10 November, 2025 INITIATING COVERAGE

MTAR Technologies Ltd

Nifty: 25,574 CMP: Rs. 2430 Target Price: Rs. 2711 Rating: HOLD

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Aerospace & Defense

MTAR Technologies is a Hyderabad-based precision engineering company engaged in manufacturing critical components and assemblies for clean energy, nuclear, space, and defence sectors. It is a manufacturer of critical subsystems like fueling machine head, Grid plate, and other assemblies for Nuclear, Fuel cell hotboxes and electrolysers for fuel cells and various parts for the defence and aerospace industries. Established in 1970, the company has built strong long-term partnerships with marquee clients such as ISRO, DRDO, NPCIL, HAL, and Bloom Energy (US).

Investment Rationale

Significant Growth in the Nuclear Sector:
MTAR's nuclear segment is expected to contribute 19% to total revenues by FY28E, up from 3% today, driven by the Rs 10bn Kaiga 5 & 6 order and five reactor refurbishment projects in FY26. The company supplies 15 critical reactor components and is the sole domestic qualified supplier for Fuel Transfer Systems (FTS) and Bridge & Carriage Assemblies (FMBC) for NPCIL's PHWRs. This structural moat positions MTAR favorably as India plans to expand nuclear capacity from 8 GW to 100 GW by 2047. Currently, 8 reactors are under construction (adding 8 GW by 2030), and 20 more have government approval (~19 GW). MTAR represents ~25% of total equipment costs for these projects.

Clean Energy Dominance to continue:
The clean energy segment is expected to remain MTAR's largest revenue contributor, growing at a 17% CAGR, with Bloom Energy projected to grow at 25-30% CAGR over CY20-30, continuing as MTAR's largest client. The global fuel cell market is expected to expand at a 26.3% CAGR from 2025-2030, presenting a robust long-term opportunity. MTAR's partnership with Bloom is expected to deepen as wallet share rises, with the addition of new products such as sheet metal assemblies, bellows, and electrolysers. Additionally, MTAR is onboarding new clients, including Fluence Energy for battery storage systems, further diversifying its clean energy portfolio.

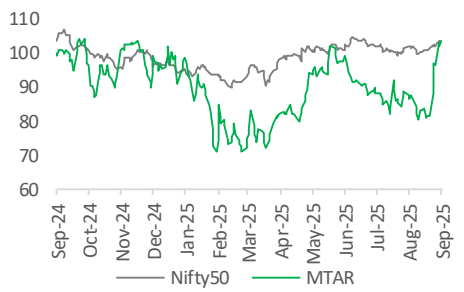
Growing Role in India's Space Sector:
MTAR is poised to play an increasingly important role as ISRO plans to launch 150 satellites by 2033, with near-term projects including Mangalyaan-2, Shukrayaan, and Chandrayaan-4. India's space economy is projected to grow from $8.4bn to $44bn by 2033. MTAR has a zero-failure execution record and long-standing relationships with ISRO, supplying critical components such as hardware for semi-cryogenic engines and actuation systems. With its expertise and track record, MTAR is well-positioned to capitalize on rising satellite launches and defence localization, with order inflows expected to grow 25-30% annually.

Valuation summary
We initiate coverage on MTAR Technologies with a HOLD rating and assign a 55x PE multiple on Sep-2027E EPS, implying a target price of Rs.2,711 (12% upside). Our positive view is driven by (1) robust growth visibility in the nuclear segment, with revenue share expected to rise to ~19% by FY28E (from 3% currently) supported by the Rs10 bn Kaiga 5 & 6 order and upcoming reactor refurbishments, (2) continued strength in the clean energy business, with MTAR's deepening partnership with Bloom Energy and diversification into new clients such as Fluence Energy, and (3) MTAR's strategic role in India's expanding space ecosystem, where its proven execution capabilities and long-standing relationship with ISRO position it well to capitalize on various opportunities. We estimate Revenue/EBITDA/PAT CAGRs of 34%/48%/68% over FY25-28E, driven by strong order growth in the clean energy and nuclear segments, expansion of wallet share with existing clients, and onboarding of new customers.

Risks to our thesis:-
- High client concentration (Bloom Energy at ~60%)
- Delays in nuclear projects or regulatory approvals.
- Currency and raw material price volatility (~40% revenue from exports, high volatility in alloys and special grade metals)
- Capacity underutilization during expansion.

Shareholding (%)	Sep-25
Promoter	31.41%
FII	9.21%
DII	24.81%
Public	34.58%

Relative Price Performance



Key Data	
Nifty 50	25,574
52 Week High/low (Rs)	1,888/1,152
Market cap (Rs mn)	54480
Outstanding Shares (mn)	307.59
Bloomberg code	MTARTECH IN
NSE code	MTARTECH

(RS. mn)	FY25	FY26E	FY27E	FY28E	CAGR
Revenue	6,760	8,823	12,476	16,123	34%
EBITDA	1,208	1,841	2,932	3,950	48%
EBITDAM	17.9%	20.9%	23.5%	24.5%	664bps
PAT	528	996	1,739	2,483	68%
EPS	17.1	32.4	56.6	80.7	68%
P/E (x)	140.9	74.5	42.7	29.9	

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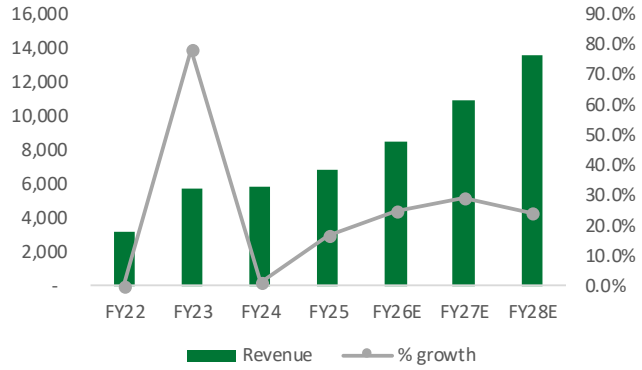
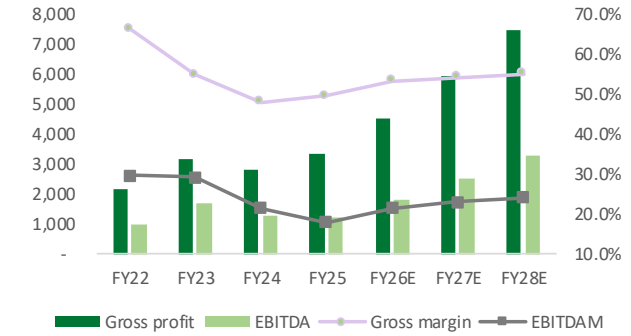
Story in charts

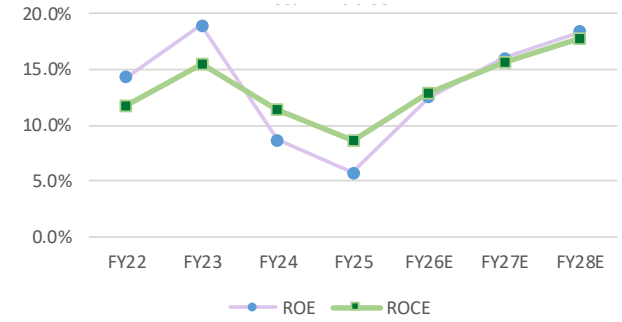
MTAR is expected to grow at a ~34% CAGR over FY25-28E



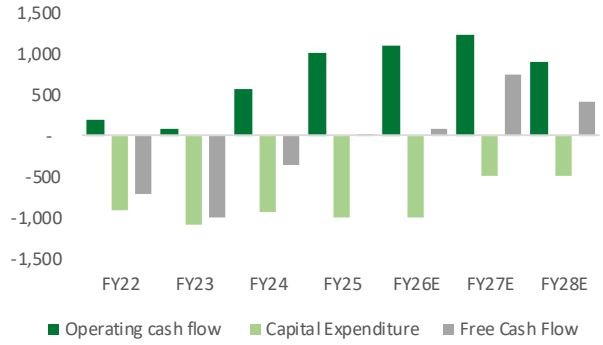
Higher Utilization to Drive Margins



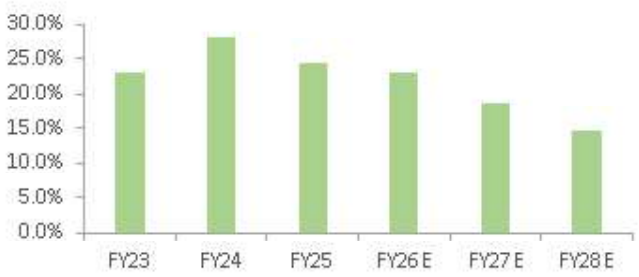
Return Ratios to improve after a fall in FY24 and FY25



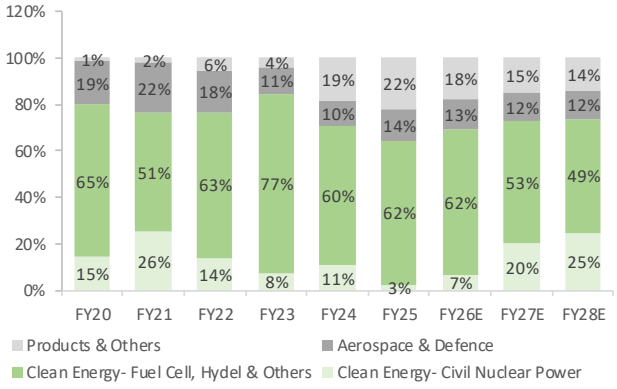
Improved operational efficiency are expected to result in better cash flows



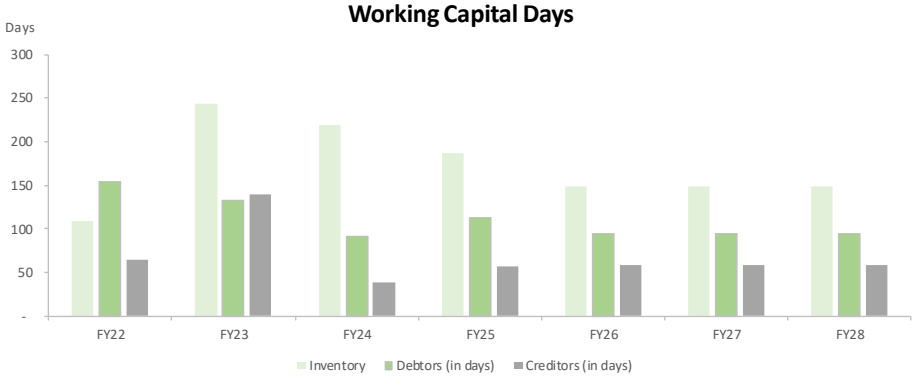
Strong Balance Sheet



Segmental Revenue mix



Working Capital Days



Investment Rational

We anticipate healthy expansion in order book and revenue over FY25-28E

The fuel cell is the largest segment with 62% revenue share in FY25 followed by Products and others (22%),Aerospace and Defence (14%), and Nuclear Power (3%). The company has registered a healthy revenue CAGR of 26% over FY20-25E (despite the pandemic), aided by healthy 24% order book growth during the same period. Clean Energy (fuel cells) led the growth with a revenue CAGR of 25%.

Particulars (Rs mn)	FY20	FY21	FY22	FY23	FY24	FY25	CAGR
Closing orderbook	3,451	4,159	6,488	11,730	9,151	9,794	23%
Revenue	2,103	2,432	3,220	5,737	5,812	6,760	26%
Fuel cell Revenue	1,375	1,229	2,016	4,417	3,511	4,169	25%
Orderbook to revenue ratio	1.6	1.7	2.0	2.0	1.6	1.4	

As of 5th November 2026, MTAR has an order book of Rs 17,030m and the order book is expected to increase to Rs 28,000mn by FY26 due to Rs ~800cr Kaiga 5&6 and refurbishment orders.

Particulars	FY25	FY26E	FY27E	FY28E
Opening orderbook	9,151	9,794	23,402	23,026
Additions	7,202	22,430	12,100	16,300
Executions	6,559	8,822	12,476	16,123
Short closed orders	-	-	-	-
Closing orderbook	9,794	23,402	23,026	23,203
Orderbook to revenue	1.4	2.7	1.8	1.4

We expect MTAR's order book to grow from Rs 9.8bn to Rs 20.4bn over FY25-FY28E, driven by:

Orderbook breakup	FY22	FY23	FY24	FY25
Clean Energy- Civil Nuclear Power	1,752	1,935	1,464	1,577
Clean Energy- Fuel Cell, Hydel & Others	2,985	6,874	5,362	4,740
Aerospace & Defence	1,687	1,818	1,931	2,773
Products & Others	65	1,103	393	703
Closing order book	6,488	11,730	9,151	9,793
Order book to revenue ratio	2.0	2.0	1.6	1.4

1) Government's target of expanding nuclear reactors by 2030:

MTAR expects a significant spike in nuclear order inflows in FY26, driven by the Rs 10bn Kaiga 5 & 6 order and refurbishment of five reactors across Tarapur, Madhya Pradesh, Rajasthan, and Chennai, expected by Jan-Mar 2026. These time-sensitive projects are to be executed over 2-3 years. Moreover, Management expects a long run way of projects from this sector as the Indian government aims for at least 100Gw of energy from Nuclear power by 2047 from the current ~8Gw.

MTAR is a critical player in the supply chain as it manufactures 15 different products such as Fuel Machine Head, FM Bridge & Column, FTS, Coolant Channel Assemblies, Ball Screws, Water Lubricated Bearings, Ram head Assemblies, Drive Mechanisms. Moreover, MTAR is the sole qualified domestic supplier of FTS and FMBC for NPCIL's Pressurized Heavy Water Reactors (PHWRs). These are critical subsystems where vendor approval takes 5-7 years.

Currently, India has 23 operational nuclear reactors, 8 reactors are under construction and approval has been received for 20 more reactors. Typically the equipment cost is 25-30% of the total equipment cost; MTAR constitutes 25-30% of this equipment costs.

Particulars	capacity Gw	cost (Rs bn)	Equipment cost (Rs bn)
23 nuclear reactors (currently operational)	7.4	120	28
8 nuclear reactors (under construction)	6.8	720	170
14 PHWRs (approval received)	9.8	1,800	435
6 European Pressurised reactors (EPR)(in-principal approval)	9.9		
Total	**33.9**	**2,640**	**633**

Source: Annual Report 2025

The 8 reactors under construction are expected to be completed by 2030 which will increase the capacity to 14.2 Gw.

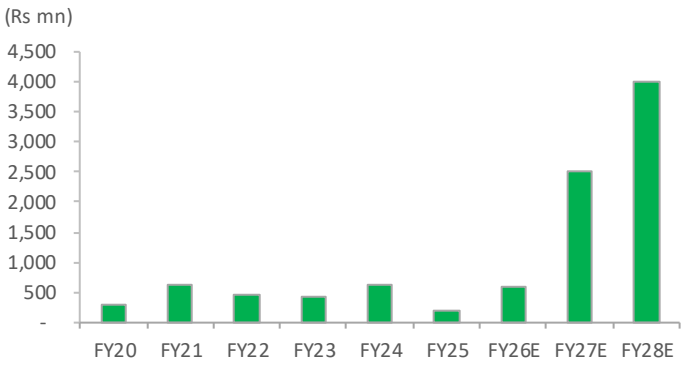
Under construction reactors	Type	Capacity (Gw)
PFBR	FBR	0.5
Rajasthan 7&8	PHWR	1.4
Kudankulam 3, 4, 5 and 6	PWR	4
Gorakhpur 1 & 2	PHWR	1.4

Nuclear contributed 3% of revenue in FY25 and is expected to rise to 7% in FY26 with management's target of Rs 600mn. The government has granted approval for 14 PHWRs to be set up in fleet mode and granted approval for 6 EPRs at Jaitapur Maharashtra. The total equipment cost for these two projects is expected to be Rs435bn and MTAR represents 25-30% of the total equipment costs. This translates into an opportunity of ~Rs 108bn for the company. The Company's current capacity can address four reactors simultaneously. Additionally, the refurbishment of reactors reaching 16-year life are expected to generate Rs 100-200mn annually.

New reactors planned	Type	Capacity	Status
Gorakhpur 3 & 4	PHWR	1.4	Geotechnical/early site work
Chutka 1 & 2	PHWR	1.4	Administrative approval and financial sanction obtained.
Mahi Banswara - 1, 2, 3 & 4	PHWR	2.8	Foundation stone laid on 25th September 2025.
Kaiga 5&6	PHWR	1.4	EPC awarded to MEIL; construction approved
Kudankulam - 7 & 8	PWHR	2.0	proposed

This means that annual opportunity could be Rs ~27bn for these projects. Based on the Rs 10bn Kaiga order which is expected in FY26 and is executable over FY27-29, we assume 20% to be realized in FY27 and 40% to be realised over FY28E, and remainder over FY29. This increases the expected revenue mix in FY27E and FY28E to 18% and 22% respectively.

Revenue Nuclear Power



2) Bloom to do well on the back of data center growth

Order flow from Bloom is expected to rise due to higher demand for Bloom boxes based on Data center growth, Bloom's tie-up with SK group, and MTAR's increasing wallet share with the company.

Bloom anticipates rising demand for onsite power, particularly from the data center sector. The data center capacity is projected to increase from ~175 MW today to ~275 MW by 2030 and 375 MW by 2035. ~70% of Bloom's revenue is generated in the U.S., where the data center market is expected to grow at a ~12% CAGR, reaching $585 billion between 2025 and 2034, according to Precedence Research. Data center clients for Bloom include Oracle and Equinix, and the company recently secured a $5 billion contract with . As per Brightlio Data Center Stats (September 2025), Equinix holds a 13% share of the U.S. colocation services market.

MTAR, over the years, has steadily increased its wallet share with Bloom by introducing new product lines such as sheet metal components, enclosures, and ASP assemblies with an expectation that MTAR will do full assemblies for Bloom in the future. MTAR caters to ~50-60% of hotbox requirement for Bloom currently. In FY26, it is adding two more products. Additionally, MTAR is sole supplier of electrolyser units for Bloom.

South Korea represents Bloom's second-largest market, where the company has entered into agreements with SK Group and expects additional opportunities driven by the country's Hydrogen Economy roadmap. This initiative targets the deployment of 15 GW of utility-scale fuel cells by 2040, with 370 MW already installed. The hydrogen sector in Korea is projected to nearly double, growing from KRW 14.1 trillion (£9.1 bn) in 2020 to KRW 26.8 trillion (£17.3 bn) by 2030. The initiative also looks to deploy water electrolysis to produce hydrogen. This is likely beneficial for MTAR as it is Bloom's sole supplier of electrolyzers.

Bloom is expected to grow 25% in CY25 with 29% margins and currently holds an order backlog of $2.5 billion. Over CY20-30, the company targets a 30%-35% CAGR. Bloom has ordered 4,000 hot boxes (+14%YoY) for FY26 with a forecast of 25% growth in hot box procurement for FY27E. Electrolyser orders are expected to grow at a similar rate.

Blooms products	FY22	FY23	FY24	FY25	FY26E	FY27E	FY28E
Fuel cell hot boxes- Yuma, santacruz, Santacruz Bloc 2	4,000	4,545	2,752	3,500	4,000	5,000	6,250

3) Space and Defence - Benefiting from Rising Launch Activity

ISRO has planned nine launches in 2025 and aims to launch its first space station module in 2028. Ongoing missions include Mangalyaan-2, Shukrayaan, and Chandrayaan-4/5. India plans to increase its satellite count from ~55 to ~150 by 2033, with the domestic space economy projected to expand from USD 8.4 bn to USD 44 bn. MTAR is seeking to grow its presence in this sector by increasing wallet share with ISRO through products such as thrust chambers, motor casings, and light alloy structures. The company expects ~20% growth in space revenues driven by rising ISRO launches. Key anticipated orders include Rs. 600 mn for electromechanical actuators (EMA) and Vikas engine components in FY26, and semi-cryogenic engine hardware after successful qualification in FY27. Additionally, MTAR has signed an MoU with the Indian National Space Promotion and Authorization Center (IN-SPACe) to develop a two-stage, all-liquid Small Satellite Launch Vehicle (SSLV) capable of carrying a 500 kg payload.

MTAR expects ~80% revenue growth in FY26 (~Rs100-120 cr vs Rs 45 cr in FY25) in the defence segment, with addition of new components like actuation systems for launch vehicles. In the defence vertical, MTAR now has 7 MNC customers- Rafael, Elbit Systems, GKN Aerospace, Thales, Thales Alenia Space, Israel Aerospace Industries (IAI), and Collins Aerospace. The company has completed first article deliveries, and has entered production phase for few Programs. It is projecting a growth of 45% over the next 5 years in the MNC defence vertical. In the domestic defence segment the company has a leadership in products such as canisters, magnesium gearboxes, airframes, Wing kit assemblies. The company is a supplier of 5-ton and 10-ton actuators for the HAL's LCA Tejas Program. The government recently approved Rs 62,000cr for 97 LCA MK-1A fighter jets. It has built a new facility (unit 7) for the aerospace vertical to meet growing demand for high-end parts and sub-assemblies.

Given its zero-failure execution record and multi-year qualification cycles, we expect aerospace and defence to grow at 23% CAGR over FY2-28E as launch activity accelerates and defence localization gains traction.

4) Expansion in new areas

MTAR has signed a 5-year Long-Term Agreement with Weatherford International after the delivery of first-article assemblies. MTAR will execute Rs 900mn worth of orders starting from FY27. The company has set up a dedicated oil & gas facility with a capex of Rs 700 mn in the SEZ near Hyderabad airport at Adibatla, targeted for commissioning by June 2026. Management expects the oil & gas vertical to evolve into a meaningful contributor to the order book over the next decade.

MTAR is diversifying its clean energy customer base by exploring enclosure manufacturing and system integration in the rapidly growing energy storage sector. The global battery storage market is expected to expand from ~$6 bn in 2024 to ~$54 bn by 2032, while India currently has 3.3 GWe of energy storage projects in the pipeline, projected to deliver 8.5 GWh of storage capacity over the next two years. To meet its clean energy and grid flexibility targets, India will need to scale energy storage capacity to ~74 GWe by 2031-32. MTAR has developed battery storage enclosures for Fluence Energy, with the first prototype already delivered and the second scheduled for completion by 3Q FY26.

In the hydropower segment, MTAR supplies complex fabricated components such as draft tubes and spiral casings to clients including Andritz, Voith, and GE Power. India's current hydropower capacity stands at 42 GWe, expected to rise to 67 GWe by 2031-32, with 15 GWe currently under construction.

In the wind energy segment, MTAR provides rotor and stator assemblies for Regen Power. India's wind capacity is projected to grow more than 2.5×, from ~9 GWe today to ~25 GWe by 2028, with a capital expenditure of Rs 1.8-2 lakh crore. Annual capacity additions are expected to increase to 7.1 GWe per year by FY27 (up from 3.4 GWe during FY23-25), pushing total installed capacity to ~63 GWe by FY27.

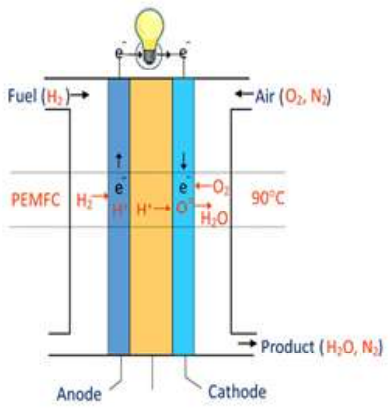
Backbone of Strategic Sectors

Clean Energy

About 60% of MTAR's revenue is derived from the clean energy segment, making it a strategically important sector for the company. Within this segment, MTAR manufactures solid oxide fuel cell (SOFC) and hydrogen units, along with sheet metal assemblies, enclosures, and electrolyser components, which are primarily supplied to Bloom Energy.

The growing emphasis on energy diversification and the adoption of alternative energy sources is creating a favourable environment for fuel cell deployment.

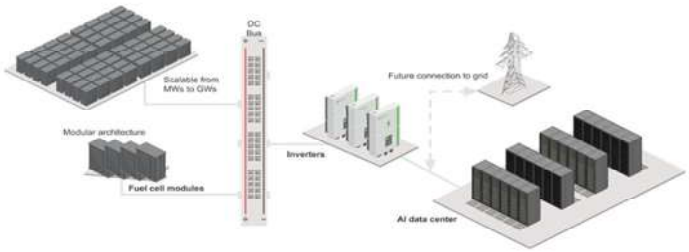
Similar to the electric battery, a fuel cell is composed of an anode and cathode separated by an electrolyte. Fuel (hydrogen) enters and is dissociated at the anode into protons (H+) and electrons (e-). While the electrolyte is receptive to transporting the protons to the cathode, electrons are rejected and required to find an alternative path. The electrons to travel through a load, represented in the illustration by a lightbulb. The electrons transfer energy to, and thereby support, the load. While "spent" when leaving the load, the electrons are sufficiently energetic to react with the oxygen entering the cathode and the protons exiting the electrolyte, and they close the electrochemical reaction by generating water. The water then mixes with the nitrogen from the air to comprise the fuel cell exhaust.



Source: NFCRC

Source: National Fuel Cell Research Center (NFCRC)

Fuel cells convert chemical energy from fuels like hydrogen into electrical energy, and hence they are clean as don't release any harmful pollutants and reduce the greenhouse gas emissions as compared to the traditional grid. Also a fuel cell module creates power on the premises where it's used which is why the reliability is higher than the grid. Fuel cells continuously generate electricity as long as there is supply of fuel.Hence they are used increasingly to power data centers, retail centers, disaster relief, military operations, and medical facilities etc where the uninterrupted supply of power is essential.



The global fuel cell market is projected to grow at a CAGR of 26.3%, from an estimate of $ 5.7bn in 2025 to ~ $ 18.2bn by 2030.
Usually, Hydrogen is used as a fuel, but other fuels such as hydrocarbons (natural gas and methane) or alcohols (ethanol and methanol) can be used. Different fuel cells use different electrolyte materials, which changes how they work, how hot they get, and what they're useful for.

Fuel cell type depending on the electrolyte material

Fuel Cell Type	Electrolyte Material	Efficiency	Typical Applications	Notes
PEMFC (Proton Exchange Membrane)	Polymer membrane	40-60%	Cars, buses, mobile devices, backup power (small devices)	PEMFCs require hydrogen and oxygen as inputs. The PEMFC can be contaminated by CO, reducing the performance and damaging catalytic materials within the cell. A PEMFC requires cooling and management of the exhaust water to function properly.
AFC (Alkaline Fuel Cell)	liquid potassium hydroxide (KOH)	50-60%	Space programs, submarines	
PAFC (Phosphoric Acid Fuel Cell)	Liquid phosphoric acid	40-50%	Hospitals, hotels, (stationery power)	CO poisoning of the anode electro-catalyst (usually platinum) and poor ionic conduction in the electrolyte become problems.
MCFC (Molten Carbonate Fuel Cell)	Molten carbonate salts (e.g., Li_2CO_2/K_2CO_2)	45-60%	Large-scale power plants, industrial use	MCFCs offer greater fuel flexibility and higher fuel-to-electricity efficiencies
SOFC (Solid Oxide Fuel Cell)	Solid ceramic	60-80%	Utility-scale power, industrial CHP (combined heat & power)	allows more flexibility in the choice of fuels

According to Markets and Markets, SOFC's is the fastest-growing segment in the market at 31% CAGR from $ 3bn in 2025 to $ 11.6bn by 2030 because of high efficiency, durability, they can run on multiple fuels, and can be used for various applications from factories to homes.

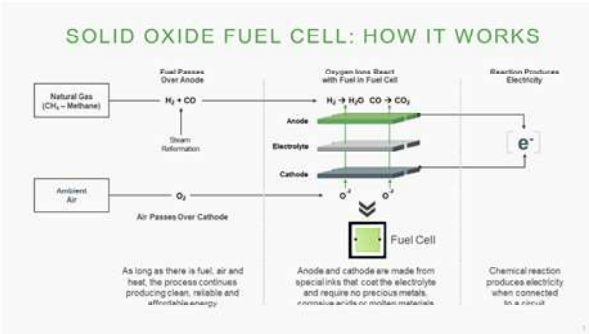
PEMFC and PAFC are great for small/mobile applications but are expensive and lower inefficiency for large-scale use. MCFCs are scalable but are costly and hard to maintain. SOFC uses a hard, non-porous ceramic compound as the electrolyte and operates at very high temperature. SOFCs reform fuels internally, which enables the use of a variety of fuels, and reduces the cost associated with adding a reformer to the system. SOFCs can use natural gas, biogas, and gases made from coal as fuel.

About Bloom Energy
Bloom Energy is a leader in the SOFC industry globally in the stationery fuel cell sector. The electricity is generated through Bloom Energy Servers (Bloom Boxes), which use proprietary inks on the anode and cathode electrodes to enhance performance and durability. Bloom along with its competitors Doosan-HyAxiom, FuelCell Energy, and Panasonic, collectively accounting for over 85% of the market's installed capacity.

It operates a 1 GW manufacturing capacity with over 1.2 GW deployed worldwide, serving data centres, hospitals, manufacturing, and utilities. Bloom plans to expand its capacity to 2 GW by 2026 with a $100mn investment. Its manufacturing facility is in Fremont and Delaware. The company has been awarded up to $75mn in federal tax credits to enhance operational efficiency and expand its stack capacity at this plant.

Rising Data Centre Power Needs

How a solid oxide fuel cell works? Bloom servers operate at very high temperatures, air enters the fuel cell through the cathode side, while fuel enters through the anode side, where steam mixes with fuel to form reformed fuel. It attracts oxygen ions from the cathode side, to produce electricity, steam and carbon di oxide The steam that is produced in the reaction is recycled to reform the fuel which is why Bloom's fuel cells do not require water during normal operation.



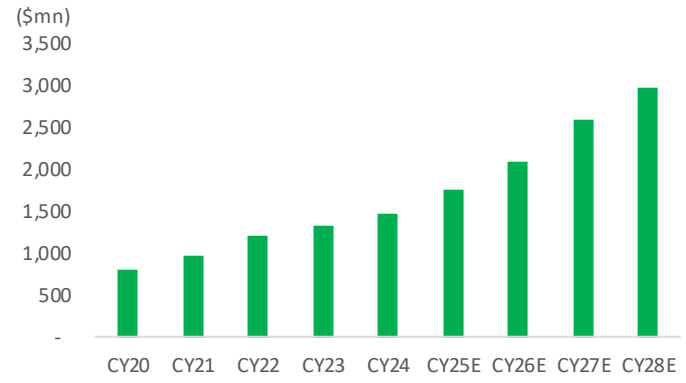
According to the North American Electric Reliability Corporation's 2024 Assessment, peak power demand in North America is projected to rise by 151 GW (17%), over the next 10 years. Growth will be driven by the large energy requirements of artificial intelligence, cloud computing and crypto-mining, re-shoring of semiconductor manufacturing, electric vehicles, and the electrification of household appliances. Median data centre size is expected to expand from ~ 175 MW today to ~ 375 MW by 2035, making it increasingly difficult for larger sites to meet their unique power requirements through the grid alone. According to Bloom's survey, access to power is ranked as one of the top three considerations in site selection for data centres. With power availability becoming a decisive factor for growth, Bloom is positioned favourably to provide distributed, reliable and scalable clean power solutions to address these emerging constraints. Its data centre partner include Equinix and Oracle with over 400 MW of capacity deployed as of June 2025.

Bloom Energy in South Korea

Huge opportunity exists for Bloom in South Korea. The Hydrogen Economy Roadmap announced in 2019, aims to deploy 15GW of utility-scale and 2.1GW of commercial and residential fuel cells by 2040. Bloom has partnered with SK group and has deployed 400MW of capacity in the country since their collaboration in 2018. The updated deal includes a recommitment of 250 MW under the original 2021 contract and an additional 250 MW extending through 2027, with an estimated $ 1.5bn in product revenues and $ 3bn in service revenues anticipated over the next 20 years. Bloom and SK are collaborating to deploy green hydrogen as an energy source using Bloom electrolysers (1.8MW) in late 2025 in Jeju Island, South Korea. Bloom has also entered into 80MW partnership with SK Eternix to power two eco Parks in South Korea.

There are four major fuel cell players in South Korea- POSCO energy, Doosan, S-fuel cell and SK Group. In SOFC cells, Doosan has collaborated with Ceres Power to mass produce SOFC fuel cells with a capacity of 50MW. South Korea's target of 15 GW of fuel cell capacity translates to about 231,000 Bloom Boxes, since each unit is roughly 65 kW. If Bloom captures 30-40% of this market, it could supply 4.5-6 GW, or around 70,000-90,000 boxes. On the capacity side, Bloom currently has 1 GW of annual manufacturing capacity. This is expected to double by 2026, doubling its annual revenue potential from current revenues of $1.5-2bn, supporting the consensus view of an 18% revenue CAGR through 2028.

As per consensus, Bloom is expected to post revenue CAGR of 18% over CY20-28E



MTAR is the largest supplier of Hot boxes to Bloom, the other one being Kaori Heat Treatment Co. Ltd which is based in Taiwan. As of CY24, 43% of its revenue came from Bloom. MTAR is the largest and currently satisfies ~60% of the hot box requirement. According to Frost & Sullivan, Bloom held a 44% market share in 2023. In the same year, MTAR supplied 4,545 hot boxes to Bloom, implying that the total number of hot boxes produced globally was approximately 10,330 in 2023.

What is a hot box? It is the module in which the electrochemical reaction that generates electricity actually takes place. It contains the fuel cell stacks made up of many individual SOFC cells layered together. These stacks are housed in a high-temperature at 600-1,000°C

In FY24, Bloom's technology shift from Yuma (50 kW) to Santa Cruz Block 2 (65 kW) modules caused short-term volatility for MTAR. Bloom supplies designs and directs materials, while MTAR manufactures high-precision SOFC components (power units, hydrogen boxes). FY25 shipments imply MTAR supplied ~12-15% of Bloom's module needs; FY26 guidance suggests share could rise to ~20%.

Fuel cell manufacturing industry

1. Raw Materials: This includes platinum or palladium catalysts for electrodes, along with specialized membranes or electrolytes. These are essential inputs but represent a smaller portion of overall value.
2. Critical Components: Key components such as bipolar plates, electrodes, membranes, pumps, heat exchangers, and sensors are manufactured at this stage. While important, they are often commoditized compared with higher-value assembly.
3. Stack Assembly and System Integration: This layer involves assembling the fuel cell stacks and integrating them into complete systems, including power electronics, fuel handling systems, and control units. It combines technical know-how, proprietary IP, and turnkey solutions, enabling OEMs to capture the largest share of value in the fuel cell ecosystem.
4. Distribution and Aftermarket: This final layer covers delivery, installation, and ongoing maintenance or replacement services. While important for customer satisfaction and recurring revenue, it generally contributes less to total value capture than the system integration layer.

Fuel cell vs. traditional power generation vs other modern renewable sources

Fuel cells differ fundamentally from both traditional power generation and other modern renewables. Unlike coal or gas turbines, which burn fuel and lose efficiency through multiple conversion steps, fuel cells convert chemical energy directly into electricity, making them cleaner and more efficient. Compared to solar and wind, fuel cells are dispatchable-they can provide continuous, reliable power regardless of weather or time of day.

While solar and wind are the cheapest options for bulk, zero-carbon generation, and fuel cells are most suitable where reliability, energy density, or off-grid independence is critical. But they are the costliest among them.

Feature	Fuel Cells	Traditional Power (Coal/Gas)	Modern Renewables (Solar/Wind)
Efficiency	50–60% electrical (up to 80–85% with CHP)	~30–40% (coal), ~40–55% (CCGT gas)	18–22% (solar PV modules), ~35–45% (wind turbines)
Emissions	Zero if green hydrogen/biogas; low if natural gas	High CO_2, NOx, SOx	Zero during operation
Reliability	24/7 dispatchable if fuel available	24/7 dispatchable	Weather- and time-dependent, intermittent
Fuel Source	Hydrogen, natural gas, biogas, methanol	Coal, oil, natural gas	Sunlight, wind
Use Cases	Critical loads, transport, off-grid bases, industrial CHP	Bulk baseload generation	Bulk grid decarbonization, distributed power
Scalability	Modular (kW → MW)	Large central plants	Scalable from rooftop kW → utility-scale GW
CapEx (installed cost per kW)	$3,000–6,000/kW (SOFC/MCFC, industrial scale); $7,000–10,000/kW (small units)	$1,000–2,500/kW	$900–1,500/kW (utility-scale solar/wind)
LCOE (cost per kWh)	$0.13–0.20/kWh today (lower if using natural gas; higher if green hydrogen)	$0.05–0.07/kWh (coal/gas turbines)	$0.03–0.05/kWh (solar/wind utility-scale)
Cost Trend	Declining with hydrogen & electrolyser adoption; subsidies critical	Stable, mature	Falling further with scale, already cheapest globally

The adoption of fuel cells relies heavily on government incentives and subsidies. Bloom benefits from theTax Credits under the Inflation Reduction Act, which can subsidize up to 30% of project costs. Bloom was awarded $75 mn in federal tax credits recently to expand its Delaware plant.

Cost remains a key constraint for the large-scale adoption of fuel cells. Over the past five years, overall fuel cell system costs have declined by about 20%. Scaling production from 10,000 to 50,000 units could lower unit costs by 7-10%. A 20-fold increase in production, unit costs could fall by 40-45%.

Electrolyzer

Hydrogen can be generated from sources such as natural gas/ biogas (through reformation) or by electrolysing water (each molecule of water contains two hydrogen atoms).Electrolysers are devices that use electricity to split water into hydrogen and oxygen via electrolysis. There are different type of electrolysers depending on the electrolyte material.

Type	Electrolyte	Operating Temp	Advantages	Limitations	Typical Applications
PEM (Proton Exchange Membrane)	Solid polymer	Low (~50–80°C)	High purity H_2, flexible operation, rapid response	Expensive (platinum catalysts), limited scale	Transport, industrial processes, variable renewable input
Alkaline	Liquid KOH or NaOH	Low (~60–80°C)	Mature, cheaper, long lifetime, large-scale deployment	Slow response, larger footprint	Industrial hydrogen, ammonia production
SOEC (Solid Oxide Electrolyser)	Ceramic oxide	High (~700–800°C)	Very high efficiency, can use waste heat	Expensive, durability challenges	Large-scale industrial hydrogen, power-to-X applications

Green hydrogen is produced through water electrolysis using renewable electricity, where the electricity acts on an electrolyte to split water into hydrogen and oxygen. Electrolysers account for a 33-57% of production costs, with current electrolyser costs ranging from $ 500-700 per kW, contributing to green hydrogen prices of around $ 6 per kg. Electrolyser costs are expected to reduce to $ 200 per kW, which could bring green hydrogen costs down to $ 1 per kg, making it more competitive with conventional hydrogen and fossil fuels.

Green hydrogen can replace other hydrogen types (pink, blue, or grey) in industries such as steel, chemicals, and predominantly in power generation through fuel cells. Bloom has installed a 4 MW electrolyser, producing over 2.4 metric tons of hydrogen per day. MTAR delivered 138 and 98 units of electrolysers to BE in FY23 and FY24 respectively. Management expects revenues from electrolyser units to mirror the current run rate of hot box supplies at 25%CAGR.

Industry reports project the market expanding from $ 676mn in CY22 to ~$ 7.3bn by CY27, implying a CAGR of 61%. India has approved the National Green Hydrogen Mission, allocating $ 2bn in incentives and targeting a production capacity of 5 MMT by CY30. MTAR could benefit as it has already proven capabilities as India ramps up its hydrogen ambitions.

Aerospace and defence

ISRO has conducted 131 spacecraft missions and 101 launch missions. Since the 1980s, MTAR has been supplying PSLV propulsion engines, turbo pumps, base shrouds, and cryogenic subsystems for GSLV Mk-II & Mk-III. It has contributed assemblies for Chandrayaan and propulsion parts for the Gaganyaan human spaceflight program.

Recent success includes the launch of Chandrayaan-3, which made India the first country to achieve a soft landing on the Moon's South Polar region in August 2023, and launch of Aditya L1 which is India's first solar observatory, which provides valuable data on solar activity and space weather.

India aims to nearly triple its satellites in orbit from the current 55 to around 150 for earth observation, communication, and navigation. India's space economy, valued at USD 8.4 billion, currently accounts for 2% of the global space market and is projected to reach USD 44 billion by 2033. The global space economy itself is expected to grow to USD 1.8 trillion by 2035.

ISRO has also taken major strides in deep space collaboration:

- The NASA-ISRO Synthetic Aperture Radar (NISAR) mission-launched in July 2025-is the world's first dual-frequency radar imaging satellite for Earth observation.
- SpaDEx mission (Space Docking Experiment), successfully launched in December 2024, which made India only the fourth nation in the world to demonstrate autonomous in-orbit satellite docking. This is crucial for human spaceflight missions.
- Gaganyaan mission Which is expected to launch in December 2025 featuring humanoid robot Vyommitra
- ISRO has announced future interplanetary missions, including Mangalyaan-2 (Mars Orbiter Mission-2), Shukrayaan (Venus Orbiter), Chandrayaan-4 and Chandrayaan-5, and a Lunar Polar Exploration Mission in collaboration with JAXA.

MTAR signed a memorandum of understanding with the Indian National Space Promotion and Authorization Center (IN-SPACe) in December 2022 to develop a two-stage, all-liquid small satellite launch vehicle (SSLV) with a 500 kg payload capacity.

Space hardware undergoes multi-year qualification and testing cycles, where a single defect can jeopardize a mission. MTAR's zero-failure track record makes it a long-term partner of choice for ISRO.

MTAR has long-standing relationships with ISRO and is expanding supplies to defence primes like Rafael Advanced Defense Systems and Elbit Systems. With increasing space launch activity and defence localization, order inflows are expected to grow at 25-30% annually.

Long-Standing Customer Relationships

MTAR is a trusted partner to some of India's most strategic programs. These partnerships are built over decades (with ISRO 30+ years, DRDO 40+years, NPCIL 16+ years); creating mutual dependence between MTAR and its clients. Together, Bloom, NPCIL, and ISRO contribute the majority of MTAR's revenues (>80% as of FY20). Because the products that MTAR manufactures are critical, their qualification cycles are quite long, which forms an entry barrier to new players.

ISRO

ISRO has invested 50% of its FY25 budget of ~Rs 130bn allocated to space transportation (launch vehicles, Gaganyaan, PSLV/GSLV upgrades). Flagship programs like Gaganyaan (Rs 900bn+), Chandrayaan-4, Shukrayaan (Venus mission), and LVM-3 launches for One Web underpin a robust order pipeline.

ISRO has launched 300 foreign satellites from 34 countries. ISRO had also signed a MoU with One Web to launch satellites using PSLV. With the surge in global commercial satellite launches led by One Web (648 launched), Star link (target of 12,000 launches), and Amazon Kuiper (3236 satellites by 2029), positions ISRO favorably.

MTAR supplies major components for cryogenic engines including turbo pumps, booster pumps, gas generators, and injector heads, to ISRO for the GSLV Mk III and LVM-III vehicles. PSLV has flown 60+ times with MTAR hardware onboard. Cryogenics remains one of the toughest frontiers in propulsion engineering. These engines operate at extreme conditions: liquid hydrogen must be pumped at -253°C through turbomachinery spinning at ~40,000 rpm, then combusted at >3,000°C in chambers. Designing assemblies that neither crack nor leak is exceptionally complex as even minor asymmetry can trigger chugging or catastrophic failure. Globally, only the US, Russia, France, China, Japan, and India have mastered cryogenic propulsion. Stringent export controls under the Missile Technology Control Regime (MTCR) restrict technology transfer, making indigenous capability strategically vital.

NPCIL

MTAR has collaborated with NPCIL for over 16 years. MTAR has supplied to all of India's 23 operational reactors. Nuclear subsystem vendors must obtain approval from both the Atomic Energy Regulatory Board (AERB) and NPCIL, a process that typically takes 5 to 7 years, creating a significant barrier to entry. MTAR is the sole qualified supplier for as Fuel Transfer Systems (FTS) and Bridge & Carriage Assemblies (FMBC)

India currently operates 23 nuclear reactors with an installed capacity of around 7 GW, but the government has announced plans to expand nuclear capacity to 22.5 GW by 2031, implying a substantial pipeline of new reactor builds, refurbishments, and component requirements. MTAR's revenue is thus structurally linked to India's energy-security roadmap, and the long qualification cycles for nuclear components provide a durable competitive advantage, limiting the entry of new players.

DRDO

MTAR has been associated with DRDO since the 1970s, supplying mission-critical components across missile programs, strategic defence systems, and export defence supply chains.

- **Missile Programs (DRDO-ISRO collaboration):** Supplies liquid propulsion engines, actuators, rocket motors, and base shrouds used in platforms like Agni, Akash, and LCA Tejas.
- **Strategic Defence Systems:** Works on assemblies for solid-fuel based systems and components for nuclear defence applications, many developed under DRDO oversight.
- **Export Defence Supply Chains:** Supplies to Rafael, Elbit Systems, and Collins Aerospace, embedding itself within global programmes.

Entry barriers are high, qualification cycles run 3-5 years, requiring AS9100D, NADCAP, and platform-specific certifications. However, once integrated, suppliers rarely change, creating sticky, recurring revenues over long program lifecycles. With India's FY25 defence budget at Rs 6.2tn (Rs1.7tn capital outlay, Rs 238bn DRDO R&D) and >70% domestic procurement mandated, MTAR is well-positioned to capture increased wallet share as indigenous missile, aircraft, and space platforms scale.

We have stressed the importance of Bloom energy for MTAR earlier.

In-House R&D as a Strategic Growth Engine

MTAR operates one of the most sophisticated in-house R&D setups among Indian precision engineering companies, with dedicated design engineers, metallurgists, and process technologists working alongside its production teams. MTAR typically reinvests 2-3% of revenues into R&D, higher than most domestic precision-engineering peers. This has translated into products like ball screws, roller screws, and reactor subsystems. Over time, the company has built a portfolio of patent-pending designs and proprietary machining processes that act as competitive moats.

The R&D function focuses on three themes:

1. **Import Substitution in Critical Systems**
   - Roller Screw Actuators - being indigenized for use in space launch vehicles, nuclear control systems, and defense platforms.
   - High-Pressure Hydraulic Systems & Valves - to replace imported subcomponents in reactors and aerospace engines.
   - Specialty Alloys & Metallurgy - MTAR has developed proprietary processes for handling exotic materials (Inconel, titanium, and zirconium) used in reactors and aerospace structures.
2. **Co-Development with Strategic Customers**
   - Close collaboration with ISRO, DRDO, and NPCIL enables MTAR to participate in early-stage design discussions, often leading to sole-source supplier status once systems are proven. For example, MTAR co-engineered grid fins and propulsion subsystems for the Gaganyaan program, leveraging its machining expertise in complex geometries and high-strength alloys.
   - With Bloom Energy, the R&D team has localized Bellows for fuel-cell stacks, instead of importing
3. **Future-Facing Technologies**
   - Hydrogen Ecosystem - prototyping subsystems for electrolyzers and hydrogen boxes to improve efficiency, durability, and manufacturability.
   - Small Modular Reactors (SMRs) - working on high-precision subsystems (control rod drives, pressure vessels, coolant pumps) to align with India's SMR roadmap.
   - Advanced Motion Control Devices - MTAR's actuator program positions it for long-term demand in robotics, satellite payload deployment, and guided missile systems.

Other Defence & Aerospace Customer- beyond ISRO and Bloom, MTAR supports DRDO, HAL, Rafael, and Elbit Systems with propulsion assemblies, actuation systems, and other mission-critical subsystems. It has also begun onboarding Collins Aerospace, Thales, GKN, GE Hydro, and Weatherford - signaling a deliberate diversification drive.

Peers

MTAR does not have a perfect domestic comparable given its diversified presence across clean energy, nuclear, defence, and space. Among Indian players, Paras Defence, Data Patterns, and BEL are the closest, but they are primarily defence-focused and operate at higher margins (PAT margins of 17-31% vs MTAR's ~7%). On the global side, companies like Curtiss-Wright and Howmet Aerospace are significantly larger in scale with superior returns and profitability, benefiting from operating leverage and mature product portfolios.

CY24 (USD mn)	MTAR	Curtiss-Wright Corporation (USD mn)	Howmet Aerospace
Revenue	72.7	3426	7430
EBITDA	12	761	1914
EBITDAM	17%	22.2%	25.8%
PAT	5.04	490	1107
PATM	6.93%	14.30%	14.90%
EPS	0.2	12.93	2.69
ROE	7.50%	17.50%	26.89%

Particulars (Rs mn)	Data Patterns	BEL	Paras Defence
Revenue	7,084	2,37,687	3,647
EBITDA	2,733	68,090	973
EBITDAM	38.6%	28.6%	26.7%
PAT	2,218	53,214	615
PATM	31%	22%	17%
EPS	39.6	7.28	16.02
ROE	15.70%	29.30%	11.70%
P/E	66.8x	49.35x	85.71x

Kaori Heat Treatment Ltd is a company based in Taiwan which supplies fuel cell hotboxes to Bloom, apart from MTAR. The company is engaged in the business of heat exchanger solutions and supplies products internationally, particularly US which accounts for ~47% of its revenues. As per CY24 annual report, Bloom accounts for 43% of its sales.

Particulars ($mn) CY24	MTAR	Kaori Heat Treatment Ltd
Revenue	72.7	122
EBITDA	12	24.48
EBITDAM	16.5%	20.1%
PAT	5.04	18.02
PATM	6.9%	14.8%
EPS	0.2	0.19
ROE	7.5%	19.3%
LTM P/E	110x	76x

About the Company

MTAR Technologies is a Hyderabad-based precision engineering company engaged in manufacturing critical components and assemblies for clean energy, nuclear, space, and defence sectors. Established in 1970, the company has built strong long-term partnerships with marquee clients such as ISRO, DRDO, NPCIL, HAL, and Bloom Energy (US).

Its core strength lies in ultra-precision machining, specialized fabrication, and complex assembly capabilities, enabling it to serve projects of national and strategic importance. Over the years, MTAR has emerged as a key supplier for India's space and nuclear programs, while also playing an increasingly important role in the global clean energy transition through supply of critical parts for fuel cells and hydrogen solutions.

MTAR has 9 advanced manufacturing units offering complete in-house capabilities to support the entire product life cycle from design to development. Its operations include design, precision machining, fabrication, assembly, and testing - all housed within its Hyderabad campus.

Manufacturing facilities	Products manufactured	Sectors
Unit 1	Fuelling, machine head, top hatch beam, bridge and column and defence equipment	Clean Energy - Civil Nuclear, Power, Defence
Unit 2	Liquid propulsion engines such as Vikas engine, Cryogenic, engines, Semi Cryo engine, electro pneumatic modules for PSLV and GSLV satellite valves	Aerospace & Defence
Unit 3	High Volume nuclear assembliesincluding coolant channelassemblies, products such asBall Screws, Water LubricatedBearings, Roller Screws andother nuclear site orders	Clean Energy - Civil Nuclear Power, Defence
EOU	SOFC & Hydrogen units,electrolysers, ASP assemblies forClean Energy, high precision equipment to Aerospace MNCs	Clean Energy - Fuel Cells & MNC Aerospace
Unit 4	This is a supporting unit and undertakes rough machining	-
Unit 5	This is a supporting unit and undertakes rough machining	-
Unit 6 - Adibatla	Sheet metal assemblies and enclosures for Clean Energy - Fuel cells; critical structures for Clean Energy - Hydel & Waste toEnergy sectorsElectronics ManufacturingSystems - Cable HarnessingAssemblies	Clean Energy - Fuel Cells, Hydel and others
Unit 7 - Pashamylaram	Assemblies and Structures for Aerospace	Aerospace
Unit 8	Surface Treatment for Aerospace & Defence	Aerospace

Business Segments

Major products produced by the company include- Fuel machining head, Bridge and column, Grid Plate, Drive Mechanisms, Ball screws and water lubricated bearings, Cryogenic engines, etc

Sectoral Revenue Breakup %

Revenue Mix (%)	FY20	FY21	FY22	FY23	FY24	FY25
Clean Energy- Civil Nuclear Power	28.6%	25.5%	12.1%	7.6%	10.7%	2.7%
Clean Energy- Fuel Cell, Hydel & Others	151.1%	56.5%	53.4%	77.0%	60.4%	61.7%
Aerospace & Defence	39.0%	27.4%	14.9%	11.2%	10.4%	13.8%
Products & Others	16.0%	4.1%	4.8%	4.1%	18.5%	21.8%

Clean Energy - Civil Nuclear Power

The company produces key products such as Fuel Machine Head, FM Bridge & Column, Fuel Transfer System, Coolant Channel Assemblies, Ball Screws, Water Lubricated Bearings, and Ram head Assemblies, Drive Mechanisms. These products are used in Nuclear Reactors and key customers in this segment are NPCIL, BARC, DAE, and IGCAR. MTAR supplies fuel handling systems which form the core of the reactors. It currently provides 15 different products and it is now qualified to manufacture new products such as End Shields, Calandrias and Self-elevating platforms.

Particulars	capacity	cost (Rs bn)	Equipment cost (Rs bn)
Current infra			
23 nuclear reactors	7.4 GW	120	28
Under construction			
8 nuclear reactors	6 GW	720	170
Approval received			
14 PHWRs	9.8 GW		
in-principal approval			
6 European Pressurised reactors (collaboration with France)	9.9GW	1,800	435
Total	**33.1**	**2,640**	**633**

MTAR supplies fuel handling systems which form the core of the reactors. It currently provides 15 different products and it is now qualified to manufacture new products such as End Shields, Calandrias and Self-elevating platforms. Order inflow of Rs 1bn is expected from Kaiga unit 5 and 6 projects, and refurbishment of 5 reactors. Another Rs 15-20bn for 10 fleet reactors maybe expected for next 6-7 years. Annual Maintenance is generally between Rs 100-200 mn.

Fuel Machine Head- Loading and unloading of fuel bundles for nuclear reactors.


Fuelling Machine Head

Grid Plate- Removes heat generated from the reactor. It is 80m in diameter and weighs 80 tonnes. It was designed by IGCAR and fabricated by MTAR which was an important milestone. Earlier India used to import this from France.


Grid Plate

Water lubricated bearings- used in FM head


Water Lubricated Bearings

Bridge and column-Moves the FM Head to precisely locate and handle fuel bundles for refueling and removing spent fuel from the reactor.


FM Bridge & Column

Coolant Channel Assemblies- collection of components, including Sealing Plugs, Shielding Plugs, Liner Tubes, and End Fittings. Essential for loading and unloading fuel bundles within the nuclear reactor core


Coolant Channel Assemblies

Control Plugs- houses mechanisms that govern the reactor's safety systems


Control Plug

Calandria Vault Top Hatch Cover Beam- structural roof of the calandria vault, provide cover against gamma radiation


Calandria Vault Top Hatch Cover Beam

Clean Energy - Fuel cell, Hydel and others

The clean energy vertical is MTAR's largest revenue contributor (~67% of topline), driven primarily by its 14-year partnership with Bloom Energy. Bloom energy is a leader in manufacturing Solid Oxide Fuel Cells (SOFC) and Solid Oxide Electrolysers (SOEC). MTAR supplies power units or hot boxes, sheet metal assemblies, and enclosures, and is the sole supplier for Bloom's electrolyser units. Other major clients are Voith Hydro, GE Energy, Andtriz, Hitachi, Fluence Energy in the sector.

Aerospace and Defence -

It manufactures components for actuator assembly for LCA, Aerostructures and gears for the defence industry. The Company participates in various launch vehicle and missile programs through supply of liquid propulsion engines, cryogenic upper stage systems, electro-pneumatic modules, airframe, canisters, actuators, wing kit assemblies and gearboxes, among others. Major clients include ISRO, Vikram Sarabhai Space Centre, SAE, LPSC, DRDO, HAL BDL etc

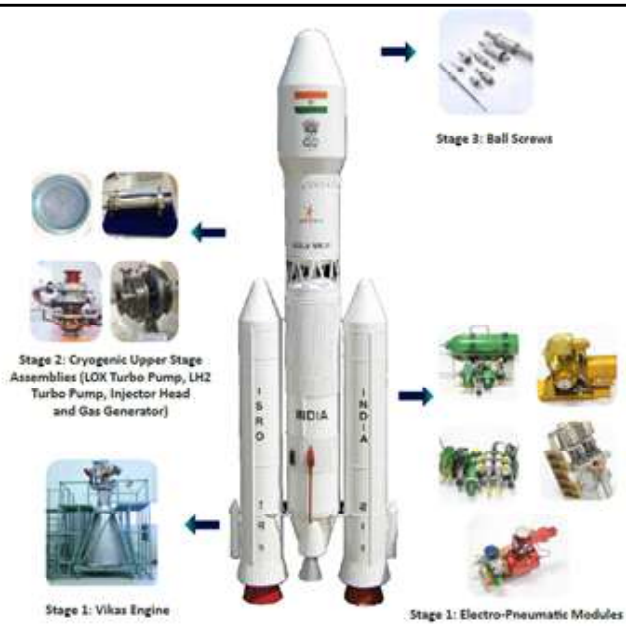
India's space economy, valued at USD 8.4 bn, is projected to grow to USD 44 bn by 2033, supported by increased satellite launches, commercial space activity, and deeper private sector engagement. The Company aims to increase its presence in this sector by enhancing its wallet shares with ISRO through products such as thrust chambers, motor casings, and light alloy structures. The Government of India has set targets to nearly triple annual defence production to Rs. 3,000bn by FY29 and double defence exports to Rs. 500bn. The Company has delivered 5-ton and 10-ton actuators for the LCA Tejas program. It has also recently commenced development of combustor assemblies for the Scramjet Engine.

Dalia Actuators- used for the fighter's flight control surfaces. Replaced actuators sourced from US Company Moog Inc making LCA more self-reliant and significantly cheaper.
Magnesium gear box- lightweight yet high-strength material


Helicopter Housing


Magnesium Gear Box

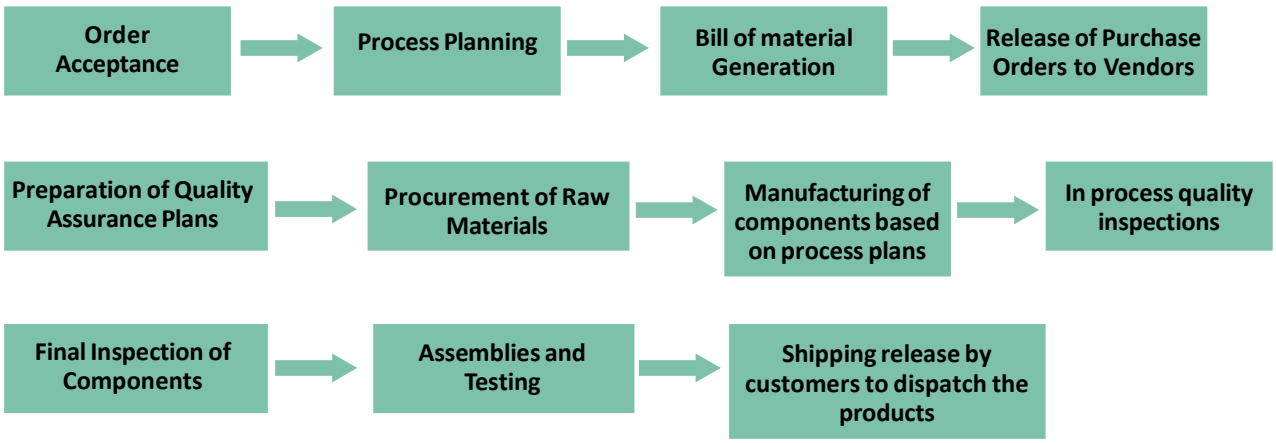

Dalia Actuators- LCA Tejas



Product & Others

It manufactures products that are import substitutes such as Valves for naval applications, Ball screws and roller screws for various applications.

Manufacturing Process



Typical Product Manufacturing cycle

Key Management Personnel

Mr. Parvat Srinivas Reddy (Managing Director & Promoter) - Mr. Parvat Srinivas Reddy has more than three decades of industry experience in Manufacturing and Construction. He has been associated with MTAR for the past 13 years. He holds a bachelor's degree in industrial production engineering, from the University of Mysore and a Master's degree in science, specialising in industrial engineering from College of Engineering, Louisiana Tech University. Mr. Reddy is instrumental in setting up and growing exports vertical in the Company.

Mr A. Praveen Kumar Reddy (Vice President and Executive Director)- He holds a bachelor's degree in electronics and communication engineering from the Faculty of Engineering, Andhra University. Prior to becoming a Director of our Company, he was associated with the Company for over 23 years, and has previously served as vice president of projects. Currently, he heads business development function in the Company.

Mr M. Anshuman Reddy (Executive Director) - Brings decades of operational and technical expertise in manufacturing processes and project execution. He has completed Master's Degree in logistics and supply chain management from USC Marshall School of Business in 2015. He has been with the company for 8 years. He is responsible for heading exports and supply chain divisions in MTAR; instrumental in growing exports vertical in the Company. He has nearly ten years of experience in manufacturing and worked in global organisations including AeroVironment.

Mr. Gunneswara Rao Pusarla (Chief Financial Officer) - Heads finance and strategy functions, with experience in managing investor relations, cost control, and compliance.

Mr. Arun Ojha (Chief Commercial officer) - He will be responsible for Business Development. He has got over 25 years of vast experience in Supply Chain, Business Development and Manufacturing and worked for prestigious firms such as including Schlumberger, Alstom, L&T and Andritz. Under the leadership of Arun we are expecting to enhance our customer base further and we have initiated discussions with several global customers.

Risks & Challenges

1. **Customer Concentration**
   - MTAR derives ~70% of its revenues from the Clean Energy segment, with Bloom Energy as the anchor client.
   - While the partnership is deep, over-reliance on a single customer exposes MTAR to demand fluctuations, technology risks, or strategic pivots at Bloom.
2. **Regulatory & Policy Risks**
   - Nuclear, space, and defence businesses are highly regulated and tied to government budgets. Any delay in project clearances, funding allocations, or geopolitical tensions can directly impact order inflows.
   - Export-linked contracts are also exposed to global trade and policy shifts, including US clean energy incentives or India's export clearance processes.

3. **Execution & Scale-Up Risks**
   - With rising order volumes, MTAR faces the challenge of scaling manufacturing without diluting precision standards.
   - Complex machining and long qualification cycles mean capacity expansion or new product development can be time- and capital-intensive.
4. **Margin Volatility**
   - Despite a structurally high EBITDA profile, near-term profitability remains vulnerable to commodity price fluctuations (steel), forex volatility, and supply-chain constraints.
   - A sharp increase in exports also introduces greater sensitivity to INR/USD movements.
5. **Technology & Competitive Risks**
   - Precision engineering is a niche, but global OEMs and domestic players are gradually building capabilities.
   - MTAR must continuously invest in advanced machining, additive manufacturing, and hydrogen/clean-tech solutions to maintain its technological edge.

Key Takeaways from Management Call (2QFY26)

Overall Outlook

- Strong 2HFY26 expected, with revenues nearly doubling vs. 1HFY26.
- FY26 revenue growth guidance raised to 30-35% YoY (vs. 25% earlier), driven by incremental order inflows scheduled for execution in FY26.
- EBITDA margin guidance reaffirmed at ~21%, with H2 margins to benefit from operating leverage and higher utilization.
- Order book expected at Rs. 2,800 cr by FY26-end (vs. Rs.1,296 cr in 1HFY26). As of Nov 5, it stood at Rs. 1,703 cr, with Rs. 480 cr of fresh inflows post 2QFY26.

Segmental Highlights

1. Clean Energy (Bloom Energy)

- Expected Rs340 cr revenue in 2HFY26; robust demand led by AI data center power needs and South Korea/Europe opportunities.
- Bloom expanding SOFC capacity to 2 GW by 2026; MTAR to benefit from rising hotbox demand.
- **Capacity expansion:**
  - 8,000 - 12,000 units by Mar'26 (Rs35-40 cr capex, existing infra).
  - 12,000 - 16,000 units by Sep'26, and to 20,000 by Mar'27 (total ~Rs100 cr capex).
- Hotbox upgrade from 65kW to 70kW; high utilization expected as Bloom's orders exceed supply.
- BOM cost inflation impact minimal; tariffs not expected to materially affect margins due to low import content.

2. Nuclear

- Rs. 500 cr Kaiga 5 & 6 orders expected by Nov'25; Rs. 800 cr total including reactor refurbishment in FY26.
- Additional orders expected from NPCIL/NTPC for Mahibatswara (3-4 months) and Chutka (6 months).
- Execution timeline: ~3.5 years; capex bottlenecks of Rs.20-30 cr to be addressed.

3. Aerospace & Defence

- Signed Expression of Interest (EOI) with Adani Aerospace for AMCA programme (lead: Adani; MTAR as non-lead partner, equal stake).
- Post-EOI: bidding -- award (~May'26) -- JV formation (~Aug'26) -- prototype build (first by Mar'28).
- Potential to scale A&D revenues from Rs.100 cr (FY26E) to Rs.500 cr over 4-5 years.
- Ongoing execution: Rs.100 cr A&D orders in FY26.
- Semicryogenic engine: issue resolved; exports to resume next year.
- SSLV programme: paused due to high investment needs.

4. Oil & Gas (Weatherford)

- Capex of Rs.100 cr for new facility; operational by Jun'26.
- 1st articles in 2HFY27, volume ramp-up from FY27.

5. Fluence Energy

- Working on 2nd prototype; long-term supply agreement expected by 4QFY26.
- Batch production from 2HFY27, potential Rs.200-400 cr annual revenue for next 2-3 years.

6. Products & Others

- Targeting Rs.100+ cr revenue in FY26; ASP sub-division continues to support Bloom.

Financials & Capital Structure

- **Working capital:** high due to WIP buildup for upcoming quarters; reduced by Rs. 21 cr QoQ in 2QFY26.
- **Target WC days:** 220 by FY26; long-term 200 days.
- Measures underway - staggered deliveries, improved payables management.
- **Debt:** plans to raise Rs. 150-200 cr for capex in fuel cells (Rs. 40 cr) and oil & gas (Rs.90 cr).
- Net debt ceiling capped at Rs.250 cr; long-term debt at Rs.100 cr (annual repayment Rs.46 cr).
- **Operating cash flow** improved sharply to Rs. 39.8 cr in 2QFY26 (vs. -Rs. 1 cr in 1QFY26).
- Management confident of surpassing FY25's full-year CFO.

Valuation

We expect robust revenue growth and margin expansion over the coming years, supported by a strong order book of Rs. 12,967 mn as of September 2025 and healthy order execution. We initiate coverage on MTAR Technologies with a HOLD rating, assigning a 55x PE multiple on Sep-2027E EPS, which implies a target price of Rs. 2,711, offering a 12% potential upside.

Financials

Income Statement

Y/E Mar (RS. mn)	FY25	FY26E	FY27E	FY28E
Revenue from operations	6,760	8,823	12,476	16,123
Cost of Materials Consumed	3,420	4,064	5,677	7,255
Gross Profit	3,340	4,760	6,800	8,868
Gross Margin	49.4%	53.9%	54.5%	55.0%
Employee cost	1,238	1,730	2,246	2,822
Other Expenses	895	1,188	1,622	2,096
EBITDA	1,208	1,841	2,932	3,950
EBITDA Margin	17.9%	20.9%	23.5%	24.5%
Depreciation	322	340	440	480
EBIT	885	1,501	2,492	3,470
EBIT Margin	13.1%	17.0%	20.0%	21.5%
Other Income	52	76	100	120
Interest cost	222	245	266	270
Profit Before Tax	715	1,332	2,325	3,320
Tax	187	336	586	837
Profit after Tax	528	996	1,739	2,483
PATM	7.8%	11.3%	13.9%	15.4%
EPS (Rs per share)	17.1	32.4	56.6	80.7

Balance Sheet

Y/E Mar (RS. mn)	FY25	FY26E	FY27E	FY28E
Share capital	308	308	308	308
Reserves and surplus	6,982	7,978	9,717	12,200
Trade Payables	1,061	1,450	1,948	2,518
Borrowings	1,773	2,248	2,538	2,078
Other Liabilities	1,180	1,180	1,180	1,180
Total Liabilities	11,303	13,163	15,691	18,284
Net Fixed Assets	4,893	5,488	5,548	5,568
Inventories	3,461	4,109	5,127	7,068
Investments	0	0	0	0
Trade Receivables	2,098	2,659	3,418	4,417
Cash and bank balances	169	225	915	549
Other assets	682	682	682	682
Total Assets	11,303	13,163	15,691	18,284

Key Ratios

Y/E	FY25	FY26E	FY27E	FY28E
Liquidity Ratios				
Current Ratio	2.13	2.05	2.25	2.76
Quick Ratio	0.24	0.25	0.31	0.30
Cash Ratio	0.01	0.02	0.06	0.03
Asset Utilization Ratios				
Asset Turnover	0.6	0.7	0.8	0.9
Fixed Asset turnover	1.6	1.8	2.5	3.2
Trade payables to Assets	0.1	0.1	0.1	0.1
Fixed asset ratio	0.4	0.4	0.3	0.3
Return Ratios				
ROA	5%	8%	11%	14%
ROE	6%	13%	19%	22%
ROCE	9%	13%	17%	20%
Ex cash ROCE	8%	12%	17%	20%
Margin				
EBITDA Margin	18%	21%	24%	25%
PAT Margin	8%	11%	14%	15%
Effective Tax Rate	26%	25%	25%	25%
Leverage & Capital Structure				
Debt to Equity	0.24	0.27	0.25	0.17
Debt to Assets	0.16	0.17	0.16	0.11
Net Debt	1,603	2,023	1,623	1,529
Interest to Avg debt	0.13	0.11	0.11	0.13
Working Capital(in days)	243	220	193	203
Inventories	187	170	150	160
Debtors (in days)	113	110	100	100
Creditors (in days)	57	60	57	57
CFO/EBITDA	83.8%	41.3%	39.8%	21.9%
dep/NFA	7%	6%	8%	9%

Cash Flow

Y/E Mar (RS. mn)	FY25	FY26E	FY27E	FY28E
PBT	716	1,332	2,325	3,320
Depreciation and amortisation expense	322	340	440	480
Finance costs	222	245	266	270
Changes in working capital	-89	-821	-1,279	-2,370
Taxes	-134	-336	-586	-837
Cash flow from operations (A)	1,147	1,096	1,753	1,700
Purchase of property, plant and equipment	-1,003	-1,000	-500	-500
Purchase of investments	0	-	-	-
Net cash (used in)/ generated from investing activities (B)	-1,027	-1,000	-500	-500
Borrowings	-137	951	580	-920
Finance costs paid	-222	-245	-266	-270
Net cash flow from/(used in) financing activities (c)	-358	706	314	-1,190
Net increase / (decrease) in cash and cash equivalents (A+B+C)	-239	802	1,566	10
Cash and cash equivalents at the beginning of the year	392	19	486	1,466
Effect of exchange differences on restatement of foreign currency on Cash and cash equivalents	-	-	-	-
Cash from business combination	4	5	6	7
Cash and cash equivalents at the end of the year	19	486	1,466	639
Free cash flow	2,150	2,096	2,253	2,200

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