR 143 trillion projected for 2024–2030 under government-led programs such as the National Infrastructure Pipeline and Gati Shakti. This unprecedented spending is spurring demand for construction, transport, energy, and housing assets, which in turn accelerates downstream manufacturing across automotive, packaging, consumer goods, and electrical equipment. As these sectors scale, the requirement for precision tooling and advanced systems-particularly hot runner technologies; will intensify, boosting demand for high-quality industrial moulds.

Growing Heavy-Engineering segment boosting demand for dies and moulds

Heavy engineering, a core segment of India's capital goods industry, manufactures turbines, boilers, generators, industrial machinery, process plants, and construction and mining equipment. These end-products require precision components and structural parts that are produced using industrial moulds.

As the sector expands production capacity to serve growing domestic infrastructure, renewable energy projects, and export demand, the requirement for high-performance moulds rises in parallel. This outlook is reinforced by growth in allied industries: the construction equipment

market is expected to reach INR 1,02,827 crore by 2030 at a CAGR of 8.3% during FY-24 to FY'30; and the machine tools market is forecast to grow at 9.4% annually by 2028. (Source: India Brand Equity Foundation)

The Index of Industrial Production (IIP) has witnessed 5.1% year-on-year growth in May 2026, driven by 5.5% growth in manufacturing (Source: Ministry of Statistics & Programme Implementation). Additionally, rising investment in engineering is accelerating the adoption of CNC machining, CAE-based design, and additive manufacturing in moulds making; enabling the precision, speed, and complexity required for heavy engineering applications.

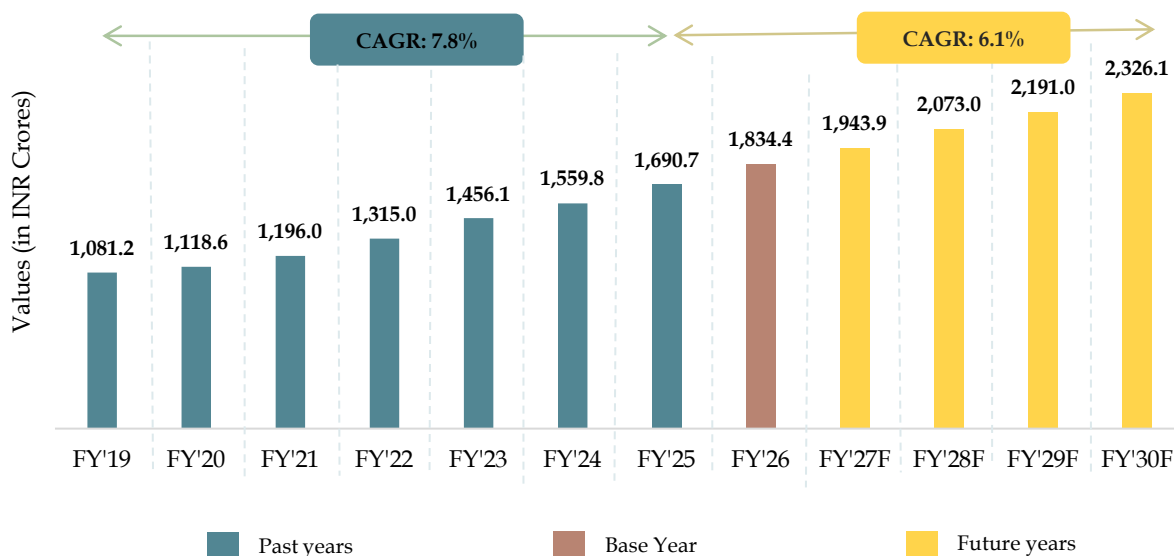
5. INDIA'S HOT RUNNER SYSTEMS MARKET

5.1. INDIA'S HOT RUNNER SYSTEMS MARKET SIZE, FY'19 - FY'30F

Hot Runner Systems are needed for increasing efficiency and quality in injection moulding processes. Hot runner systems maintain a consistent temperature in the moulds, preventing material solidification in the runner channels. The market for hot Runner system was valued at INR 1,834.4 crore in FY'26. Some key drivers are:

- **Packaging boom:** India's packaging industry is projected to grow ~11% CAGR from FY'24-FY'29, lifting high-cavitation, fast-cycle moulding that favors hot runners.
- Hot runners cut cycle time up to **20-25%** and scrap (often double-digit cycle reductions in multi-cavity tools), improving ROI and adoption which leads to increased sales volume for hot runner systems. (Source: RTP Imagineering Plastics)
- **Automotive output expansion (incl. EV/localization):** 4-wheeler production has risen strongly since FY'21; ongoing localization increases part counts and precision requirements suited to hot runners.

Figure 5-1: India Hot Runner Systems Market Size (in INR Crore), FY'19-FY'30F



Source: Interviews with Industry Experts, Industry Articles & Ken Research Analysis

Note 1: Market is calculated on the basis of Manufacturers

Note 1: FY represents Financial Year (April-March)

Note 2: F notes Forecasted figures

TECHNICAL OVERVIEW OF HOT RUNNER SYSTEMS AND ITS COMPONENTS

Nozzles, manifolds, and hot-half assemblies, components of hot runner systems, are critical to moulds manufacturing by enabling precise and balanced melt distribution, maintaining optimal thermal profiles, reducing material waste, enhancing part quality, and production efficiency.

Table 5-1: Technical Overview, Utility, and Impact of Hot Runner System Components in Mould Manufacturing

Component	Description	Utility	Technology Adoption	Impact
Nozzles	Heated flow channels positioned between the manifold outlets and the moulds cavity gates.	Transfer molten polymer directly into each cavity while maintaining optimal melt temperature and flow.	Advanced tip configurations, integrated temperature/pressure sensors, wear-resistant coatings (e.g., TiN, DLC).	Enhanced surface finish, dimensional accuracy, extended operational life with reduced maintenance
Manifolds	Central heated distribution block within the moulds, connecting the injection moulding machine nozzle to multiple hot runner nozzles	Distribute molten polymer evenly to all cavities through precision-balanced internal channels.	CAE-optimized flow path design, individually zoned PID-controlled heaters, low-thermal-mass insulation plates.	Consistent cavity filling, reduced part defects and shape distortion, improved energy efficiency.

Component	Description	Utility	Technology Adoption	Impact
Hot-Half Systems	Pre-assembled stationary moulds half integrating the manifold, nozzles, heating elements, wiring, and insulation.	Provide a ready-to-install, factory-tested hot runner assembly with precise alignment and integrated thermal management.	Modular pre-engineered assemblies, quick-connect electrical interfaces, built-in leak detection and expansion compensation.	Reduced installation time, minimal setup errors, higher production uptime in continuous operations.

Source: Companies' Websites & Ken Research Analysis

BENEFITS OF ADOPTION OF HOT RUNNER SYSTEMS IN MOULDS MANUFACTURING

The adoption of hot runner systems in moulds manufacturing yields significant improvements in production efficiency, material utilization, product quality, and operational reliability.

Table 5-2: Benefits and Performance Improvements from Hot Runner System Adoption in the Indian Moulds Manufacturing Industry

Benefits	Improvement Driver	Impact
Waste Reduction	Direct gating removes runners, eliminating nearly all material waste	~85%
Cycle Time Improvement	No Runner Cooling shortens cycle time	8-20%
Failure Rate	Balanced Melt flow and temperature reduce defects and improve consistency	2-5%
Material Usage Efficiency	Short weight closely matches part weight, minimizing raisin consumption.	~95% utilization
Maintenance Interventions Reduction	Less frequent cleaning/purging and no runner regrinding reduce downtime	~15-20%

Source: Interviews with Industry Experts, Industry Articles & Ken Research Analysis

IMPORT SUBSTITUTION OPPORTUNITY & DOMESTIC CAPACITY BUILD-OUT OF HOT RUNNER SYSTEMS

The Indian hot runner system industry has been **import-dependent**, with domestic moulders sourcing most systems and components from overseas suppliers. Between October CY'23 and September CY'24 alone, customs records show imports of nearly **6,800 consignments of hot runner parts**, underscoring the market's reliance on foreign supply chains. (Source: Volza) Against this backdrop, a structural shift is underway as several India-based manufacturers and joint ventures such as **HOTTIP India, Etech HRS, HTS Hot Runner Systems, and the Adroit-ERUMTECH partnership** have established local manufacturing and assembly operations. By producing hot runner systems, manifolds, pre-wired hot halves, controllers, and consumables within India, these firms are reducing dependence on imports and creating the foundation for a broader **domestic capacity build-out**.

Table 5-3: Key India-Based Hot Runner System Producers and Localizing Players

Company	Offerings in India
HTS Hot Runner Systems India	Hot Runners, Controllers, Injection Moulding systems
ETech HRS India	Prewired, Normal, Valve type Hot Runner System, Hot valves, Single Valve Nozzle, Sequential Injection Timer, Controller
Hot Tip Hot Runner System India	Nozzle, Manifold, Semi Modular, Temperature Controller, Pin valve Gate System, Spare heaters, Sequential Controller
Adroit Erum tech Hot Runner Systems	Open Gate, Valve Gate Systems, Integrated Pre wired Hot Runner Systems, Cassette Systems, Single Nozzles, Temperature Controller, Sequential Timer

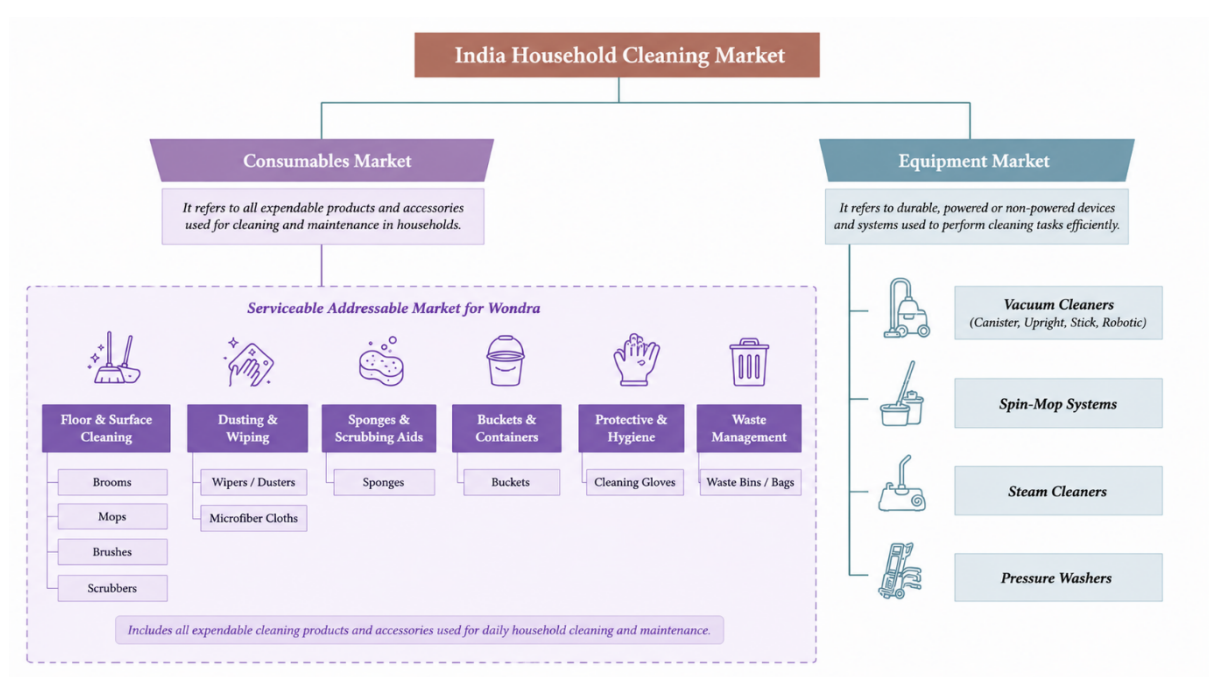
Source: Companies' Websites & Ken Research Analysis

6. INDIA HOUSEHOLD CLEANING CONSUMABLE MARKET

6.1. INDIA HOUSEHOLD CLEANING MARKET TAXONOMY

The India Household Cleaning Market broadly comprises two categories: (i) Household Cleaning Consumables, including brooms, mops, brushes, scrubbers, wipers/dusters, microfiber cloths, sponges, buckets, cleaning gloves, waste bins/bags, and other cleaning accessories; and (ii) Cleaning Equipment, comprising products such as vacuum cleaners, spin-mop systems, steam cleaners, pressure washers, and other mechanized cleaning devices.

Figure 6-1: Taxonomy of India's Household Cleaning (Consumables + Equipment) Market



Source: Ken Research Analysis

6.2. HOUSEHOLD CLEANING CONSUMABLES MARKET ECOSYSTEM

The India household cleaning consumables ecosystem is **highly fragmented and predominantly unorganised**. Participants range from multinational and national branded manufacturers to cluster-based unregistered producers. Unlike the dies and moulds industry, this is a **business-to-consumer** market in which distribution reach, shelf presence and brand recall matter as much as manufacturing capability. Market size in this report is measured at manufacturer realisation.

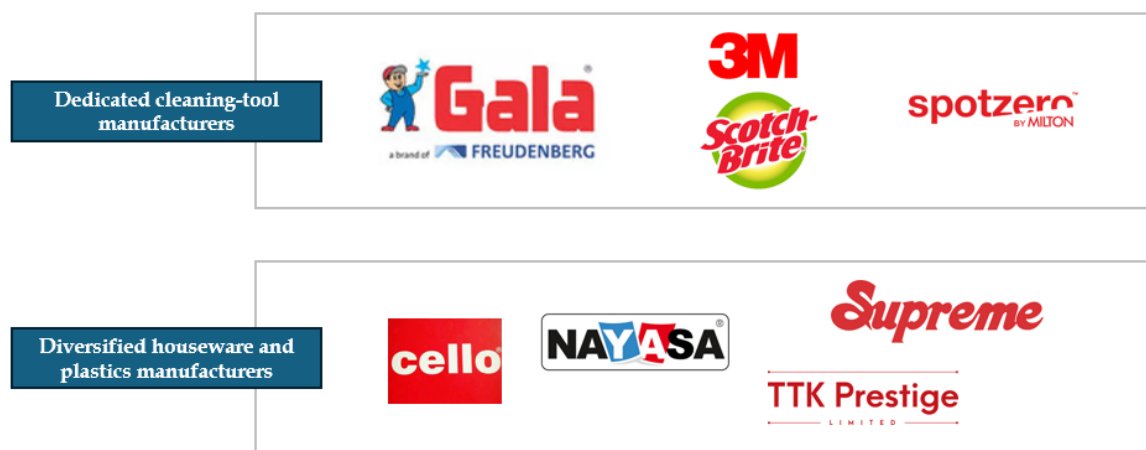
By type of participant:

- **Dedicated cleaning-tool manufacturers.** Pure-play or near pure-play manufacturers for whom cleaning tools are the primary business. They lead the category on product innovation, brand recall and modern-trade shelf share, and command the highest realisation per unit. Examples: Freudenberg Gala Household Products Private Limited (Gala), 3M India Limited (Scotch-Brite) and Hamilton Housewares Private Limited (Spotzero)
- **Diversified houseware and plastics manufacturers.** Companies whose principal business is houseware, kitchenware or moulded plastics and for whom cleaning products are an adjacency carried on an existing distribution network. They are strongest in buckets, waste bins and value cleaning aids. Examples: Cello World Limited, Supreme Industries Limited, Nayasa Retail Private Limited, TTK Prestige Limited and Milton (Hamilton Housewares Private Limited).
- **Local manufacturers.** An estimated 9,000 to 12,000 unregistered and below-threshold units, concentrated in the Rajkot, Vasai-Daman, Jalandhar, Sivakasi and Howrah clusters, producing

brooms, coir and plastic brushes, steel scrubbers, recycled Low Density Polyethylene liners and moulded buckets and bins. This group accounts for the majority of category volume.

- **Imports.** China supplies microfiber cloths, sponges, household gloves and spin-mop assemblies, while Indonesia, Myanmar, Sri Lanka and Nepal supply broom fibre and finished brooms.

Figure 6-2: India's Household Cleaning Consumables Market Ecosystem



Source: Ken Research Analysis

Category leadership is narrow rather than deep. The largest branded participant, Freudenberg Gala Household Products, reported total revenue of approximately **INR 547 crore in Fiscal ending March 2025** across all lines including exports, against a category in which the unorganised sector accounts for the majority of value. No participant holds a dominant share of the total market. The principal barriers to entry are distribution reach and working capital rather than manufacturing technology, which is why a manufacturer with captive moulding capability can enter the category credibly but must fund a sustained distribution build in order to scale.

6.3. INDIA HOUSEHOLD CLEANING CONSUMABLE MARKET SIZE, FY'19 - FY'30F

The India Household Cleaning Consumable Market comprises non-electric cleaning products including brooms, mops, brushes, scrubbers, wipers/dusters, microfiber cloths, sponges, buckets, cleaning gloves, waste bins/bags.

Demand for these products is primarily driven by rising hygiene awareness, increasing urbanization, government sanitation initiatives, premiumization of household cleaning products, and growth in organized retail. **The market is estimated to grow at a CAGR of 3.7% during FY'26–FY'30.** Some key drivers are:

Rising hygiene awareness and increasing cleaning frequency

Growing awareness regarding household hygiene and sanitation has led to more frequent cleaning and faster replacement of cleaning tools such as mops, scrubbers, microfiber cloths, gloves, and sponges. This has created recurring demand for non-electric cleaning products across urban and semi-urban households. Under the Swachh Bharat Mission, 98% of urban households are covered by door-to-door waste collection, while urban waste processing has increased to over 82% in 2026, reflecting a sustained national focus on cleanliness and sanitation. (Source: PIB)

Growth in urban households and residential construction

The continuous increase in urban households, supported by residential construction and housing schemes, is expanding the addressable market for household cleaning products. Every new household requires essential cleaning tools such as brooms, buckets, mops, waste bins, and brushes, generating steady demand. India's urban population is projected to reach approximately 600 million by 2031, increasing demand for household maintenance products. (Source: MoHUA)

Expansion of organized retail and e-commerce

The rapid growth of supermarkets, hypermarkets, and e-commerce platforms has significantly improved the availability of branded cleaning tools across India. Organized retail has also increased consumer awareness of premium products such as microfiber cloths, flat mops, spray mops, and ergonomic cleaning accessories. The online retail market in India is projected to US\$ 260 billion by 2030 from US\$ 115 billion in 2025, fuelled by rising internet penetration, digital payments, and an expanding shopper base. (Source: IBEF)

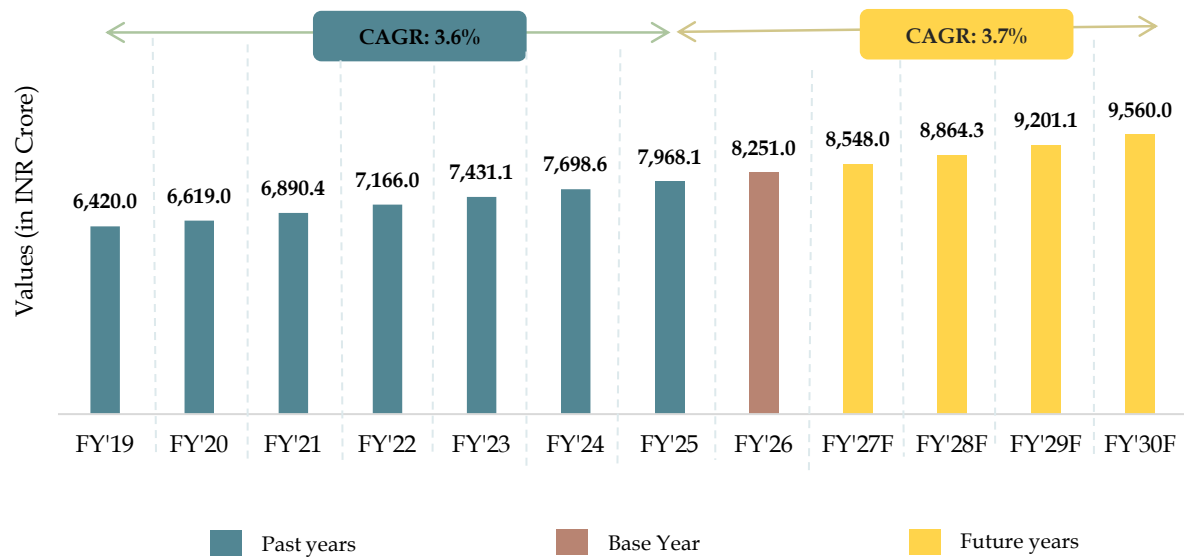
Stable replacement demand due to short product life cycles

Unlike durable household products, most cleaning tools require periodic replacement because of regular wear and tear. Products such as scrubbers, sponges, microfiber cloths, gloves, brooms, and mop heads have relatively short replacement cycles, creating a stable and recurring revenue stream for manufacturers.

Typical replacement cycle *(Source: Industry Articles and Consumer Reports)*:

Sponges: 1–3 months | Scrubbers: 2–4 months | Microfiber cloths: 3–6 months | Cleaning gloves: 3–6 months | Brooms and mop heads: 3–6 months

Figure 6-3: India Household Cleaning Consumable Market Size (in INR Crore), FY'19-FY'30F



Source: Interviews with Industry Experts, Industry Articles & Ken Research Analysis

Note 1: Market is calculated on the basis of Manufacturers

Note: 1: FY represents Financial Year (April-March)

Note 2: F notes Forecasted figures

COMPARATIVE TECHNOLOGY MATRIX FOR PRODUCTS

Product	Current Technology in India	Technology in Developed Markets	Adoption in India	Key Benefits	Commercial Opportunity
Brooms	Plastic/Coconut/Fiber	Electrostatic & ergonomic brooms	Medium	Better dust capture	High
Mops	Cotton & spin mops	Flat microfiber, spray, self-wringing systems	Medium	Water saving, better hygiene	Very High
Brushes	Standard PP brushes	Antimicrobial, replaceable-head brushes	Low	Longer life, hygiene	High
Scrubbers	Nylon/steel	Non-scratch polymer, antimicrobial scrubbers	Low	Surface protection	Medium
Wipers/Dusters	Cotton/feather	Electrostatic microfiber dusters	Low	Higher dust retention	High
Microfiber Cloths	Basic microfiber	Multi-layer microfiber, nano-fiber technology	Medium	Superior cleaning efficiency	High
Sponges	PU foam	Cellulose, antimicrobial, dual-layer sponges	Low	Improved durability	Medium

Buckets	Plastic	Dual-compartment, integrated wringer systems	Medium	Improved ergonomics	Medium
Cleaning Gloves	Latex	Nitrile, reusable ergonomic gloves	Low	Chemical resistance	High
Waste Bins/Bags	Basic plastic	Sensor bins, odor-control bags, biodegradable bags	Low	Better waste management	Very High

Source: Ken Research Analysis

7. INNOVATION AND TECHNOLOGY ADOPTION

The Dies and Moulds market is being driven by innovations and technological advancements aimed at achieving higher precision, faster production, and overall improvements in the manufacturing process. These include:

CNC Multi-axis, EDM and Additive manufacturing in moulds making

Modern moulds making is shifting towards advanced technologies **CNC multi-axis machining**, **Electrical Discharge Machining (EDM)**, and **additive manufacturing**: to enhance precision, speed, and design flexibility. CNC multi-axis machining produces complex shapes in fewer setups with higher accuracy and consistency. EDM creates sharp edges and fine cavities in hard materials beyond the reach of conventional tools. Additive manufacturing builds components layer by layer, enabling features like internal cooling channels and rapid prototyping. Together, these technologies meet the demand for complex, high-quality moulds with shorter lead time.

Table 7-1: Adoption of CNC, EDM, and Additive Manufacturing Technologies by Key Indian Moulds Makers and Their Impact, As of FY'26

Players	Technology Adoption	Impact on Moulds Manufacturing
OM Galaxy Limited	Air compressors with air dryers, Hydraulic Bandsaw Machine, Chain Hoists, CMM, CNC Lathe Machine, Vertical Machining Center/Horizontal Machining Center, Deep hole drilling machines, Grinding machines, Hydraulic presses, Surface grinding machines, tool and cutter grinding machines and more	It significantly improves mould manufacturing by enabling high-precision measurement, complex geometry machining, and reduced setup times.
Sahil Tech (India) Ltd.	50+ CNC machines (3-, 4-, 5-axis DMG), 11 Wire EDM, 11 Spark EDM, advanced drilling & grinding systems	Tight tolerances, intricate cavities, faster turnaround
Devu Tools	14+ CNC machines (multi-axis), 8 EDM machines, CAD/CAM systems (UG, Pro-E, Delcam, MasterCAM)	High-precision, complex moulds production with improved efficiency and quality

Players	Technology Adoption	Impact on Moulds Manufacturing
Vasantha Tool Crafts	Advanced CNC (Yasda, ZK, Mikron, Mitsubishi), robotic automation, 3D metal printing	High-cavitation, precision moulds with innovative features and faster development cycles
Abhijeet Dies and Tools Pvt.Ltd.	Advanced design, CNC machining (including 5-axis DMG MORI and other CNC machining centres), EDM, CMM inspection, 3D metal printing, and injection & blow moulds trial facilities	Enables the production of high-precision injection and blow moulds for industries with improved dimensional accuracy
Sridevi Tool Engg. Pvt. Ltd.	Multiple European 5 axis and deep hole drilling machining centres, High precision Japanese EDMs, various moulding machines from 250 to 2500 Ton, CMM and spotting presses	Facilitates the manufacture of large and complex automotive injection moulds with tight tolerances, improved surface finish and faster product development.

Source: Ken Research Analysis, Companies' Websites

Hot Runner vs Cold Runner systems uptake:

Moulds manufacturing is shifting from cold runner to hot runner systems to improve efficiency, reduce waste, and enhance product quality.

Figure 7-1: Key Differences Driving the Shift from Cold Runner to Hot Runner Systems in India Moulds Manufacturing

Parameters	Hot Runner System	Cold Runner System
Part Quality	More consistent surface finish, better dimensional stability	Greater variation in quality due to temperature and pressure loss in runners
Cycle Time	Shorter – no time lost cooling and ejecting runners	Longer – includes cooling and ejection of runner material
Volume & Precision	High-volume, multi-cavity, complex or high-precision parts. Failure Rate: 3.2%	Low to medium-volume, simpler parts, or materials sensitive to prolonged heating. Failure Rate: 12.8%
Energy Efficiency	More efficient over time due to reduced waste and faster cycles. 0% material is lost	Less efficient due to longer cycles and reprocessing of waste material. 32.5% material is lost
Maintenance	Requires skilled maintenance and precise temperature control	Easier to maintain, fewer components
Initial Cost	Higher upfront investment due to heated manifold, controls, and complex design	Lower upfront cost, simpler design

Source: Interviews with Industry Experts, Industry Articles & Ken Research Analysis

Digital twins & simulation for cycle-time optimization:

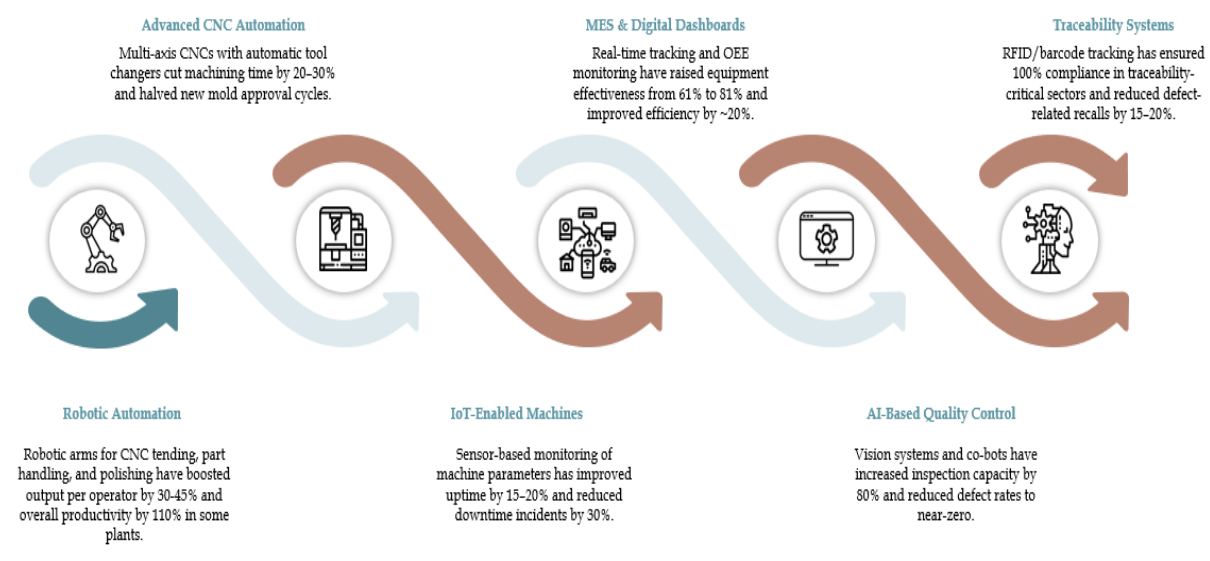
Digital twins - virtual replicas of manufacturing systems are emerging as a powerful tool for cycle-time optimization in moulds production. By integrating real-time shop-floor data with advanced simulation models, manufacturers can mirror and test production processes virtually before implementing changes physically. They can improve production efficiency by up to 10–15% and reduce unplanned downtime by up to 30%, while enabling faster, data-driven decision-making. In Moulds manufacturing, this means bottlenecks can be identified early,

optimal tool change sequences can be planned, and machine utilization can be maximized without disrupting ongoing operations. This approach also enhances transparency and traceability; for compliance and quality.

Automation and Industry 4.0 integration:

Some of the key Automation and Industry 4.0 innovations impacting India's Moulds manufacturing sector:

Figure 7-2: Key Automation and Industry 4.0 Innovations Transforming Moulds Manufacturing in India



Source: Interviews with Industry Experts, Industry Articles & Ken Research Analysis

8. GROWTH DRIVERS

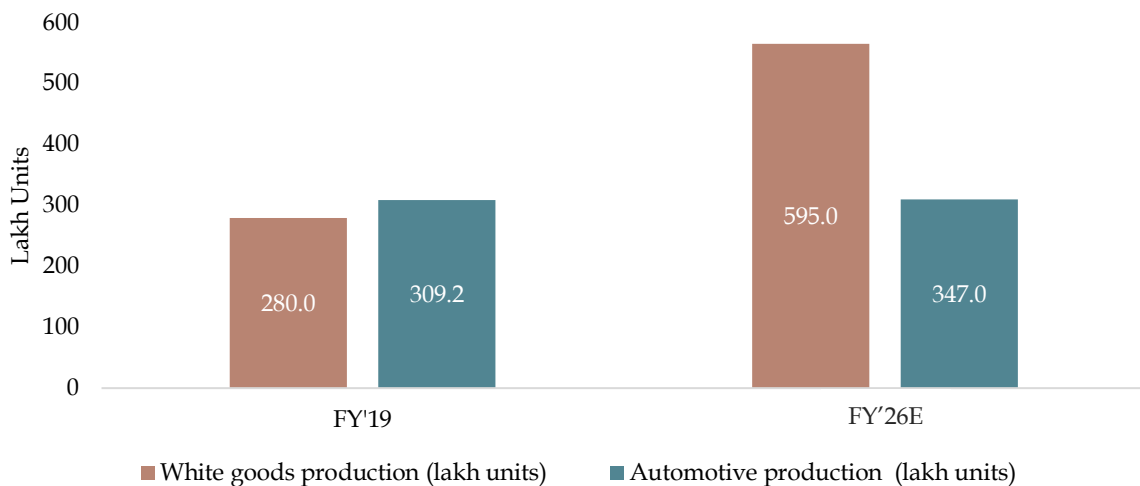
Growth in India Dies and Moulds market is fueled by rising various infrastructure and localized manufacturing initiatives. These initiatives and drivers include:

Rising White Goods and Automotive production, & Infrastructure Investments Drive Surging Demand for Tooling

India's white goods (large electrical goods used domestically such as refrigerators and washing machines) production is projected to double within a few years, while automotive production is also steadily rising. Automotive production in India for FY'26 is reported to be just over 347 lakh units. This upward trend underscores increased demand for moulds and dies, as higher vehicle output requires extensive use of these tools for consistent quality and scalable manufacturing. Reliable moulds and dies are critical to meeting the precision and efficiency needs of the automotive sector, supporting its continuing expansion. (Source: IBEF)

Capital investment outlay for infrastructure was budgeted at INR 11.21 lakh crore for FY'25-26 (Source: Controller General of Accounts (CGA)), representing an 18.8% year-on-year increase in capex over FY'24-25, with Budget 2026-27 raising the allocation further to INR 12.2 lakh crore for FY'26-27. This surge in public spending will accelerate large-scale infrastructure development across transportation, construction, manufacturing, energy, and urban development.

Figure 8-1: Production of White Goods and Automobiles in India (in Lakh units), FY'19 & FY'26E



Source: IBEF & Ken Research Analysis

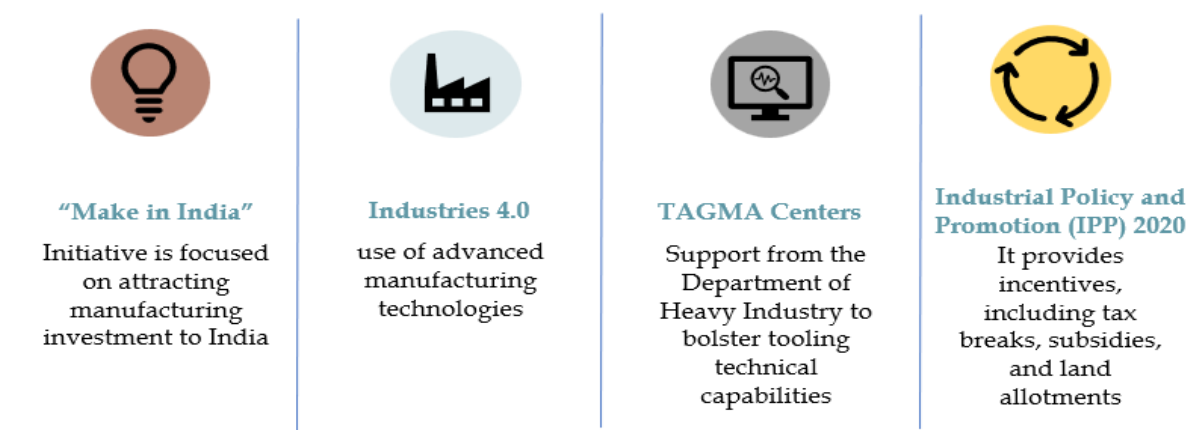
Note: **White Goods** refers to large electrical goods used domestically such as refrigerators and washing machines

Policy Push & Industrial Parks Fuel Growth in Precision Tooling

India Manufacturing Sector is expanding, with projected revenues of INR 8,757 thousand Crore by FY'26. Government Policies like 'Make in India' the environment is conducive for manufacturing, promising a sustained demand for precision tools and opening avenues for profitable ventures. The government has established dedicated industrial parks like the Integrated Machine Tools Park in Tumakuru, Karnataka, spanning 530 acres, with 145 acres allotted to machinery manufacturers. Such parks provide state-of-the-art infrastructure, testing & certification centers, common engineering facilities, and incubation support, which significantly enhance productivity and capacity building for Dies and Moulds. (Source: Government of Karnataka).

Government irrigation schemes like **Pradhan Mantri Krishi Sinchayee Yojana (PMKSY)**, **Per Drop More Crop (PDMC)**, and **Accelerated Irrigation Benefit Programme/Command Area Development & Water Management** are boosting demand for dies and moulds specially for fittings in drip, sprinkler, and canal systems. These rising fittings production directly drives the need for precision moulds for pipe fittings, making irrigation policy a key driver for the sector.

Figure 8-2: Government Initiatives driving growth for Moulds and Dies

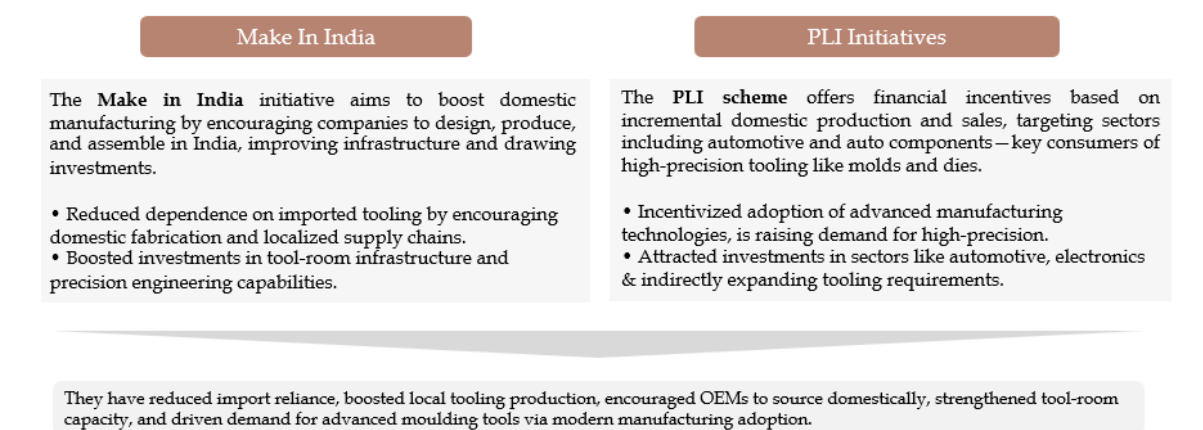


Source: Ken Research Analysis

Make in India and PLI Schemes

The moulds manufacturing market is supported by government policies such as Make in India, which provides tariff benefits, localization targets, and assistance for setting up tool rooms, thereby reducing reliance on imports, while the **PLI scheme offers 4–6%** incentives on incremental sales in eligible sectors, encouraging investment in advanced tooling and precision manufacturing capacity.

Figure 8-3: 'Make in India' & PLI incentives for tooling



Source: Ken Research Analysis

High-Precision Multi-Cavity Moulds Powering Automotive and Pipe-Fitting Demand Surge

Rising output in automotive and pipe fitting industries is driving adoption of high-precision, multi-cavity injection moulds, which boost efficiency by producing multiple identical parts in a single cycle a 10-cavity moulds yields 10 parts per shot, multiplying hourly output without extending cycle time. This is critical as the auto sector and irrigation and water supply projects

like Jal Jeevan Mission INR 3.6 lakh crore fuel large-volume pipe-fittings demand. Balanced runner systems and optimized cooling ensure uniform quality across cavities, while fewer production cycles lower machine downtime, energy use, and labor cost per part, enabling manufacturers to meet high-volume requirements with consistent tolerances.

Expanding Trade Footprint to Middle East & South-East Asia

Indian exports of moulds to South-East Asia and the Middle East have experienced notable fluctuations and substantial growth in recent years. In the Middle East, Saudi Arabia saw exports rising from USD 1.5 million in CY'20 to USD 6.2 million in CY'24, before moderating to USD 5.7 million in 2025. The UAE recorded even more robust growth, with exports increasing from USD 3.4 million in CY'20 to an impressive USD 17 million by CY'25. In South-East Asia, Indonesia received USD 3.4 million in CY'20, reaching USD 3.2 million in CY'25 after some variability, while Malaysia peaked at USD 7.0 million in CY'22, followed by a decline to USD 3.6 million in CY'25. These figures underscore India's expanding presence and adaptability in the moulds export market, responding dynamically to demand from both regions. (Source: Trademap)

Shift to high-precision, low-waste hot runner technology increases tooling consumer's profitability

The Indian moulds and dies market is increasingly adopting hot runner systems for their dual capability of delivering high-precision and low-waste production. By keeping plastic molten within the system, hot runners eliminate cold runner scrap, companies like Yudo Hot Runner cut raw material usage by around 33% and reducing defect-related waste by nearly 10%. At the same time, advanced temperature control, CAD/CAM-optimized tooling, and precision machining enable tolerances as fine as ± 0.005 mm-essential for zero-defect applications in automotive safety components, medical devices, and micro-electronics. These systems not only minimize rework and post-processing but also enhance repeatability, meeting strict regulatory standards while lowering production costs and environmental footprint. (Source: Yudo)

9. MARKET CHALLENGES AND THREATS

The Indian dies and moulds market faces persistent pressures varying market conditions and a fragmented supply landscape. These Challenges and Threats include:

Table 9-1: Major Challenges and Threats impacting Moulds and Dies Market

Major Challenges		
Challenges	Impact	Description
Volatile steel and alloy costs		Domestic steel price swings constantly and cheap imports squeeze margins on tool steel and alloy procurement. India turned a net steel importer in FY'24, with finished steel imports up 20% YoY to 8.3 MT (Apr-Jan); creating pricing whiplash for toolrooms.
Skilled workforce shortages		Moulds making requires a deep understanding of materials, machining, and design, new workers often lack the necessary skills. As a result, many moulds manufacturers are investing in training programs and working with technical schools to create an ongoing supply of skilled workers.
Quality/certification compliance (ISO, Original Equipment Manufacturer audits)		Automotive moulds demand IATF 16949, Original Equipment Manufacturer audits, traceability-all adding overhead. Small shops without certification find high-value contracts inaccessible
Major Threats		
Threats	Impact	Description
Competition from unorganized players		Large parts of Indian manufacturing remain informal/fragmented, keeping price competition intense and productivity low for micro firms (dominant in MSMEs). These undercuts organized toolmakers on price while pushing down realizations.
High working-capital requirements (long receivables)		Tooling involves high up-front steel + machining costs; MSME receivables often overrun statutory timelines. The MSME Act mandates ≤45-day payment; surveys show >50% of MSME B2B dues overdue 90+ days in major cities-directly stressing cashflows of toolrooms supplying Original Equipment Manufacturers /Tier-1s.

Source:  Low High

10. REGULATORY LANDSCAPE

The market is Regulated by strict quality and certification standards, manufacturing support and complex audits. The regulations guiding this industry are:

Customs duties on imported moulds & components:

High customs duties on imported moulds, components, and binders increase production costs in India's dies and moulds market, pushing manufacturers towards local fabrication. This affects price competitiveness, especially for small-scale importers, and raises overall tooling expenses in sectors reliant on high-precision imports.

Figure 10-1: Custom Duties Structure for Dies and Moulds, as of July 2026

Item	Basic Custom Duty	Social Welfare Surcharge	IGST	Effective Duty	Implications for Industry
Moulds for metal, glass, plastics	7.5%	10%	18% on value + duty	31%	Raises sourcing costs; encourages localized fabrication; impacts small-scale importers
Moulds for mineral materials	7.5%	10%	Included	31%	Adds cost pressure across tooling segments
Binders for foundry moulds	10%	10%	18%	42%	Increases input costs for coatings and chemical components; affects overall tooling expenses

Source: Cybex Exim Solutions & Ken Research Analysis

Note 1: Basic Custom Duty: The standard import duty levied on moulds when they enter the country.

Social Welfare Surcharge: An additional charge (calculated on BCD) used to fund government welfare schemes.

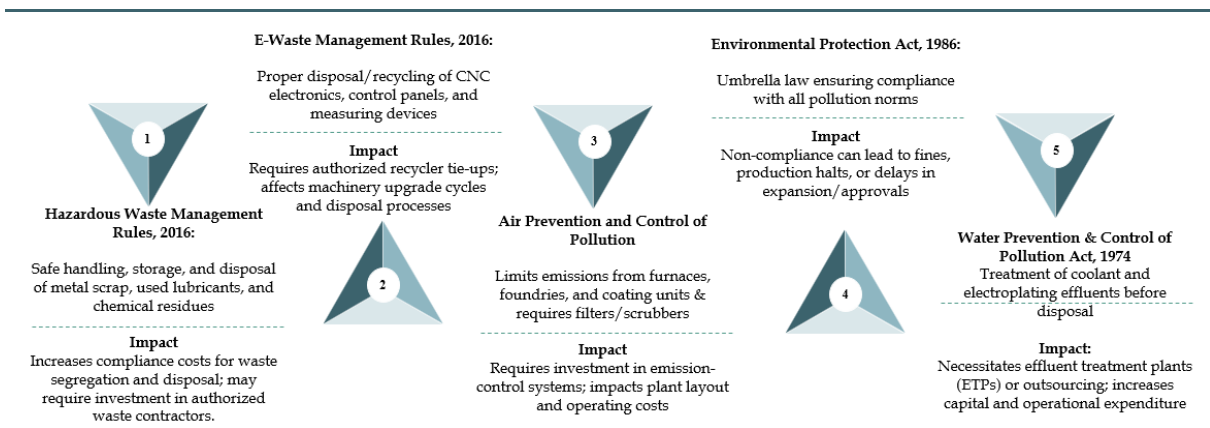
IGST: A tax applied on imported moulds to align with domestic GST, allowing input credit.

Effective Duty: The total landed cost of duty on moulds, including all CSD, SWF and IGST.

Environmental Norms affecting Dies and Moulds Market:

Environmental norms in India affect moulds and dies manufacturing by requiring waste segregation, emission control systems, and effluent treatment, raising compliance costs. Rules on e-waste disposal and overall pollution control also influence machinery replacement cycles and can cause production delays if violated.

Figure 10-2: Environmental norms affecting Dies and Moulds Market



Source: Government Websites, Industry Articles & Ken Research Analysis

Labour Laws and Reforms:

These provisions impact production schedules, labour flexibility, and overall operating expenses. In the Dies and Moulds sector, **new labour codes** impact shop-floor costs and flexibility by mandating 8-hour shifts, safety compliance, and wage restructuring (50% basic pay, higher PF/ESI). They also regulate contract machinists, extend social security, and require equal pay and bonus norms - raising compliance costs while tightening workplace safety and workforce management.

Figure 10-3: Labour Laws and Reforms affecting shop-floor operations

Regulation	Key Provisions	Impact
Code on Wages, 2019	- Standardizes wage definition (basic + DA 250% of total) and introduces a national floor wage below which states cannot fix minimum wages.. - Ensures timely wage payment, equal pay for equal work, and streamlines bonus eligibility.	This raises labour costs but improves retention of skilled toolmakers.
Industrial Relations Code, 2020	- Recognizes fixed-term employment with full benefits and raises layoff/closure approval threshold from 100 to 300 workers. - Makes 14-day strike notice mandatory and formalizes trade union recognition.	- Enables flexible hiring for project demand - It reduces strike risks.
OSH & Working Conditions Code, 2020	- Consolidates safety & welfare laws with one license/registration/return for compliance.. - Caps working hours at 8/day, allows women in all sectors (including night shifts) with safeguards, and improves migrant worker protections.	- Increases safety compliance costs - It boosts productivity and workforce availability.
Social Security Code, 2020	- Extends EPF, ESI, gratuity, maternity benefits to gig, platform, and unorganized workers.. - Creates a Social Security Fund and mandates Aadhaar-based universal worker registration.	Raises costs for mould makers relying on contract labour but improves workforce stability and retention.

Source: Government Websites, Industry Articles & Ken Research Analysis

TAXATION AND REGULATORY FRAMEWORK OF INDIA HOUSEHOLD CLEANING CONSUMABLES MARKET

The India household cleaning consumables market is taxed under the Goods and Services Tax regime and regulated principally under the Plastic Waste Management Rules, 2016 and the Legal Metrology Act, 2009. Following the rate rationalisation approved at the **56th** meeting of the GST Council on 3 September 2025 and given effect from **22 September 2025**, the rate structure was simplified to slabs of 5%, 18% and 40%, and the 12% and 28% slabs were withdrawn. The categories in scope for this market were largely unaffected by the rationalisation: with one significant exception, branded cleaning consumables continue to attract 18%.

That exception matters, because the tax structure is not neutral between organised and unorganised supply. **The traditional broom of twigs or other vegetable materials** attracts a concessional GST of 5% under a dedicated tariff entry. A branded moulded broom, mop, wiper or brush serving the same household purpose attracts 18%. Combined with the compliance cost differential between a registered manufacturer and an unregistered one, that thirteen percentage point wedge is a structural headwind to formalisation of the category, and it is part of the explanation for why the organised share of this market remains low relative to comparable consumer categories.

Table 10-1: GST Rates Applicable to the India Household Cleaning Consumables Market, with effect from 22 September 2025

Product category in scope	HSN heading	GST rate up to 21-Sep-2025	GST rate w.e.f. 22-Sep-2025	Classification note
Brooms and brushes of twigs or other vegetable materials, bound together	9603 10 00	5%	5%	The concessional entry. Covers the traditional grass (phool jhadu) and coir broom, which is predominantly unorganised supply.
Brushes, mops, feather dusters, floor wipers and squeegees	9603 29 / 9603 90	18%	18%	The principal entry for branded cleaning tools, including plastic and synthetic brooms. Unchanged by the rationalisation.
Plastic buckets, mugs, dustbins and other household articles of plastics	3924	18%	18%	Plastic household articles were not moved by the September 2025 rationalisation and remain at 18%.
Plastic sacks and bags, including garbage bags and bin liners	3923 21 / 3923 29	18%	18%	Also subject to the Plastic Waste Management Rules; see the regulatory table below.
Floor cloths, dusters and similar made-up textile articles, including microfiber cloths	6307 10	5% / 12%	5%	Made-up textile articles moved broadly to 5%. The applicable rate depends on the specific made-up classification.
Household gloves of vulcanised rubber, other than surgical	4015 19	18%	18%	Surgical and examination gloves fall under a separate sub-heading at a concessional rate and are outside the scope of this market.
Cellular rubber and plastic sponges, and other scouring articles of plastics	3926 90 / 4016	18%	18%	Classification between chapters 39 and 40 depends on the material composition of the sponge.

Source: Central Board of Indirect Taxes and Customs rate schedules as notified pursuant to the 56th GST Council meeting, effective 22 September 2025; Ken Research Analysis

Note 1: Rates shown are for the principal HSN headings applicable to the products within the scope of this market. GST classification is determined at the eight-digit sub-heading level and depends on the material composition and intended use of each Stock Keeping Unit. The classification of specific products should be confirmed with the Company's tax advisers.

Note 2: The 12% and 28% slabs were withdrawn with effect from 22 September 2025 and the structure was reduced to 0%, 5%, 18% and 40%

Beyond taxation, the regulatory burden in this market falls disproportionately on the plastic-based categories - buckets, waste bins, garbage bags and bin liners - and on all packaged categories through legal metrology and consumer protection requirements. The Extended Producer Responsibility framework under the Plastic Waste Management Rules has become materially more demanding since 2024: registration on the centralised Central Pollution Control Board portal is mandatory for every producer, importer and brand owner placing plastic packaging on the market, **with no turnover exemption**. For a small manufacturer entering the category, compliance cost is now a more significant barrier to entry than manufacturing technology.

Table 10-2: Principal Regulations Applicable to the India Household Cleaning Consumables Market

Regulation and authority	Principal requirement	Relevance to this market
Plastic Waste Management Rules, 2016, as amended - most recently by the Plastic Waste Management (Amendment) Rules, 2026 (G.S.R. 237(E) dated 31 March 2026). MoEFCC and CPCB	Mandatory Extended Producer Responsibility registration on the centralised CPCB portal for every producer, importer and brand owner placing plastic packaging on the market, with no turnover exemption. Category-wise recycling targets, rising to 50% for rigid plastic in FY2025-26. Mandatory recycled-content and reuse obligations introduced by the 2026 amendment. Annual returns due by 30 June.	The single most significant compliance obligation for participants in the plastic-based categories. Applies to the plastic packaging used across all categories, and to plastic products where they fall within a notified category.
Rule 11, Plastic Waste Management Rules - on-pack labelling. CPCB	With effect from 1 July 2025, all plastic packaging sold or distributed in India must display the producer, importer or brand owner's name and CPCB EPR registration number, delivered through a QR code, barcode or unique identification number.	Requires artwork and packaging changes across the entire range for any participant selling in plastic packaging.
Environmental compensation for EPR shortfall. CPCB guidelines dated 4 April 2024	Environmental compensation of INR 5,000 per tonne for a first-year shortfall against the recycling target, rising to INR 10,000 for a second consecutive year and INR 20,000 for a third. The shortfall carries forward for three years and the compensation does not extinguish the underlying obligation.	Quantifies the financial exposure of non-compliance and is the reason EPR certificate procurement has become a working capital line for branded participants.
Instruction No. 21/2025- Customs dated 2 July 2025. CBIC	Importers of plastic raw material, including resin, pellets, granules, films and preforms, must produce proof of registration on the centralised EPR portal before consignments are cleared through customs.	Directly relevant to participants importing polymer for moulded cleaning products, and to importers of finished goods packed in plastic.
Prohibition on identified single-use plastics - Plastic Waste Management (Amendment) Rules, 2021, effective 1 July 2022. MoEFCC	Manufacture, import, stocking, distribution, sale and use of identified single-use plastic commodities is prohibited. Plastic carry bags below 120 microns in thickness are prohibited.	Garbage bags and bin liners are not among the prohibited single-use items, but the carry-bag thickness rule constrains the format and the gauge economics of the liner category.

Consumer Protection Act, 2019 and Consumer Protection (E-Commerce) Rules, 2020. Department of Consumer Affairs	Mandatory disclosure of country of origin, seller identity and product information on e-commerce listings; liability for misleading claims; product liability provisions.	Increasingly material as e-commerce and quick commerce grow as a route to market for this category.
Bureau of Indian Standards - Indian Standards for cleaning implements. BIS	Indian Standards exist for several cleaning implements and for the plastics used in household articles. Certification is presently voluntary for the core categories in this market rather than mandated through a Quality Control Order.	Voluntary certification is used by branded participants as a differentiator, particularly for institutional and government tenders.
Customs tariff on imported cleaning tools and components. CBIC	Basic customs duty, social welfare surcharge and IGST on imports of finished cleaning tools and of components such as spin-mop mechanisms and microfiber fabric.	China is the principal source of imported microfiber cloths, sponges, household gloves and spin-mop assemblies. Duty is therefore a determinant of landed cost for participants who assemble rather than fully manufacture.

Source: Ministry of Environment, Forest and Climate Change; Central Pollution Control Board; Central Board of Indirect Taxes and Customs; Department of Consumer Affairs; Bureau of Indian Standards; Ken Research Analysis

Note: This table sets out the principal regulations applicable to the market as a whole and is not a statement of the Company's own compliance position. Regulatory applicability should be confirmed with the Company's legal advisers.

11. COMPETITION LANDSCAPE

11.1. KEY FACTORS SHAPING COMPETITION

Competition in India's dies & moulds market is shaped by technical capabilities, industry focus, and customer linkages. Players that can serve different types of industries, indicating the complexity these players can handle.

Factors which shape competition amongst peers are:

- **Customer Confidence & Reach:** Limited presence beyond 5–7 major hubs reduce client trust; national coverage and service networks become differentiators.
- **Technology Complexity:** Ability to design and deliver multi-cavity, multi-axis and HRS, with complex precision tools like **5-axis CNC machining** centers, **imported ESR-grade steels** speed milling machines, **precision engineering expertise in CAD/CAM**, **coordinate measuring machines** (CMMs) is a major competitive edge, especially for export and packaging demand.
- **Cost Efficiency:** Players with **complete in-house capabilities**, including manufacturing of larger and more complex moulds, **achieve faster turnaround times (TAT)** and lower costs, strengthening competitiveness.
- **Diversification Advantage:** Multi-domain players can gain an advantage of participating in commoditised markets and snatch market share.

The market remains fragmented, with limited listed firms and several medium to small scale private players, but is gradually tilting toward firms with wider reach, stronger technology, and diversified industry exposure.

11.2. ECOSYSTEM OF PLAYERS IN THE MARKET

INDIAN DIES AND MOULDS MARKET ECOSYSTEM

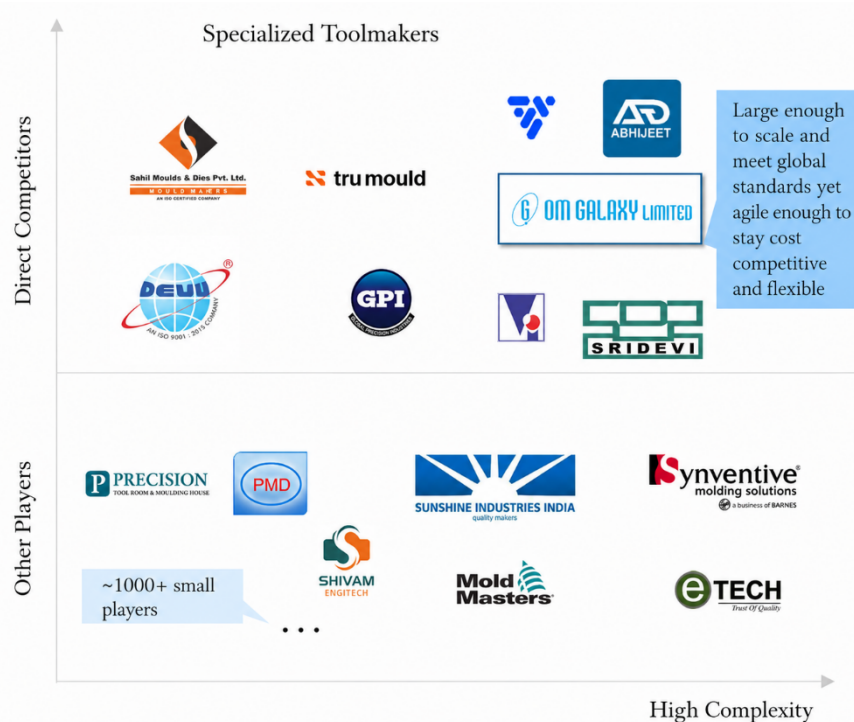
Indian Dies and Moulds ecosystem comprise **specialized toolmakers and general-purpose toolmakers**, spanning both SMEs and large players. The industry serves diverse downstream applications across **automotive, medical, aerospace, consumer goods, and electronics**.

- **Specialized toolmakers** serve high-precision, industry-specific applications such as multi-cavity packaging moulds, automotive, medical device tooling, or aerospace composites. They compete on **technical know-how, certification, and tolerances**, with some also operating as suppliers to global Original Equipment Manufacturers.
- **General-purpose toolmakers** focus on lower-complexity moulds for consumer goods, appliances, and toys. These firms are cost-driven, operating in fragmented clusters across Pune, Bengaluru, and Chennai.

By competitive proximity to Om Galaxy:

- **Direct competitors:** These are firms that design and sell moulds and dies on a merchant basis into the same end applications as the Company, and therefore compete for the same orders. They are differentiated by design content, tolerance capability, mould life, and delivery reliability rather than by price alone. Examples: Sahil Moulds and Dies, Devu Tools, Tru Mould, GPI, Sridevi Tool Engineers, Abhijeet.
- **Other players:** These are firms that participate in the tooling value chain without competing directly for the same merchant mould orders. They include tool rooms integrated with captive moulding operations, adjacent tooling and moulding suppliers, and global suppliers of hot runner systems and mould components that are specified into moulds built by Indian toolmakers. Examples: Precision Tool Room and Moulding House, PMD, Shivam Engitech, Sunshine Industries India, Mold Masters, Synventive Molding Solutions, e-Tech.

Figure 11-1: Ecosystem of Entities Present in the Indian Dies and Moulds Market



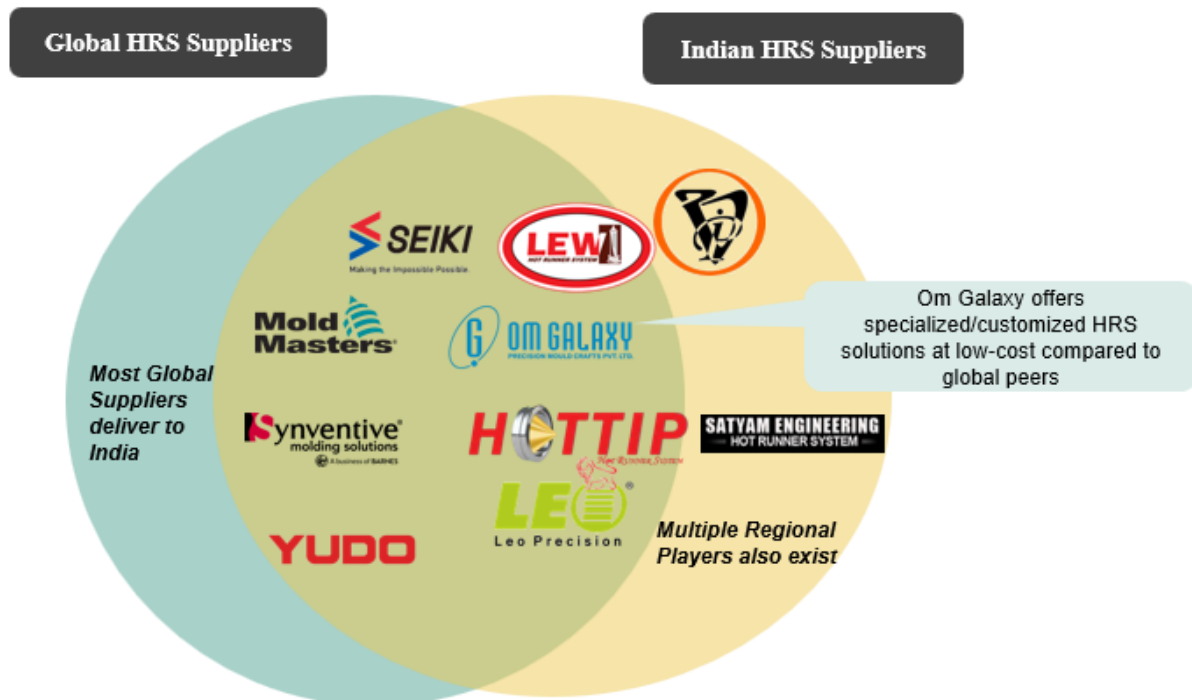
Source: Ken Research Analysis

HOT RUNNER SYSTEMS (HRS) ECOSYSTEM

Hot Runner Systems are a critical enabler in injection moulding, improving efficiency, reducing material wastage, and enabling multi-cavity, high-precision moulds. The landscape is shaped by **global leaders** such as **Husky, Synventive, Mold-Masters, and Yudo**, who dominate advanced applications in **medical, packaging, and automotive**.

On the Indian side, players like **Infuse HRS**, **Mastip India**, and smaller precision engineering firms are scaling up to meet domestic demand, particularly in **automotive, consumer products, and packaging**. While global players set benchmarks in **technology and performance**, Indian manufacturers compete on **cost, customization, and local service support**.

Figure 11-2: Ecosystem of Entities Present in Hot Runner Systems Market



Source: Ken Research Analysis

11.3. POSITIONING OF OM GALAXY LIMITED

In India's dies and moulds market, there are over **5000 manufacturers**, ranging from small and local players to large scale players. Among these, approximately **500+ manufacturers** have the capability to produce **large-size moulds** (≥ 2500 mm, up to 64 cavities), typically used in automotive, industrial and more complex applications. A smaller subset of these are **MSMEs**, are **forward integration** and **in-house Hot Runner System (HRS) manufacturing capabilities**. With subsidiary **Infuse HRS Private Ltd.** providing inhouse hot runner manufacturing and other distinction of **OMG Auto Mould Private Ltd.** indulged in automotive moulds manufacturing positions OM Galaxy Limited. as one such player.

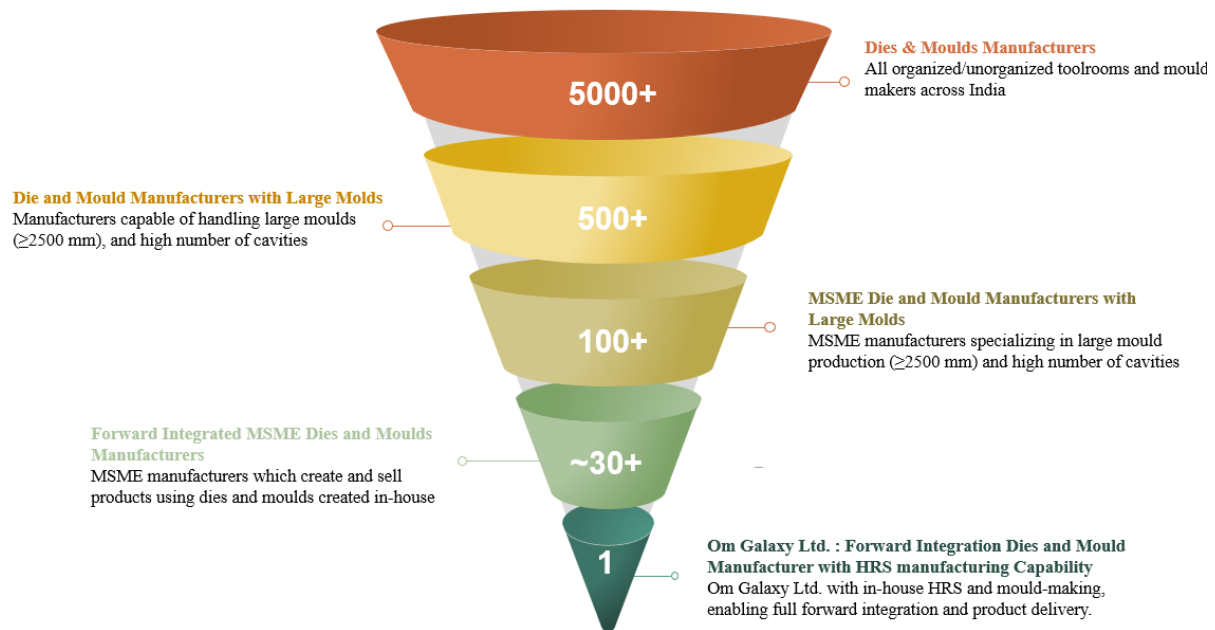
OM Galaxy Limited designs and manufactures plastic injection moulds and hot runner systems for pipe fittings, automotive components, and industrial applications. The company has in-house design, machining, assembly, and trial capabilities.

The production setup includes modular insert designs, integrated hot runner systems, and large-capacity machinery suited for a range of tooling requirements. It also supplies hot runner systems through its group entity, **Infuse Hot Runner Systems**, which are integrated into its moulds to deliver complete moulds solutions.

With its combination of moulds-making and HRS manufacturing, it serves domestic customers in the pipe-fitting and automotive sectors and maintains some export relationships. OM Galaxy Limited is positioned as a **Forward-integrated MSME Dies and Moulds Manufacturer with HRS manufacturing Capabilities** in the Indian market.

Under its consumer-facing sub-brand, *Wondra*, Om Galaxy is strategically diversified into the Indian household cleaning consumables market build on the existing mould manufacturing capabilities. Potential serviceable obtainable market in this segment is ₹100 crore by FY30, representing a market share potential of 1.04% in household cleaning products in India. This expansion reflects Om Galaxy's strategy to diversify beyond its core industrial portfolio and establish a stronger presence in the fast-growing FMCG household cleaning segment through a dedicated consumer brand.

Figure 11-3: Positioning of OM Galaxy Limited in the Indian Dies and Moulds Market



Source: Ken Research Analysis

12. TAIL-WINDS FOR DIES AND MOULDS MARKET

12.1. MARGIN OUTLOOK WITH TECH UPGRADES

Industry 4.0 and CAD/CAM are reshaping moulds manufacturing by driving efficiency and margin gains. While typical Industry Margins are 15%, digitalisation allows to pull more:

- **IoP deployments** deliver cycle time reductions of 10–30%, energy savings of 7–25%, scrap reductions of 10–20% (up to 35% for co-injection), and OEE gains of 5–20% (Source: KERN IoP). These directly lower unit costs and raise throughput, sustaining competitive pricing without margin erosion.
- **Advanced CAD/CAM systems** (e.g., Cimatron) cut design time by ~75%, reduce labour hours by ~50%, shorten cycle times by 14%, and lower costs by ~16% (Source: Cimatron). Faster prototyping and reduced rework enable delivery of complex, multi-cavity moulds at premium price points.
- Combined with **IoT monitoring, predictive maintenance, robotics, and AI optimization**, these technologies streamline workflows, enhance flexibility, and improve product quality-creating sustainable margin uplift and healthier financial outlooks for moulds manufacturers.

There is significant margin expansion potential in the segment, as **hot runner moulds** and **complex multi-cavity designs** typically offered at higher pricing due to their precision,

engineering complexity, and shorter cycle times. As OEMs and component suppliers move toward faster production and design customization, demand for such advanced tooling continues to rise, supporting stronger realizations for capable toolmakers.

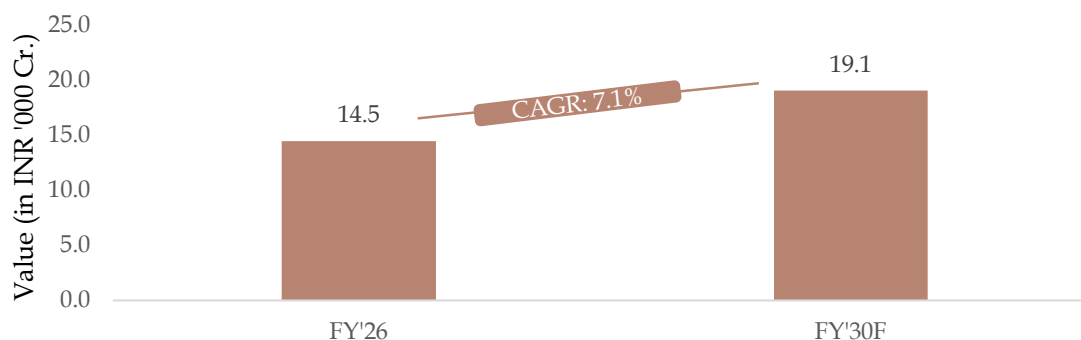
12.2. DIVERSIFICATION INTO MEDICAL GRADE MOULDS

Medical-grade moulds are high-precision tools used to manufacture critical healthcare products such as syringes, diagnostics, surgical instruments, implants, and drug-delivery devices. Rising reliance on precision-moulded components is driving strong demand, with production requiring **clean room environments** to ensure sterility, patient safety, and compliance with global standards.

- India's medical devices industry is expected to reach **INR 2,55,000 Cr by FY'30**, led by growing demand for diagnostics, disposables, and drug-delivery devices-all dependent on precision moulding.
- Policy support through the **National Medical Devices Policy 2023, PLI schemes, and new Device Parks** is boosting investment, local manufacturing, and reducing imports-directly fuelling demand for moulds and clean rooms.

With India positioning as a **global MedTech hub**, the surge in disposables and precision-moulded devices ensures a sustained pipeline of opportunities.

Figure 12-1: Market size of Medical Grade Moulds on the basis of Revenue (in INR '000 Crore), FY'26-FY'30F



Source: Ken Research Analysis

India's dies and moulds industry is supported by multiple growth tailwinds, including the government's infrastructure push, accelerating automotive model turnover, and innovation in consumer packaging. These trends collectively drive sustained demand for new tooling across construction materials, vehicle components, and packaging products, ensuring a steady cycle of design updates and production replacements.

13. CONCLUSION: WAY FORWARD

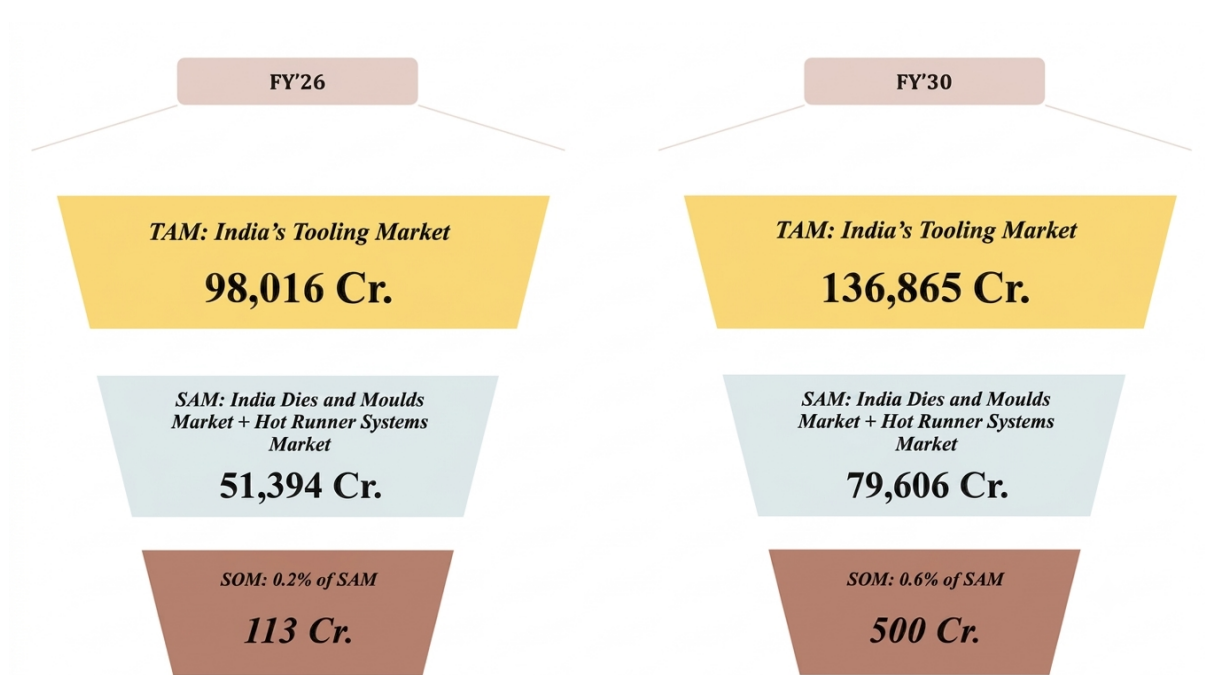
The Dies and Moulds Market and Hot Runner Systems Market in India (TAM) is poised for significant growth, with the market expected to grow at a CAGR of 8.7%, from INR 98.0 thousand crore in FY'26 to INR 136.9 thousand crore by FY'30. This growth is driven by the expansion of India's manufacturing ecosystem and the adoption of advanced technologies across the automotive, consumer goods, and electronics industries. Recurring revenues are driven by ongoing market changes such as new product variants, standard revisions, and design updates rather than solely by moulds wear-and-tear. Looking ahead, India's dies and moulds industry is set to benefit from the global shift of moulds manufacturing away from China due to diversifying supply chain and as Indian dies and moulds customers look to source locally as TAT reduces and quality improves with Indian moulds remaining cost-competitive against Europe and Japan, and increasingly quality-competitive with China.

OM Galaxy Limited along with its subsidiaries i.e. OMG Auto Mould Private Limited and Infuse HRS focuses on manufacturing moulds for automotive, pipe fittings, industrial and automotive components, which covers commoditized and specialized products. The group also manufactures hot runner systems and hot runner-equipped moulds. This offered OM Galaxy Limited a Serviceable Attainable Market (SAM) of INR 51,394.3 crore.

Over the next five years, the company plans to diversify into moulds manufacturing for commoditized products (select home and consumer product moulds) and higher-complexity specialized products (medical and precision components) within its design-to-trial capability, allowing OM Galaxy Limited to pursue additional customers and gain market share in India's Dies and Moulds Market.

OM Galaxy Limited has also disclosed plans to increase manufacturing capacity and consolidate said capacity by bringing equipment and manpower under one roof, which is intended to improve operating efficiency and support margin improvement as utilization ramps. These steps are expected to increase the SOM for OM Galaxy Limited to ~ INR 500 crore by FY'30.

Figure 13-1: Target Market Opportunity for OM Galaxy Limited, FY'26 & FY'30F



Source: Ken Research Analysis

TAM: Target addressable market; SAM: Serviceable addressable market and SOM: Serviceable obtainable market

Serviceable Obtainable Market (SOM) Potential for OM Galaxy Limited is INR 500 crore by FY'30, with the growth bridge comprising INR 190 crore from Automotive Moulds, INR 180 crore from Pipe Fitting Moulds, INR 90 crore from Industrial Moulds, INR 40 crore from Hot Runner Systems and hot-runner-integrated moulds. This mix combines mature repeat demand in fittings and industrial tooling with capability-led automotive and HRS programs that leverages planned additions of injection, blow, and tufting machinery and benefits from capacity consolidation to improve throughput, delivery reliability, and margin support as utilization ramps.

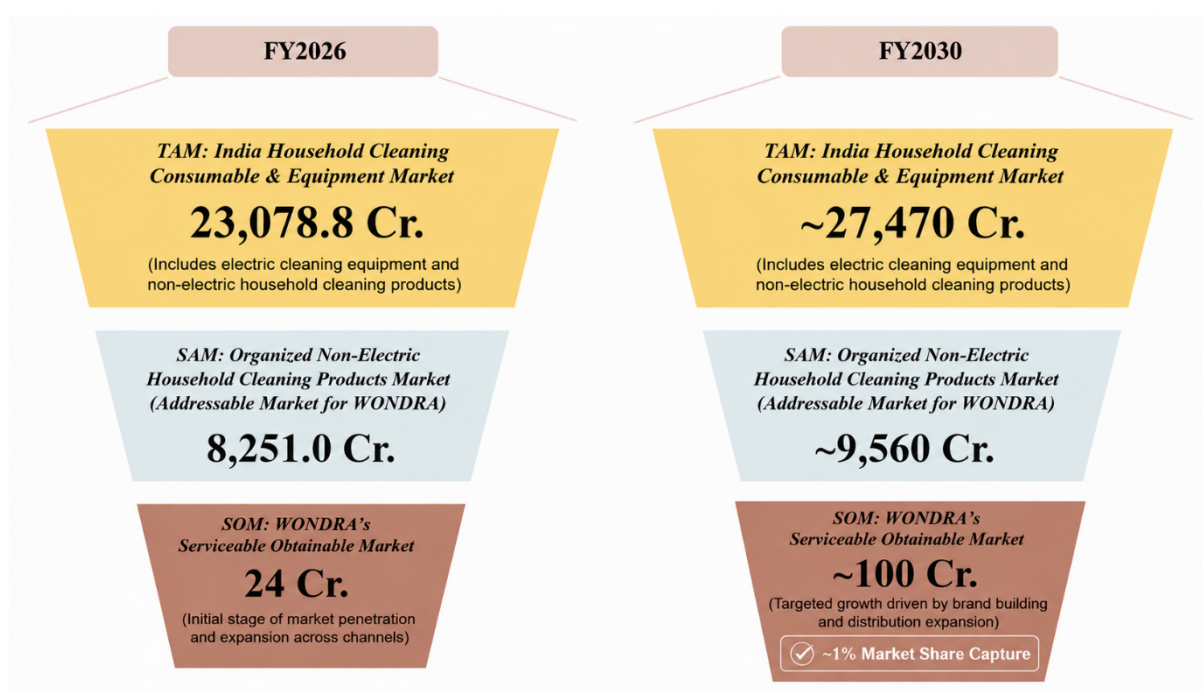
Wondra by Om Galaxy

WONDRA, a consumer brand of OM Galaxy Limited, offers a range of non-electric household cleaning products, including mops, brooms, brushes, scrubbers, microfiber cloths, and other cleaning accessories. Leveraging OM Galaxy's manufacturing expertise and expanding distribution network, the brand aims to strengthen its presence in India's organized household cleaning tools market.

In FY2026, the Total Addressable Market (TAM) for India Household Cleaning Consumable & Equipment Market is estimated at INR 23,078.8 crore, encompassing both electric cleaning equipment (such as vacuum cleaners, robotic vacuum cleaners, others) and non-electric household cleaning products (including brooms, mops, brushes, scrubbers, wipers/dusters, microfiber cloths, sponges, buckets, cleaning gloves, and waste bins/bags). Based on WONDRA's product portfolio, which is currently focused on non-electric cleaning tools, the Serviceable Available Market (SAM) is estimated at INR 8,251.0 crore in 2026, representing the addressable market for organized non-electric household cleaning products. WONDRA's Serviceable Obtainable Market (SOM) is estimated at INR 24 crore in FY2026, reflecting the company's initial stage of market penetration and its ongoing expansion across distribution channels.

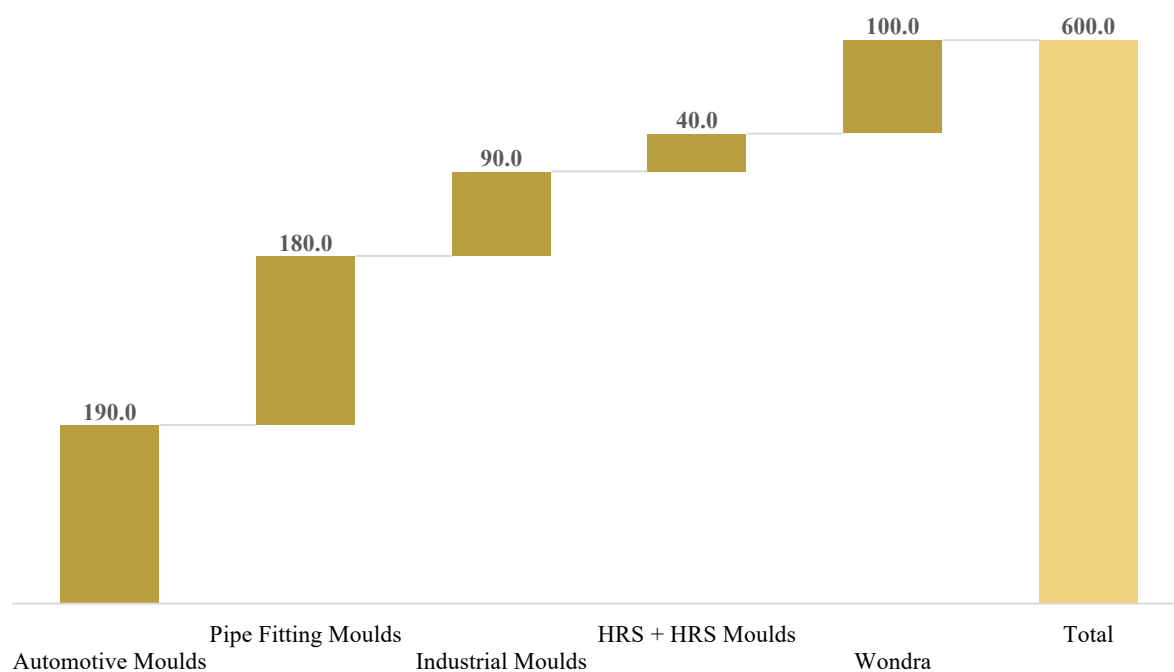
By FY2030, WONDRA's SOM is projected to increase to INR 100 crore (1.04% market share in household cleaning products market), driven by the expansion of its dealer and distributor network, wider availability through modern retail and e-commerce platforms, and the introduction of a broader portfolio of premium cleaning products. Continued investments in brand building, enhanced retail visibility, product innovation, and deeper penetration into Tier II and Tier III cities are expected to strengthen WONDRA's competitive position.

Figure 13-2: Target Market Opportunity for OM Galaxy's - Wondra, FY'26 & FY'30F



Source: Ken Research Analysis

The India Household Cleaning Market comprises two broad categories: Household Cleaning Consumables (including brooms, mops, brushes, scrubbers, wipers/dusters, microfiber cloths, sponges, buckets, cleaning gloves, waste bins/bags, etc.) and Cleaning Equipment (including vacuum cleaners, spin-mop systems, steam cleaners, pressure washers, and other cleaning devices), together **representing the Total Addressable Market (TAM)**. WONDRA's current product portfolio is primarily focused on household cleaning consumables, which constitutes its **Serviceable Available Market (SAM)**. The Company's **Serviceable Obtainable Market (SOM)** represents the share of this consumables segment that WONDRA can realistically capture based on its existing product portfolio, distribution reach, and expansion strategy.

Figure 13-3: Potential SOM Split for OM Galaxy Limited (SOM) by FY'30 (in INR Crore)

Source: Ken Research Analysis; Note: HRS: Hot Runner Systems

14. RESEARCH METHODOLOGY

14.1. MARKET DEFINITIONS

The Indian Dies and Moulds Market is the total domestic market revenue generated from the sale of **dies, moulds, and associated tooling systems within India**. The market sizing is presented in value terms (INR crore and INR thousand crores) and excludes export volumes or revenues.

- **India's Dies and Moulds Market:** Includes revenues from the design, manufacturing, and sale of dies and moulds used across automotive, packaging, pipe fittings, electronics, industrial components, and consumer goods. The market is segmented by application (automotive, packaging, industrial, etc.), by moulds type (injection, blow, extrusion, stamping), and by distribution channel (Original Equipment Manufacturer, aftermarket, B2B). The objective is to capture the commercial value of domestic moulds manufacturing and tooling demand across sectors.
- **Hot Runner Systems Market:** Defined as the value generated from the sale of hot runner components-such as nozzles, manifolds, and hot-half assemblies-within moulds manufacturing. These systems are critical for high-precision, multi-cavity injection moulding and are segmented by component type, end-use industry (automotive, packaging, medical), and technology adoption level. Only domestic demand and consumption are considered.
- **India Household Cleaning Consumable Market:** The India Household Cleaning Consumables Market comprises non-electric household cleaning products used for routine cleaning, dust removal, surface maintenance, and waste management. For the purpose of this study, the market includes brooms, mops, brushes, scrubbers, wipers/dusters, microfiber cloths, cleaning sponges, buckets, cleaning gloves, and waste bins/bags. These products are characterized by regular replacement due to wear and tear, resulting in recurring consumer demand driven by hygiene awareness, household formation, and sanitation practices.

All estimations have been made through a combination of **primary interviews, secondary data validation, and market triangulation**, ensuring alignment with actual supply-side dynamics and consumption patterns within India.

For the purpose of this study, the Indian Dies and Moulds Market is defined using the taxonomy outlined above in the report, providing clarity on scope, segmentation, and terminology used across the analysis.

ABBREVIATIONS

ACMA- Automotive Component Manufacturers Association of India

BE- Budget Estimates

Bn- Billion

CAD- Computer-Aided Design

CAE- Computer-Aided Engineering

CAGR- Compound Annual Growth Rate

CAM- Computer-Aided Manufacturing

CNC- Computer Numerical Control

CPI- Consumer Price Index

Cr – Crores

CY- Calendar Year

DMG- Deckel Maho Gildemeister

DPIIT- Department for Promotion of Industry and Internal Trade

EDM- Electrical Discharge Machining

EPF- Employees' Provident Fund

ESI- Employees' State Insurance

EV- Electric Vehicle

FDI- Foreign Direct Investment

F-Forecasted Figures

FMCG- Fast-Moving Consumer Goods

FY- Financial Year

GDP-Gross Domestic Product

GNDI- Gross National Disposal Income

GST- Goods and Service Tax

HDPE- High-Density Polyethylene

IBEF- India Brand Equity Foundation

ICE- Internal Combustion Engine

ICRA- Investment Information and Credit Rating Agency of India

IGST- Integrated Goods and Services Tax

IIP- Index of Industrial Production

IMF- International Monetary Fund

IML- In-Moulds Labelling

INR- Indian Rupee

ISO- International Organization for Standardization

IT- Information Technology

Km- Kilometres

MNC's- Multi National Corporation

MOSPI- Ministry of Statistics and Programme Implementation

MPC- Monetary Policy Committee

MSME- Micro, Small & Medium Enterprises
MT- Metric Tonne
MTPA- Million Tonnes Per Annum
NICDP- National Industrial Corridor Development Programme
NIP- National Infrastructure Pipeline
NMP- National Monetisation Pipeline
OEM- Original Equipment Manufacturer
PLI- Production Linked Incentive
PM- Pradhan Mantri
PMAY- Pradhan Mantri Awas Yojana
PMI- Purchasing Managers' Index
PPP- Public-Private Partnership
PVC- Polyvinyl Chloride
RBI- Reserve Bank of India
RE- Revised Estimate
RERA- Real Estate (Regulation and Development) Act
ROI- Return on Investment
SIAM- Society of Indian Automobile Manufacturers
SUV- Sports Utility Vehicle
Tn- Trillion
UAE- United Arab Emirates
USD- United States Dollar
US-United States

MARKET SIZING AND MODELING

The research team conducted in-depth interviews with senior management from leading dies and moulds manufacturers in India to validate market hypotheses and gather firsthand industry insights. Discussions were held with executives from companies such as Vasantha Tool Crafts, Lumax, Yudo Hot Runners, Motherson, and other prominent players.

Participants included Plant Heads, Tool Room Managers, R&D Heads, Production Directors, Business Development Leads, and Quality Assurance Managers, who shared perspectives on evolving tooling technologies, customer demand for precision and durability, adoption of hot runner and multi-cavity systems, pricing structures, and shifts in end-user industry demand (automotive, packaging, consumer goods, and infrastructure).

These interactions were crucial to confirm assumptions related to the adoption of advanced tooling technologies, integration of digital design and simulation (CAD/CAM, CAE), demand for localized and faster turnaround moulds manufacturing, and sector-wise growth drivers-thus strengthening the analytical foundation of the study.

Table 14-1: Sample Composition Table by Stakeholders and Respondents in (%)

By Stakeholders	Sample Size: ~40 Respondents	Description
Dies & Moulds and Hot Runner Manufacturers	45%	Plant Heads, Tool Room Managers, Production Directors, R&D Heads, Design Engineers (CAD/CAM/CAE), Quality Assurance Managers, Business Development Heads, Area Sales Heads
Dies & Moulds and Hot Runner Distributors	30%	Directors, CXOs, Business Heads, Sales Managers, Managers
End-Use Industries	15%	Procurement Heads, Operations Heads, Project Managers,
Industry Experts & Associations	10%	Independent Tooling Consultants, Industry Analysts, Academicians, Leaders from tooling associations (TAGMA, IMTMA)

Source: Ken Research Analysis

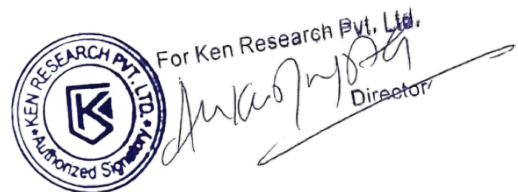
LIMITATIONS

- Insights were gathered via CATI interviews with senior professionals across India's moulds and dies sector, including CXOs, Plant Heads, Tool Room Managers, R&D Heads, and Business Development Leads. While responses offered rich directional input, some optimistic bias was observed, particularly on export growth and technology adoption. To address this, findings were cross-validated with secondary research and company disclosures.
- Market projections were based on past demand trends in automotive, packaging, consumer durables, and infrastructure. These were validated through expert interviews, though some respondents held sales or vendor development roles, which may have led to bullish outlooks. Estimates were balanced using neutral trade data, association reports, and policy releases.
- The study applied stratified purposive sampling across moulds and die makers, clusters, and end-use segments. However, given the fragmented and semi-organized nature of India's tooling industry-especially outside major hubs-some findings may not be fully generalizable. Sampling rigor ensured the error margin stayed within 5–10%, maintaining reliability.

CONCLUSION

The India Dies & Moulds Market estimation is based on a combined analysis of primary insights from leading toolmakers and end-use industries, supplemented with validated data from trade statistics, TAGMA/IMTMA releases, and company filings. This integrative approach ensures that the final outlook reflects both the manufacturing capabilities and technology adoption of domestic players, as well as the demand pull from automotive, pipe fitting, and industrial applications.

For **Ken Research Private Limited**



For Ken Research Pvt. Ltd.
Director

Director

17th August 2026

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