

CMP: ₹ 399

Target: ₹ 510 (+27%)

Target Period: 12 months

BUY

September 15, 2023

Well poised for strong growth ahead...

About the stock: Astra Microwave Products (AMPL), incorporated in 1991, is engaged in design, development and manufacture of sub-systems for Radio Frequency and microwave systems, primarily used in defence, space & meteorology

- Product range includes radars, missile electronics, electronic warfare, satellites, MMIC (Monolithic Microwave Integrated Circuit) and communication systems. 56% of revenue is from defence, ~40% from exports (including deemed exports) and balance ~4% from space & others. Order backlog stands at ₹ 1580 crore as of June 2023
- Revenue has grown by 20.4% CAGR during FY20-23 while EBITDA and PAT have grown by 21.4% CAGR and 16.6% CAGR respectively over the same period. FY23 revenue was up 8.7% YoY to ₹ 815.5 crore with EBITDA margin improved sharply to 18.1% in FY23 from 11.9% in FY22. FY23 PAT stood at ₹ 69.8 crore, increased by 84.4% YoY

Key Investment Thesis:

- Domain expertise in microwave & radio frequency systems and applications; Strong R&D and manufacturing capabilities:** With strong domain expertise in microwave and radio frequency applications, AMPL has moved up the value chain from manufacturing sub-systems to development and manufacturing a wide range of high-end, critical microwave and radio frequency application-based equipments. Pursuant to advanced manufacturing as well as research and development facilities, company has strong in-house capabilities to execute orders
- Healthy order-book position with buoyant prospects & pipeline presents strong growth visibility:** Company's order book position stands healthy at ₹ 1580 crore as of June 2023 end (1.9x FY23 revenue). With govt's focus on allocating significant capital outlay in defence & space sectors, reducing defence imports and increasing domestic procurements with indigenising usage of raw materials, components, sub-systems, the future orders inflows opportunity for AMPL is huge in both domestic and export markets. Moreover, overall execution would improve as the risk of supply chain issues recedes with increase in domestic procurement of raw materials & sub-components

Rating and Target Price

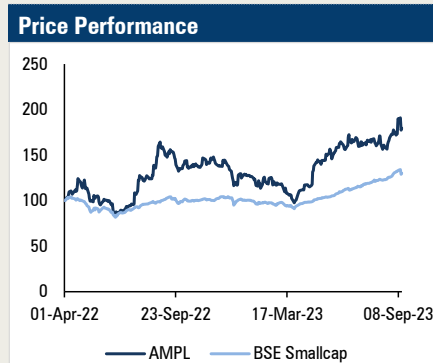
- We believe AMPL is well placed to witness healthy growth led by strong sector tailwinds. Govt's focus on indigenisation, increasing usage of electronics in defence & space, strong order backlog, healthy orders pipeline and execution of high-margin domestic orders would drive earnings in coming period. We estimate revenue, EBITDA and PAT to grow at 15.5%, 26.3% and 46.7% CAGR respectively over FY23-25E
- We recommend **BUY** on AMPL with target price of ₹ 510 per share (based on 32x FY25 EPS)



Particulars	
Particular	Amount
Market Capitalisation (₹ Crore)	3,788
FY23 Gross Debt (₹ Crore)	185
FY23 Cash (₹ Crore)	111
EV (₹ Crore)	3,863
52 Week H/L (Rs)	444 / 213
Equity Capital	19.0
Face Value	2.0

Shareholding Pattern				
	Sep-22	Dec-22	Mar-23	Jun-23
Promoter	8.3	8.3	7.2	6.5
FII	3.1	2.3	2.3	3.0
DII	0.1	0.1	0.1	9.9
Others	88.5	89.3	90.4	80.6

- ### Risks to our call
- 1) Dependent on government contracts
 - 2) Significant working capital requirement
 - 3) Increase in cost and availability of raw materials



Research Analyst

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Key Financial Summary

(₹ crore)	FY20	FY21	FY22	FY23	3 Year CAGR (FY20-23)	FY24E	FY25E	2 Year CAGR (FY23-25E)
Revenues	467	641	750	816	20.4	940	1,088	15.5
EBITDA	82	77	89	148	21.4	196	235	26.3
EBITDA margin (%)	17.7	12.0	11.9	18.1		20.9	21.6	
Net Profit	44	29	38	70	16.6	110	150	46.7
EPS (₹)	5.1	3.3	4.4	8.1		11.5	15.8	
P/E (x)	78.5	119.8	91.3	49.5		34.6	25.2	
EV/EBITDA (x)	45.8	49.9	42.4	26.2		18.7	15.5	
RoCE (%)	11.6	9.5	11.2	15.6		17.6	19.0	
RoE (%)	8.2	5.2	6.5	10.9		11.3	13.6	

Source: Company, ICICI Direct Research

Company Background

Astra Microwave Products (AMPL), incorporated in 1991, is engaged in the business of design, development and manufacture of sub-systems for Radio Frequency and microwave systems used in defence, space, meteorology and telecommunication

The company’s product range includes radars, missile electronics, electronic warfare, satellites, MMIC (Monolithic Microwave Integrated Circuit) and communication systems. Astra has designed, developed and produced critical sub systems and systems for its customers for building various airborne, naval and ground based platforms. Company’s clientele includes Ministry of Defence (MoD), DRDO (Defence Research and Development Organisation), ISRO (Indian Space Research Organisation), defence PSUs (public sector units) etc

Consolidated revenue of the company has grown by 20.4% CAGR in the last 3 years during the period FY20-23 while EBITDA and PAT have grown by 21.4% CAGR and 16.6% CAGR respectively over the same period. During FY23, company reported revenues of ₹ 815.5 crore which increased by 8.7% YoY while EBITDA grew by 65.5% YoY to ₹ 147.6 crore as EBITDA margin improved sharply from 11.9% in FY22 to 18.1% in FY23. PAT in FY23 stood at ₹ 69.8 crore, which increased by 84.4% YoY

FY23 Revenue Mix

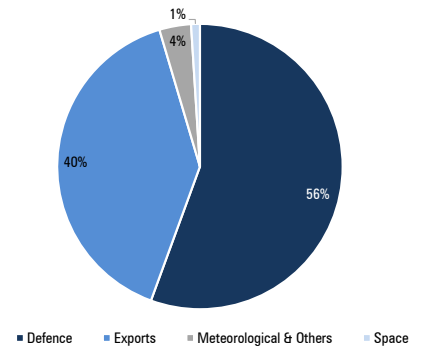








Exhibit 1: Product Range

Defence	Space	Hydro/Meteorology	Other areas of work
<ul style="list-style-type: none"> • Radars • Electronic Warfare • Missile Electronics • Telemetry • Counter-Drones 	<ul style="list-style-type: none"> • Flight Model Application • Ground based Application • INSAT MSS Terminals 	<ul style="list-style-type: none"> • Water Level Measurement (Bubbler/Radar Sensor) • Automatic Weather Stations (AWS) • Automatic Rain Gauge (ARG) X Band Doppler Weather Radar • Agromet Met Stations (AMS) 	<ul style="list-style-type: none"> • Antennas • MMIC • Contract Manufacturing • Homeland Security

Source: Company, ICICI Direct Research

Exhibit 2: State of the art Infrastructure

Hyderabad, Telangana					Karnataka
<p>Unit I</p>  <p>Land : 113 Acres Building : 18,000 Sq. Ft Status : Own Year : 1999</p> <p>Facility Offering</p> <p>Automatic weather Station AWS and other Hydrology & Meteorology</p>	<p>Unit II</p>  <p>Land : 20 Acres Building : 20,000 Sq. Ft Status : Own Year : 1995</p> <p>Facility Offering</p> <p>Near Field Test Range Out-Door Test Range Multi-Layer Antenna Fabrication</p>	<p>Unit III</p>  <p>Land : 99 Acres Building : 77,000 Sq. Ft Status : Own Year : 2003</p> <p>Facility Offering</p> <p>Clean Room Laser Welding Vibration Table</p>	<p>Unit IV</p>  <p>Land : 190 Acres Building : 1,80,000 Sq. Ft Status : Own Year : 2009</p> <p>Facility Offering</p> <p>EMI/EMC Halt/Hass Chamber ESS Chamber</p>	<p>Unit V</p>  <p>Land : 0.59 Acres Building : 23,000 Sq. Ft Status : Own Year : 2019</p> <p>Facility Offering</p> <p>MIC Facility CNC Drilling Copper Plating Gold Plating Etching developing</p>	<p>Bengaluru Unit</p>  <p>Land : 5.0 Acres Building : 1,00,000 Sq. Ft Status : Own Year : 2012</p> <p>Facility Offering</p> <p>Near Field Test Range</p>
<p>Equipped with</p> <ul style="list-style-type: none"> Clean room compatible oven for curing epoxy Temperature controlled hot plate with nitrogen purging facility for eutectic attachment High-precision bonding machines ESD measurement equipment DC probing station for on-chip measurement of DC parameters 					

Source: Company, ICICI Direct Research

Investment Rationale

Domain expertise in microwave & radio frequency systems and applications; Strong R&D and manufacturing capabilities

With over 30 years of domain expertise in microwave and radio frequency applications, AMPL has moved up the value chain from manufacturing sub-systems to development and manufacturing a wide range of high-end, critical microwave and radio frequency application-based equipment such as Monolithic Microwave Integrated Circuit ("MMIC") products, multi object tracking radar and airborne radars. The company is one of the few private sector manufacturers in India with in-house capabilities of designing, developing and manufacturing critical microwave and radio frequency based equipment that find applications across defence, space, meteorology and telecom and civil communications

With strong manufacturing capabilities and focus on research and development, company has been able to create a strong track record of new product development and R&D of sub-systems for various defence, space and meteorological programs. Moreover, company has the capability of designing and developing Gallium Nitride ("GaN") TRMs (Transmit & Receive Modules) and are currently working with defence agencies for incorporating such TRMs in modernizing existing radars of upcoming fighter aircrafts like Su-30 Mk1, LCA Mk2 and AMCA.

Moreover, pursuant to advanced manufacturing as well as research and development facilities, company has strong in-house capabilities to execute orders through Build to Specifications ("BTS") and Build to Print ("BTP") routes

Exhibit 3: Competitive landscape

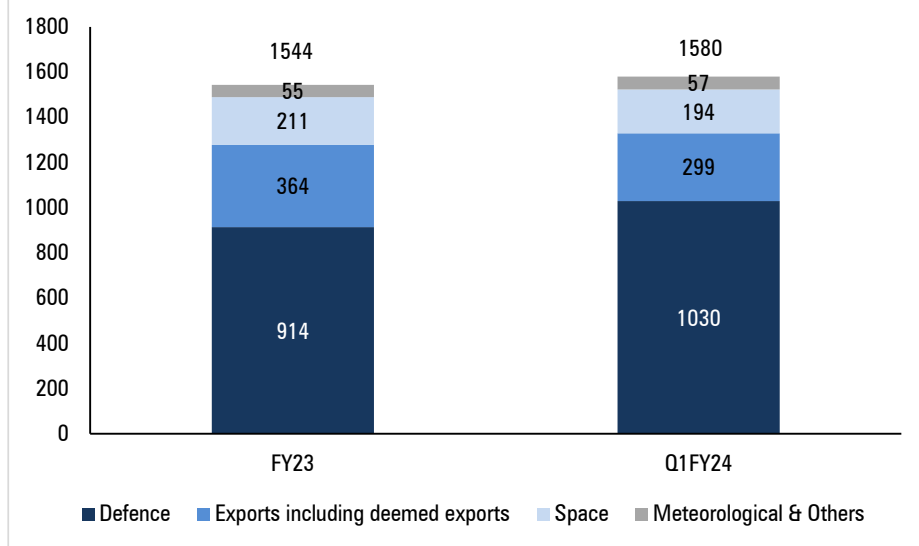
	Systems	Supplied >25 Radars	Sub-Systems	Components	MMIC	Planar Antenna Testing (NFTR)
BDL	✓					
BEL	✓	✓	✓	✓	✓	✓
L&T	✓					
Mahindra Defence	✓					
Bharat Forge	✓		✓			
Adani Defence	✓		✓			
Astra Microwave	✓	✓	✓	✓	✓	✓
Paras Defence	✓		✓			
Data Patterns	✓		✓	✓		
Centum Electronics			✓	✓		
CoreEL			✓	✓		
Mistral			✓	✓		
Alpha Design	✓		✓	✓		
TASL	✓		✓			

Source: Company, ICICI Direct Research

Healthy order-book position with buoyant prospects & pipeline presents strong growth visibility

AMPL has been able to create a diversified and healthy order book on the back of its strong capabilities and proven track record of making high value-added systems, RF and microwave super components and sub-systems. Company's order book position stands healthy at ₹ 1580 crore as of June 2023 end (1.9x FY23 revenue). Defence contributes ~65% of the order-book followed by ~19% by exports, ~12% by space and balance ~4% by meteorological.

Exhibit 4: Order backlog (₹ crore)



Source: Company, ICICI Direct Research

The defence segment, which contributes ~65% to the company's order backlog, is well positioned in terms of increasing domestic procurements by the government for our armed forces. A structural shift in defence sector is clearly visible with increasing allocation for modernised indigenous platforms (domestic procurement budget share increased to 75% for FY24 from 68% for FY23), which implies ~19% growth as against 8% growth for total budgeted capital outlay. As per the estimates, contracts worth ~₹ 5 lakh crore for military equipments are likely to be placed from government with the domestic industries in the next five years, in line with its policy of promoting indigenous defence manufacturing

We understand that there is an increasing requirement for induction of strong & modern warfare technologies and combat defence platforms into the armed forces, pushing the demand for defence electronics. This creates a strong demand outlook for products/systems like electronic warfare, radars, communication systems, navigation systems etc in defence platforms across aerospace, missiles, naval warships, underwater weapons like torpedoes and ground based defence platforms

As per the industry reports, the Indian defence electronics industry is expected to clock 13-14% CAGR over FY22-27 to reach ₹ 650-700 billion by FY27. Improving technology is demanding increased usage of electronics, expanding the share of defence electronics in total defence production. The share of defence electronics is projected at 40-42% of total defence production by FY27 as against current share of 36-37%

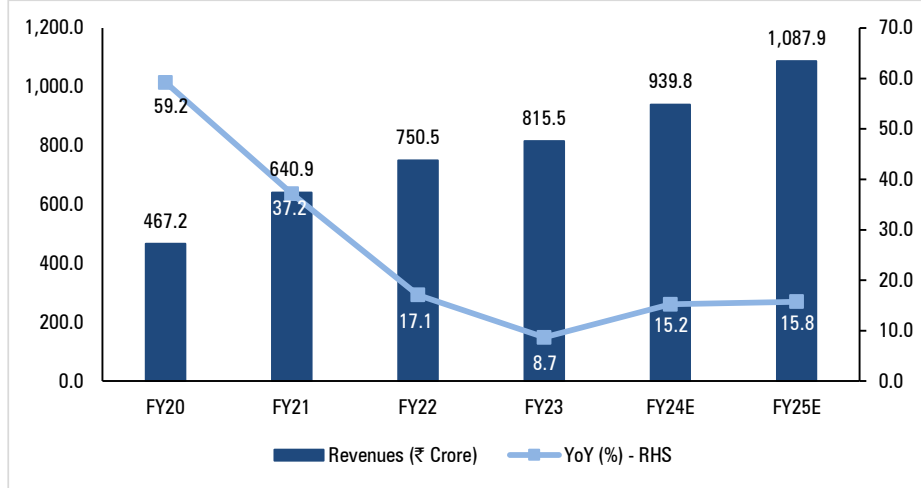
In Exports also, which contribute ~19% to the company's order backlog and contains significant part of deemed defence export orders, we believe that there is a significant opportunity led by meeting offset requirements by foreign OEMs, increasing R&D investments, increasing indigenisation level of critical sub-systems and systems and lower cost of production. Space segment (~12% of order backlog at present) too presents a sizable opportunity for the coming in coming period as the company holds significant position in development of sub-systems for various space programs by ISRO. As per the estimates, Indian space economy - consisting of ground systems and satellite manufacturing - is projected to grow by 1.5x during CY23-27 from CY18-22, reaching a cumulative order book of ₹ 600-650 billion

Overall, with govt's focus on allocating significant capital outlay in defence & space sectors, reducing defence imports and increasing domestic procurements with indigenising usage of raw materials, components, sub-systems, the future orders inflows opportunity for AMPL is huge in both domestic and export markets. Moreover, overall execution would improve as the risk of supply chain issues recedes with increase in domestic procurement of raw materials & sub-components

Revenue growth expected at 15.5% CAGR over FY23-25E

Company's revenue grew at 20.4% CAGR over the last 3 years (FY20-23) led by strong execution of the order backlog. Annual order inflows remained healthy at ~₹ 700-800 crore during the period FY20-23 with closing year order book position maintained at ~₹1540-1550 crore. Going ahead, revenue growth is expected to be at 15.5% CAGR over FY23-25E to ₹ 1088 crore in FY25E as execution expected to remain strong with healthy order inflows

Exhibit 5: Healthy revenue growth ahead

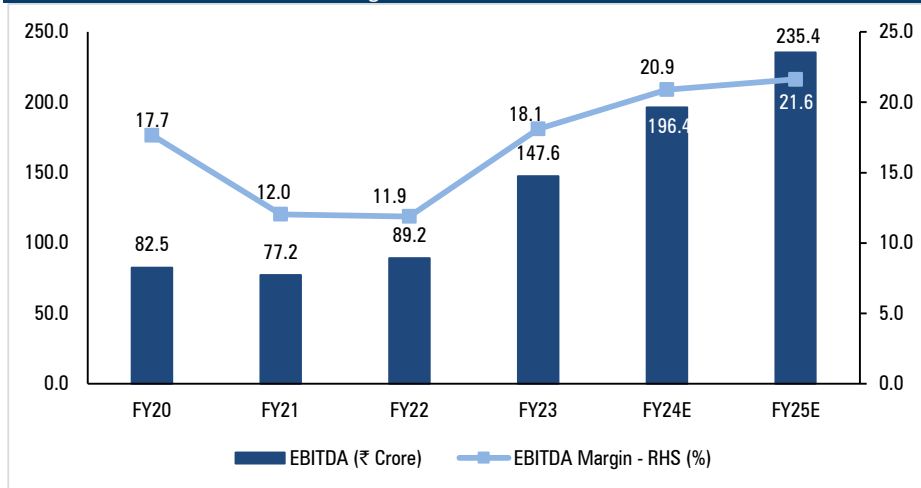


Source: Company, ICICI Direct Research

EBITDA margins expected to improve over FY23-25E; EBITDA expected at ~26% CAGR

Company's EBITDA margin stood at 18.1% in FY23, improved significantly from 11.9% in FY22 mainly on account of strong execution. Going ahead, we estimate EBITDA margins to improve further to 20.9% in FY24E and 21.6% in FY25E, led by pick-up in execution of domestic contracts (which carry relatively better margins) and positive operating leverage. We estimate EBITDA CAGR of 26.3% over FY23-25E to ₹ 235.4 crore in FY25E from ₹ 147.6 crore in FY23

Exhibit 6: EBITDA & EBITDA margin trend

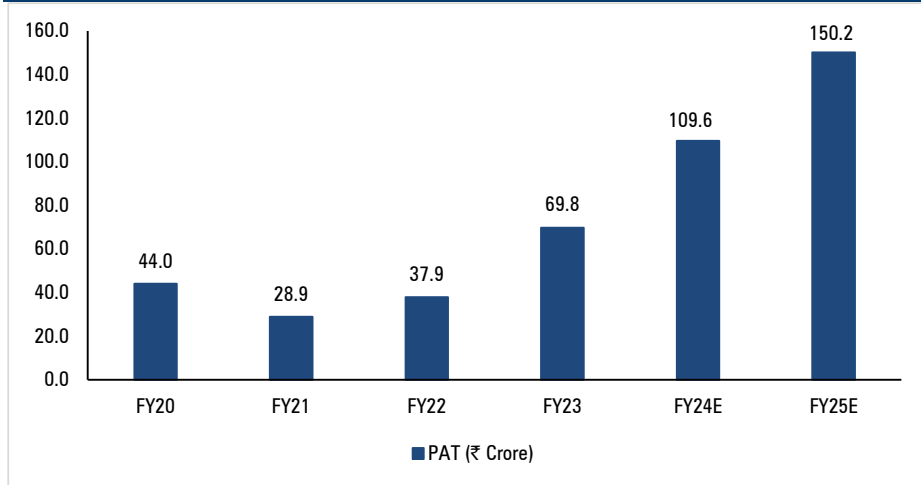


Source: Company, ICICI Direct Research

PAT expected to grow ~47% CAGR over FY23-25E

PAT increased sharply by 84.4% YoY to ₹ 69.8 crore in FY23 led by strong revenue growth and improvement in margins. Going ahead, we estimate net profit to grow at 46.7% CAGR over FY23-25E to ₹ 150.2 crore in FY25E from ₹ 69.8 crore in FY23, mainly led by further growth in revenues and improvement in margins during the period

Exhibit 7: PAT trend

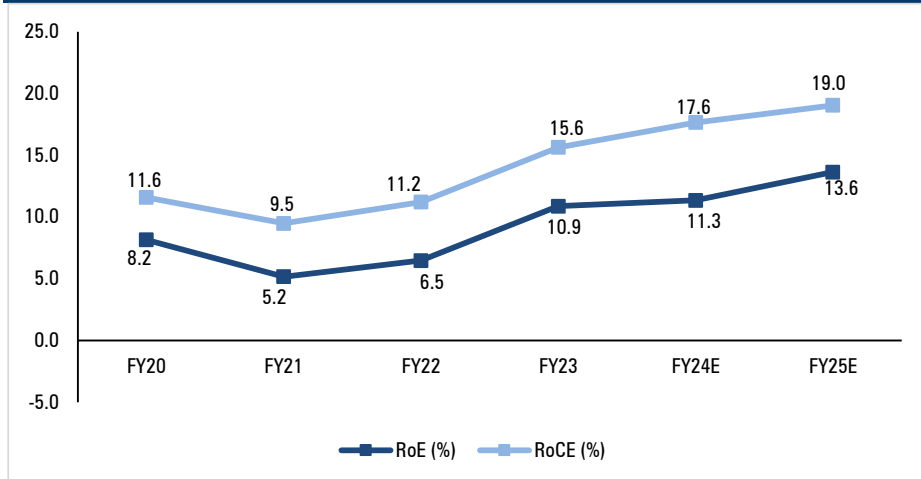


Source: Company, ICICI Direct Research

Healthy return ratios

Company's return ratios witnessed a substantial improvement during FY21-23 led by improvement in operating margins and improvement in asset turnover ratio. Going ahead, we expect the return ratios to improve further over the period FY23-25E as asset turnover ratio and margins are estimated to see further improvement. RoCE (Return on Capital Employed) and Return on Equity (RoE) are expected to improve to 19.0% and 13.6% in FY25E respectively from 15.6% and 10.9% respectively

Exhibit 8: Return ratios



Source: Company, ICICI Direct Research

Key risk and concerns

Dependent on contracts from Gol, associated entities

Given that the company derives a significant portion of revenues from government contracts & its associated entities, the company is exposed to various risks like stricter regulatory requirements which may increase compliance costs. Other risks involve difficulty in winning tenders, matching the pricing. Also, delay of existing or anticipated contracts or programmes or any adverse change in the Gol Entities defence or space requirements and geo-political circumstances, may have a material adverse impact on company's business and profitability

Significant working capital requirements

AMPL's business needs significant working capital for manufacturing operations, financing inventory, purchase of raw materials, development of new products that may be adversely affected by changes in terms of credit & payment. Hence, the company is required to maintain a high level of working capital as the business activities are characterised by long product development periods and production cycles

Increased cost of raw materials and inadequate supply

Increased cost of raw materials and inadequate supply may affect company's business and results of operations. Further, company is dependent on third parties for the timely supply of raw materials to its facilities and delivery of its products to customers, which are subject to uncertainties and risks

Financial summary

Exhibit 9: Profit and loss statement ₹ crore

(₹ Crore)	FY22	FY23	FY24E	FY25E
Revenue	750.5	815.5	939.8	1,087.9
% Growth	17.1	8.7	15.2	15.8
Other income	6.4	5.5	7.5	8.5
Total Revenue	750.5	815.5	939.8	1,087.9
% Growth	17.1	8.7	15.2	15.8
Total Raw Material Costs	527.2	518.3	573.3	658.2
Employee Expenses	80.6	95.2	111.4	130.4
other expenses	53.4	54.4	58.7	64.0
Total Operating Expenditure	661.2	667.9	743.4	852.6
Operating Profit (EBITDA)	89.2	147.6	196.4	235.4
% Growth	15.6	65.5	33.0	19.9
Interest	21.1	30.5	25.0	6.0
PBDT	74.5	122.6	178.9	237.9
Depreciation	22.0	23.7	27.3	31.0
PBT before Exceptional Items	52.5	98.9	151.6	206.8
Total Tax	12.3	26.1	40.0	54.6
PAT before MI	40.1	72.8	111.6	152.2
PAT	37.9	69.8	109.6	150.2
% Growth		84.4	56.9	37.1
EPS	4.4	8.1	11.5	15.8

Source: Company, ICICI Direct Research

Exhibit 10: Cash flow statement ₹ crore

(₹ Crore)	FY22	FY23	FY24E	FY25E
Profit after Tax	37.9	69.8	109.6	150.2
Depreciation	22.0	23.7	27.3	31.0
Interest	21.1	30.5	25.0	6.0
Cash Flow before WC changes	81.0	124.0	161.8	187.2
Changes in inventory	(89.7)	0.3	(70.2)	(77.1)
Changes in debtors	61.7	(78.6)	(43.4)	(51.5)
Changes in loans & Advances	-	-	-	-
Changes in other current assets	27.0	28.4	(10.0)	(18.3)
Net Increase in Current Assets	8.9	(45.8)	(123.5)	(146.9)
Changes in creditors	17.7	(9.6)	8.3	8.5
Changes in provisions	1.5	0.6	(0.4)	0.6
Net Inc in Current Liabilities	7.6	(114.1)	36.2	59.5
Net CF from Operating activities	97.4	(35.9)	74.5	99.8
Changes in deferred tax assets	(4.1)	(2.1)	0.1	-
(Purchase)/Sale of Fixed Assets	(29.0)	(32.9)	(50.0)	(50.0)
Net CF from Investing activities	20.7	(2.5)	(81.0)	(53.0)
Dividend and Dividend Tax	(10.4)	(12.1)	(13.3)	(13.3)
Net CF from Financing Activities	(83.2)	71.7	38.4	(39.3)
Net Cash flow	35.0	33.4	31.9	7.6
Opening Cash/Cash Equivalent	42.5	77.5	110.9	142.8
Closing Cash/ Cash Equivalent	77.5	110.9	142.8	150.4

Source: Company, ICICI Direct Research

Exhibit 11: Balance sheet ₹ crore

(₹ Crore)	FY22	FY23	FY24E	FY25E
Equity Capital	17.3	17.3	19.0	19.0
Reserve and Surplus	568.3	625.3	946.6	1,083.5
Total Shareholders funds	585.6	642.6	965.6	1,102.5
Total Debt	70.4	185.5	35.5	15.5
Total Liabilities	699.9	902.5	1,075.6	1,192.6
Gross Block	306.0	335.7	384.8	434.8
Acc: Depreciation	147.4	169.6	196.9	227.9
Net Block	158.6	166.1	188.0	207.0
Capital WIP	0.1	2.2	3.0	3.0
Total Fixed Assets	159.7	169.0	191.8	210.8
Non Current Assets	23.5	26.4	32.5	35.5
Inventory	419.3	419.1	489.2	566.3
Debtors	205.1	283.6	327.0	378.5
Other Current Assets	65.4	37.0	47.0	65.3
Cash	77.5	110.9	142.8	150.4
Total Current Assets	771.4	850.6	1,006.0	1,160.5
Current Liabilities	55.4	45.8	54.1	62.6
Provisions	4.3	6.6	6.6	90.0
Total Current Liabilities	268.6	154.5	190.6	250.2
Net Current Assets	502.8	696.1	815.4	910.4
Total Assets	699.9	902.5	1,075.7	1,192.6

Source: Company, ICICI Direct Research

Exhibit 12: Key ratios

(Year-end March)	FY22	FY23	FY24E	FY25E
EPS	4.4	8.1	11.5	15.8
Cash per Share	8.9	12.8	15.0	15.8
BV	67.6	74.2	101.7	116.1
EBITDA Margin	11.9	18.1	20.9	21.6
PAT Margin	5.0	8.6	11.7	13.8
RoE	6.5	10.9	11.3	13.6
RoCE	11.2	15.6	17.6	19.0
RoIC	11.6	17.3	19.7	21.1
EV / EBITDA	42.4	26.2	18.7	15.5
P/E	91.3	49.5	34.6	25.2
EV / Net Sales	5.0	4.7	3.9	3.4
Sales / Equity	1.3	1.3	1.0	1.0
Market Cap / Sales	5.0	4.6	4.0	3.5
Price to Book Value	5.9	5.4	3.9	3.4
Asset turnover	1.1	1.0	0.9	1.0
Debtors Turnover Ratio	3.2	3.3	3.1	3.1
Creditors Turnover Ratio	16.1	16.1	18.8	18.7
Debt / Equity	0.1	0.3	0.0	0.0
Current Ratio	9.3	10.8	11.1	11.6
Quick Ratio	3.6	4.7	4.8	5.1

Source: Company, ICICI Direct Research

RATING RATIONALE

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Buy: >15%

Hold: -5% to 15%;

Reduce: -15% to -5%;

Sell: <-15%



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