4 June 2024

MM Forgings

Attractive valuation; retaining a Buy

Rating: **Buy**
Target Price (12-mth): Rs.1,500
Share Price: Rs.1,178

MM Forgings' Q4 EBITDA grew a healthy 18% y/y to Rs753m but lagged our estimated Rs816m due to less-than-expected revenue. We reckon the domestic M&H CV volume uptrend would hold, at a 5% CAGR over FY24-26, on economic activity and replacement demand. Growth would be driven by new products (gear blanks, long shafts, larger crankshafts) and market-share gains. The company is trading at an attractive valuation of 18x/14x FY25e/FY26e EPS, at a large discount to peers like BHFC (56x/40x) and RMKF (29x/24x). With a higher wallet-share and sharper focus on EV-specific components, its outperformance would continue. The stock is among our top picks in ancillaries. We retain a Buy, with a higher 12-mth TP of Rs1,500, 18x FY26e EPS (earlier Rs1,200, 15x FY26e EPS).

EBITDA miss. Standalone revenue grew 4% y/y to Rs3.88bn, below our Rs4.17bn estimate due to the drop in inventory with customers. EBITDA grew a healthy 18% to Rs753m, though below our estimated Rs816m owing to less-than-expected revenue. The EBITDA margin expanded 220bps y/y, 50bps q/q, to 19.4%, on the higher gross margin. The gross margin rose 480bps y/y, 260bps q/q to 55.6%. Employee costs grew 10% to Rs377m. Power and fuel expenses grew 9% to Rs361m. Other expenses grew 14% to Rs668m. Interest cost rose 83% to Rs133m. The tax rate was 26% vs. 33.8% a year ago and 30.8% the prior quarter. Overall, PAT grew 30% to Rs380m, below our estimated Rs426m due to less-than-anticipated operating profit and higher interest cost.

Valuation. We expect a 17% EPS CAGR over FY24-26, driven by an 11% revenue CAGR and a 210bp EBITDA margin expansion. Our FY25e EPS is slightly lower due to high interest and depreciation costs, while FY26e EPS is slightly higher on better margins. We retain a Buy at a higher 12-mth TP of Rs1,500, 18x FY26e EPS (earlier Rs1,200, 15x FY26e EPS). We raise our multiple on higher EBITDA growth and coming EV opportunities (Abhinava Rizel). **Key risks:** Less-than-expected growth in underlying segments, delay in order executions, adverse commodity/forex movements.

Key financials (YE Mar)	FY22	FY23	FY24	FY25e	FY26e
Sales (Rs m)	11,046	14,128	15,271	16,688	18,665
Net profit (Rs m)	918	1,261	1,448	1,595	1,985
EPS (Rs)	38.0	52.3	60.0	66.1	82.2
Growth (%)	*96.9*	*37.5*	*14.8*	*10.2*	*24.4*
P/E (x)	31.0	22.5	19.6	17.8	14.3
EV / EBITDA (x)	15.9	12.9	11.9	11.0	9.4
P/BV (x)	4.9	4.1	3.5	3.0	2.5
RoE (%)	*15.9*	*18.3*	*17.7*	*16.8*	*17.8*
RoCE (%)	*8.6*	*10.5*	*10.3*	*10.3*	*11.0*
Dividend yield (%)	*0.5*	*0.5*	*0.7*	*0.7*	*0.9*
Net debt / equity (x)	0.6	0.6	0.7	0.8	0.7

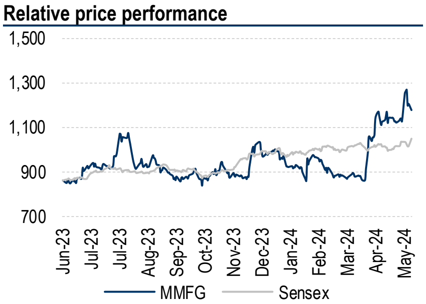
Source: Company, Anand Rathi Research

Key data	MMFG IN / MMFO.NS
52-week high / low	Rs.1,302 / 825
Sensex / Nifty	76469 / 23264
3-m average volume	$1.5m
Market cap	Rs.28bn / $342m
Shares outstanding	24m

Shareholding pattern (%)	Mar'24	Dec '23	Sept'23
Promoters	56.3	56.3	56.3
- of which, Pledged			
Free Float	43.7	43.7	43.7
- Foreign institutions	2.3	1.9	1.7
- Domestic institutions	11.8	14.5	15.7
- Public	29.6	27.3	26.3

Estimates revision (%)	FY25e	FY26e
Sales	-0.8	-1.6
EBITDA	2.9	6.5
EPS	-3.8	2.4

Relative price performance



Source: Bloomberg

Mumuksh Mandlesha
Research Analyst

Akshay Karwa
Research Analyst

Shagun Beria
Research Associate

Quick Glance – Financials and Valuations (Standalone)

Fig 1 – Income statement (Rs m)

Year-end: Mar	FY22	FY23	FY24	FY25e	FY26e
Net revenues	**11,046**	**14,128**	**15,271**	**16,688**	**18,665**
Growth (%)	*52*	*28*	*8*	*9*	*12*
RM cost	5,044	6,745	7,150	7,593	8,399
Employee cost	1,127	1,296	1,361	1,504	1,627
Other expenses	3,760	3,502	3,876	4,302	4,718
Direct costs	9,029	11,572	12,387	13,400	14,744
EBITDA	**2,017**	**2,555**	**2,884**	**3,289**	**3,921**
EBITDA margins (%)	*18.3*	*18.1*	*18.9*	*19.7*	*21.0*
- Depreciation	601	694	725	801	892
Other income	186	161	254	304	359
Interest expenses	273	296	426	660	735
PBT	1,329	1,757	1,987	2,131	2,652
Effective tax rates (%)	*31*	*28*	*27*	*25*	*25*
Net income	918	1,261	1,448	1,595	1,985
Adjusted income	918	1,261	1,448	1,595	1,985
WANS	24	24	24	24	24
FDEPS (Rs)	38.0	52.3	60.0	66.1	82.2
Growth (%)	*97*	*37*	*15*	*10*	*24*

Fig 2 – Balance sheet (Rs m)

Year-end: Mar	FY22	FY23	FY24	FY25e	FY26e
Share capital	241	241	241	241	241
Net worth	5,776	6,902	8,163	9,503	11,170
Debt	5,915	6,539	8,050	9,550	10,050
Minority interest					
DTL / (Assets)	352	346	401	401	401
Capital employed	**12,043**	**13,787**	**16,615**	**19,455**	**21,621**
Net tangible assets	6,862	7,797	9,296	11,995	13,603
CWIP (tang. & intang.)	-	-	-	-	-
Investments (strategic)	329	407	413	413	413
Current assets (excl. cash)	4,956	6,501	8,158	8,781	9,506
Cash	2,245	2,029	2,092	1,759	1,750
Current liabilities	2,349	2,948	3,344	3,493	3,650
Working capital	2,607	3,553	4,814	5,288	5,856
Capital deployed	**12,043**	**13,787**	**16,615**	**19,455**	**21,621**

Fig 3 – Cash-flow statement (Rs m)

Year-end: Mar	FY22	FY23	FY24	FY25e	FY26e
PBT	1,329	1,759	1,994	2,131	2,652
+ Non-cash items	741	859	950	801	892
Oper. prof. before WC	2,070	2,619	2,944	2,932	3,545
- Incr. / (decr.) in WC	329	1,032	1,180	474	568
Others incl. taxes	-268	-424	-319	-536	-668
Operating cash-flow	1,473	1,162	1,446	1,922	2,309
- Capex (tang.+ intang.)	-1,113	-1,563	-2,201	-3,500	-2,500
Free cash-flow	360	-401	-755	-1,578	-191
- Div. (incl. buyback & taxes)	-126	-145	-145	-255	-318
+ Equity raised	-	-	-	-	-
+ Debt raised	489	-178	555	1,500	500
- Fin investments	-	-	-	-	-
- Misc. (CFI + CFF)	-348	508	409	-0	-0
Net cash-flow	375	-216	63	-334	-9

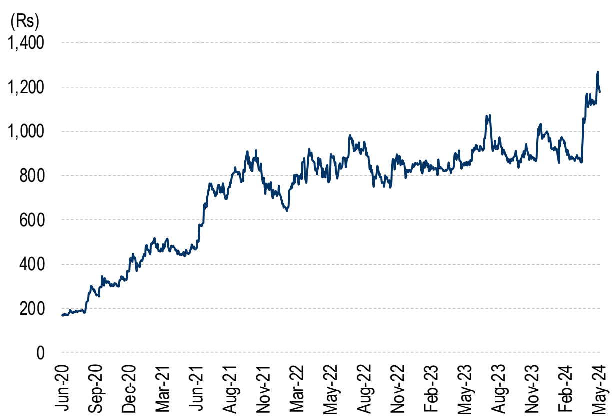
Source: Company, Anand Rathi Research

Fig 4 – Ratio analysis

Year-end: Mar	FY22	FY23	FY24	FY25e	FY26e
P/E (x)	31.0	22.5	19.6	17.8	14.3
EV / EBITDA (x)	15.9	12.9	11.9	11.0	9.4
EV / Sales (x)	2.9	2.3	2.3	2.2	2.0
P/B (x)	4.9	4.1	3.5	3.0	2.5
RoE (%)	*15.9*	*18.3*	*17.7*	*16.8*	*17.8*
RoCE (%) - after tax	*8.6*	*10.5*	*10.3*	*10.3*	*11.0*
RoIC (%) - after tax	*10.8*	*13.0*	*12.4*	*11.9*	*12.3*
DPS (Rs)	6.0	6.0	8.0	8.8	11.0
Dividend yield (%)	*0.5*	*0.5*	*0.7*	*0.7*	*0.9*
Dividend payout (%)	*15.8*	*11.5*	*13.3*	*16.0*	*16.0*
Net debt / equity (x)	0.6	0.6	0.7	0.8	0.7
Receivables (days)	56	60	83	87	91
Inventory (days)	139	157	175	175	175
Payables (days)	85	87	88	88	88
CFO: PAT (%)	*160.5*	*92.1*	*99.9*	*120.5*	*116.4*

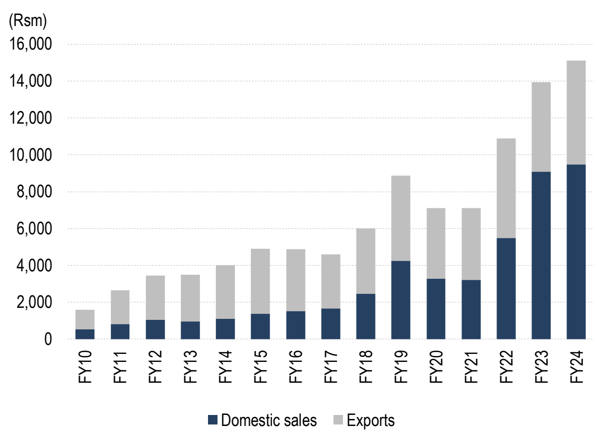
Source: Company, Anand Rathi Research

Fig 5 – Price movement



Source: Bloomberg

Fig 6 – Revenue-mix trend



Source: Company

Q4 Earnings Call Takeaways

- **Outlook.** The company expects FY25 production to grow 8-12% to 92,000-95,000 tonnes. Its FY24 production/sales were 84,800/ 77,000 tonnes. Domestic revenue would rise 10%, led by 5-7% growth in CV volumes and increase in wallet share (heavy presses - front axles, knuckles, crankshafts). Exports would grow 10-15%, led by orders despite weak overseas CVs. The company expects better CV demand globally from H2 FY25. It is seeing increased orders from global customers due to the China+1 strategy.
- The company is working on increasing the bandwidth of **senior management** to support a higher revenue trajectory of >Rs30bn.
- **Abhinava Rizel.** ~Rs1bn revenue expected by FY27, ~Rs20bn over the next decade. Orders are likely soon. For FY25, investment expected at Rs750m (Rs250m investment in FY24) for up to a 60kW motor line and other infrastructure. The line would be ready in the next two weeks. It can manufacture e-axle components (motors of up to 300kW – among a few globally, controllers and gear boxes). The initial focus is on PMSM motors; prototypes have been tested over 75,000km. Besides, it can supply power electronics (via its Suvarchas Vidyut subsidiary), such as alternators.
- **Margins.** The FY24 better gross margin was led by value addition, cost reductions and product mix. Ahead, improvement is expected, from lower operational costs (manpower, power & fuel) and higher machining mix (62-65% in FY25; >75% in the medium term vs. 57% in FY24). The share of renewables was 25% of 120m units of electricity consumed (saving Rs3/unit); this is likely more than 80% over the medium to long term, which would save Rs200m (or grow margins 150bps). The company expects the EBITDA margin to cross 20% by Q3 FY25 and the early-20% in FY26.
- **Capex.** The company expects project capex of Rs3.25bn for FY25 (Rs2.5bn for machining) and Rs1.75bn (forgings capacity of 20,000 tonnes) for FY26. It aims at funding Rs2bn-3bn by debt and the rest by internal accruals. Forgings capacity would rise from 126,000 tonnes to 146,000 by FY26 for mid-range presses, required for a few orders.
- **Interest cost** to rise to ~Rs650m in FY25, from Rs426m in FY24, to fund capex. Inventory (b/s) to reduce by Rs500m-1bn in FY25.
- **Dividend payout** expected at 15-20%.
- **FY24 revenue mix**
  - Geographically: India 65%, Europe 16%, North America 12%, South America 7%.
  - Segment-wise: CVs 81%, PVs 10%, non-auto 9%.

Results highlights

Fig 7 – Quarterly performance

(Rs m)	Q4 FY23	Q1 FY24	Q2 FY24	Q3 FY24	Q4 FY24	Y/Y (%)	Q/Q (%)	FY24	FY23	Y/Y (%)
Revenue	3,733	3,655	3,841	3,881	3,886	***4.1***	***0.1***	15,271	14,093	***8.4***
Expenditure	**3,093**	**3,035**	**3,122**	**3,151**	**3,133**	***1.3***	***(0.6)***	**12,387**	**11,538**	***7.4***
as % of sales	*82.9*	*83.0*	*81.3*	*81.2*	*80.6*			*81.1*	*81.9*	
Consumption of RM	1,837	1,772	1,822	1,828	1,727	*(6.0)*	*(5.5)*	7,150	6,744	*6.0*
as % of sales	*49.2*	*48.5*	*47.4*	*47.1*	*44.4*			*46.8*	*47.9*	
Employee cost	341	319	326	324	377	*10.5*	*16.4*	1,361	1,265	*7.6*
as % of sales	*9.1*	*8.7*	*8.5*	*8.3*	*9.7*			*8.9*	*9.0*	
Power & fuel	331	328	376	362	361	*8.9*	*(0.3)*	1,436	1,236	*16.2*
as % of sales	*8.9*	*9.0*	*9.8*	*9.3*	*9.3*			*9.4*	*8.8*	
Other expenditure	584	615	599	637	668	*14.5*	*4.9*	2,439	2,292	*6.4*
as % of sales	*15.6*	*16.8*	*15.6*	*16.4*	*17.2*			*16.0*	*16.3*	
EBITDA	**640**	**621**	**719**	**731**	**753**	***17.6***	***3.0***	**2,884**	**2,555**	***12.9***
Depreciation	177	175	175	186	175	*(1.1)*	*(5.7)*	725	676	*7.2*
EBIT	**463**	**446**	**544**	**544**	**577**	***24.7***	***6.0***	**2,159**	**1,879**	***14.9***
Other income	53	63	51	68	72	*34.9*	*6.0*	254	161	*57.4*
Interest	73	95	87	109	133	*83.0*	*21.2*	426	292	*45.7*
PBT	**443**	**413**	**509**	**503**	**516**	***16.4***	***2.7***	**1,987**	**1,748**	***13.7***
Total tax	150	113	143	155	136	*(9.4)*	*(12.3)*	540	493	*9.6*
Adj. PAT	**293**	**301**	**366**	**348**	**380**	***29.6***	***9.3***	**1,448**	**1,256**	***15.3***
Extraordinary items loss/(gain)	0	0	0	0	0			0	0	
Reported PAT	**293**	**301**	**366**	**348**	**380**	***29.6***	***9.3***	**1,448**	**1,256**	***15.3***
Adj. EPS (Rs)	**12.2**	**12.5**	**15.2**	**14.4**	**15.8**	***29.6***	***9.3***	**60.0**	**52.0**	***15.3***
Margins (%)						**(bps)**	**(bps)**			**(bps)**
Gross	*50.8*	*51.5*	*52.6*	*52.9*	*55.6*	476	264	*53.2*	*52.1*	104
EBIDTA	*17.1*	*17.0*	*18.7*	*18.8*	*19.4*	222	54	*18.9*	*18.1*	75
EBIT	*12.4*	*12.2*	*14.2*	*14.0*	*14.9*	246	82	*14.1*	*13.3*	80
PAT	*11.9*	*11.3*	*13.2*	*13.0*	*13.3*	141	33	*13.0*	*12.4*	61
Effective tax rates	*7.9*	*8.2*	*9.5*	*9.0*	*9.8*	193	83	*9.5*	*8.9*	57

Source: Company

Valuations

Attractive valuations (trading at a notable discount to peers). The stock quotes at attractive valuations of 18x/14x FY25e/FY26e EPS, a huge discount to peers such as BHFC (56x/40x) and RMKF (29x/24x). BHFC and RMKF are trading above +1std valuations; the company is trading only at slightly higher than mean valuations *(Fig 15 for more details)*.

Sound domestic performance. Domestic revenue outpaced M&H CV production growth, registering a 17% CAGR over FY19-24 (vs. industry M&H CV volumes declining 2%), led by market share gains and an increase in content per vehicle (on a better tonnage mix). Also, domestic revenue growth (a 17% CAGR over FY19-24) has been better than peers BHFC standalone (9%) and RMKF standalone (10%), on higher market share than peers, particularly BHFC.

Robust growth profile. In the last five years, growth in standalone revenue/EBITDA/EPS/RoE has been better than BHFC's *(Fig 9 for more details),* led by strong domestic revenue. Ahead, it would continue to be better than BHFC's on a favorable mix of the domestic segment *(Fig. 10 for more details).*

Favorable regional mix. The company has higher domestic revenue (65%) than BHFC's 42% and RMKF's 58%. Though weakness in overseas CVs is expected, the company would be less affected than peers.

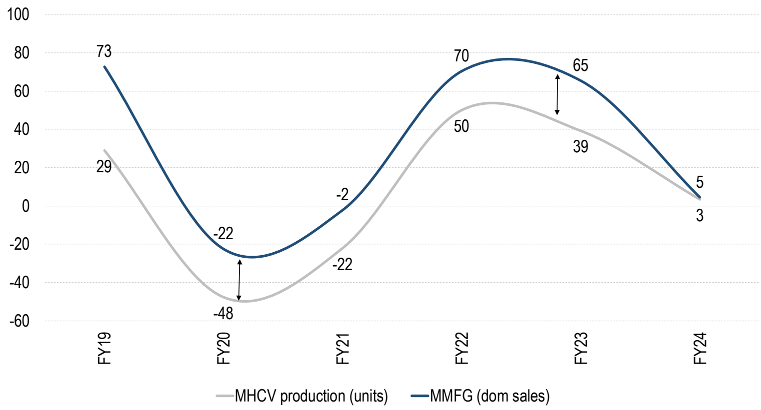
New products such as gear blanks, long shafts and larger crankshafts for CVs/PVs were developed and aided growth in FY24. Recently, PV crankshaft capacity was raised from 40,000 units to 50,000. Besides, the company is focusing on **diversifying** to PVs/non-autos and improving the **machining mix**, expected to rise from 57% in FY24 to 75% over the medium term.

Better mix, operating scale to support margins. We expect the EBITDA margin to rise from 18.9% in FY24 to 21% in FY26, aided by the greater scale, machining mix and lower operational costs (manpower, power & fuel). The post-tax RoE/RoCE would be >16%/10%.

Rs3bn capex expected annually over the next two years to expand machining capabilities, forgings capacity (20,000 tonnes) and new products. Installed capacity is 126,000 tonnes at ~67% utilisation. Net debt/equity was stable at 0.7x in FY24 and likely to be steady in FY26 due to higher capex spend.

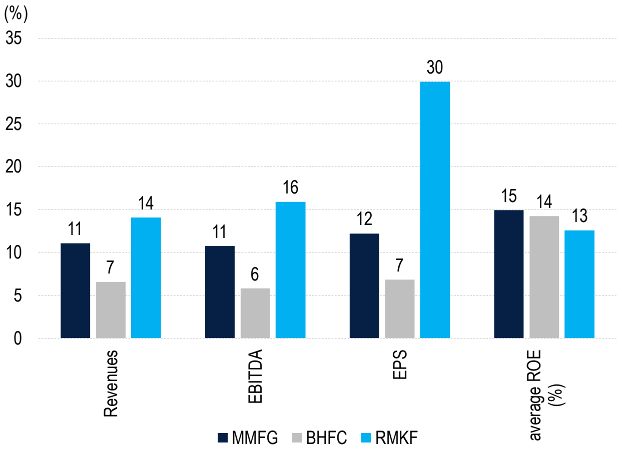
View, Valuations. We expect healthy, 11%/17%, standalone revenue/ EPS CAGRs over FY24-26. Valuations are comfortable at 18x/14x FY25e/FY26e EPS. **We recommend a Buy, with a 12-mth TP of Rs1,500, 18x FY26e EPS of Rs82.2.** Our multiple is closer to +1std of the past 10-year average.

Fig 8 – MMFG's growth better than India's M&H CVs



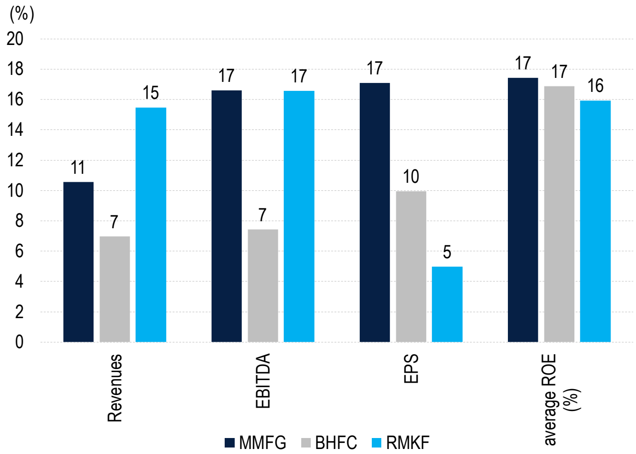
Source: Company, Anand Rathi Research

Fig 9 – MMFG's past growth profile better than BHFC's



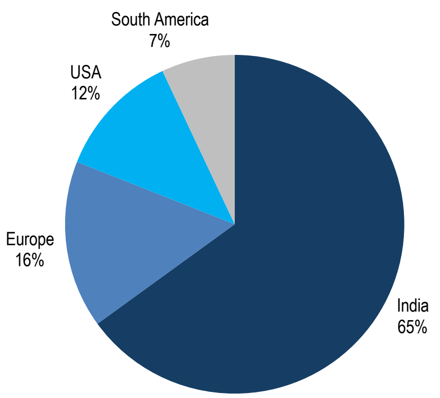
Source: Company, Anand Rathi Research

Fig 10 – Next two-year growth profile better than BHFC's



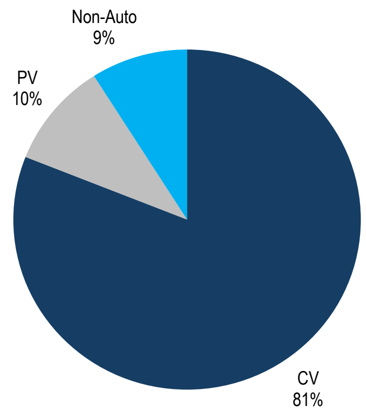
Source: Company, Anand Rathi Research

Fig 11 – Geographical mix



Source: Company, Anand Rathi Research

Fig 12 – Segmental revenue mix



Source: Company, Anand Rathi Research

Fig 13 – Key assumptions

(Rs m)	FY21	FY22	FY23	FY24	FY25e	FY26e	CAGR %, FY24-26
Domestic	3,215	5,480	9,090	9,480	10,428	11,471	10
Y/Y change, %	-2.2	70.5	65.9	4.3	10.0	10.0	
Exports	3,900	5,400	4,896	5,631	6,082	6,994	11
Y/Y change, %	2.0	38.5	-9.3	15.0	8.0	15.0	
Total	**7,115**	**10,880**	**13,986**	**15,111**	**16,510**	**18,465**	**11**
Y/Y change, %	0.1	52.9	28.6	8.0	9.3	11.8	

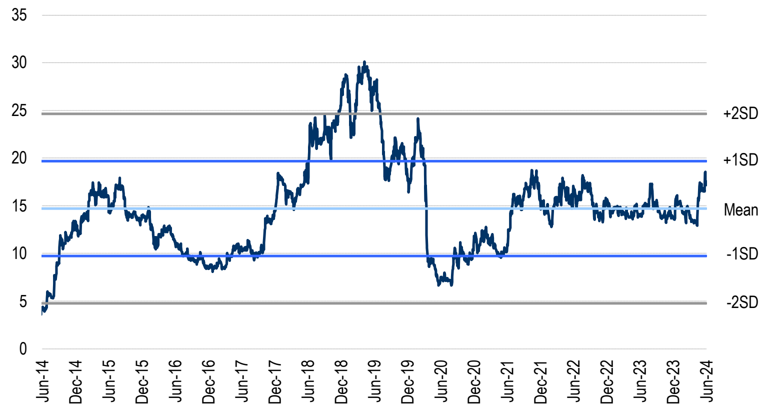
Source: Company, Anand Rathi research

Fig 14 – Change in estimates

	Old		Revised		Change (%)	
(Rs m)	FY25e	FY26e	FY25e	FY26e	FY25	FY26
Revenue	16,826	18,973	16,688	18,665	-0.8	-1.6
EBITDA	3,197	3,681	3,289	3,921	2.9	6.5
% of revenue	19.0	19.4	19.7	21.0		
Adj. PAT	1,658	1,937	1,595	1,985	-3.8	2.4
EPS (Rs)	68.7	80.2	66.1	82.2	-3.8	2.4

Source: Company, Anand Rathi research

Fig 15 – One-year-forward standard deviation of PE



Source: Bloomberg, Anand Rathi Research

Risks

- Less-than-anticipated growth in underlying segments.
- Delay in executing orders.
- Adverse commodity/forex movements.

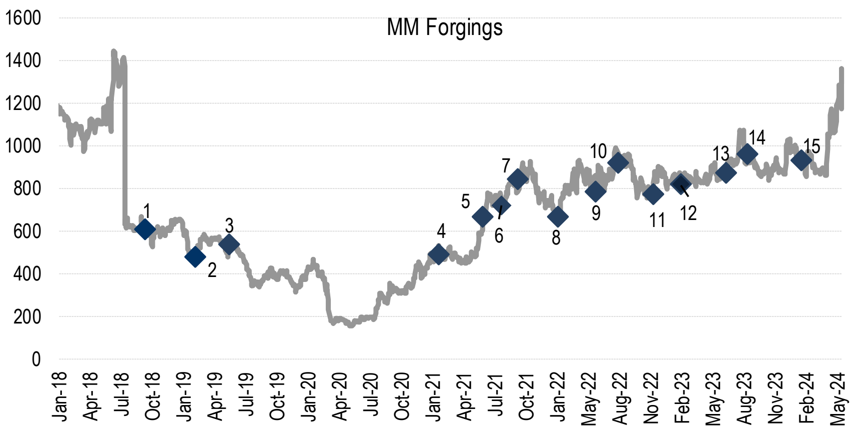
Appendix

Analyst Certification

The views expressed in this Research Report accurately reflect the personal views of the analyst(s) about the subject securities or issuers and no part of the compensation of the research analyst(s) was, is, or will be directly or indirectly related to the specific recommendations or views expressed by the research analyst(s) in this report. The research analysts are bound by stringent internal regulations and also legal and statutory requirements of the Securities and Exchange Board of India (hereinafter "SEBI") and the analysts' compensation are completely delinked from all the other companies and/or entities of Anand Rathi, and have no bearing whatsoever on any recommendation that they have given in the Research Report.

Important Disclosures on subject companies

Rating and Target Price History (as of 3 June 2024)



	Date	Rating	TP (Rs)	Share Price (Rs)
1	19-Sep-18	**Buy**	809	603
2	13-Feb-19	**Buy**	874	482
3	31-May-19	**Buy**	805	524
4	12-Feb-21	**Buy**	629	498
5	21-Jun-21	**Buy**	697	602
6	16-Aug-21	**Hold**	790	748
7	09-Nov-21	**Hold**	1021	893
8	09-Feb-22	**Buy**	1125	735
9	26-May-22	**Buy**	1021	814
10	11-Aug-22	**Buy**	1073	927
11	14-Nov-22	**Buy**	1034	769
12	15-Feb-23	**Buy**	1105	871
13	18-May-23	**Buy**	1060	885
14	14-Aug-23	**Buy**	1050	954
15	19-Feb-24	**Buy**	1200	969

Anand Rathi Ratings Definitions

Analysts' ratings and the corresponding expected returns take into account our definitions of Large Caps, Mid Caps & Small Caps as described in the Ratings Table below:

Ratings Guide (12 months)

	Buy	**Hold**	**Sell**
Large Caps (Top 100 companies)	>15%	0-15%	<0%
Mid Caps (101st-250th company)	>20%	0-20%	<0%
Small Caps (251st company onwards)	>25%	0-25%	<0%

Research Disclaimer and Disclosure inter-alia as required under Securities and Exchange Board of India (Research Analysts) Regulations, 2014

Anand Rathi Share and Stock Brokers Ltd. (hereinafter refer as ARSSBL) (Research Entity, SEBI Regn No. INH000000834, Date of Regn. 29/06/2015) is a subsidiary of the Anand Rathi Financial Services Ltd. ARSSBL is a corporate trading and clearing member of Bombay Stock Exchange Ltd (BSE), National Stock Exchange of India Ltd. (NSEIL), Metropolitan Stock Exchange of India Ltd. (MSE), and also depository participant with National Securities Depository Ltd (NSDL) and Central Depository Services Ltd. (CDSL), ARSSBL is engaged into the business of Stock Broking, Depository Participant, Mutual Fund distributor.

The research analysts, strategists, or research associates principally responsible for the preparation of Anand Rathi research have received compensation based upon various factors, including quality of research, investor client feedback, stock picking, competitive factors and firm revenues.

General Disclaimer: This Research Report (hereinafter called "Report") is meant solely for use by the recipient and is not for circulation. This Report does not constitute a personal recommendation or take into account the particular investment objectives, financial situations, or needs of individual clients. The recommendations, if any, made herein are expression of views and/or opinions and should not be deemed or construed to be neither advice for the purpose of purchase or sale of any security, derivatives or any other security through ARSSBL nor any solicitation or offering of any investment /trading opportunity on behalf of the issuer(s) of the respective security (ies) referred to herein. These information / opinions / views are not meant to serve as a professional investment guide for the readers. No action is solicited based upon the information provided herein. Recipients of this Report should rely on information/data arising out of their own investigations. Readers are advised to seek independent professional advice and arrive at an informed trading/investment decision before executing any trades or making any investments. This Report has been prepared on the basis of publicly available information, internally developed data and other sources believed by ARSSBL to be reliable. ARSSBL or its directors, employees, affiliates or representatives do not assume any responsibility for, or warrant the accuracy, completeness, adequacy and reliability of such information / opinions / views. While due care has been taken to ensure that the disclosures and opinions given are fair and reasonable, none of the directors, employees, affiliates or representatives of ARSSBL shall be liable for any direct, indirect, special, incidental, consequential, punitive or exemplary damages, including lost profits arising in any way whatsoever from the information / opinions / views contained in this Report. The price and value of the investments referred to in this Report and the income from them may go down as well as up, and investors may realize losses on any investments. Past performance is not a guide for future performance. ARSSBL does not provide tax advice to its clients, and all investors are strongly advised to consult with their tax advisers regarding taxation aspects of any potential investment.

Opinions expressed are our current opinions as of the date appearing on this Research only. We do not undertake to advise you as to any change of our views expressed in this Report. Research Report may differ between ARSSBL's RAs and/ or ARSSBL's associate companies on account of differences in research methodology, personal judgment and difference in time horizons for which recommendations are made. User should keep this risk in mind and not hold ARSSBL, its employees and associates responsible for any losses, damages of any type whatsoever.

ARSSBL and its associates or employees may; (a) from time to time, have long or short positions in, and buy or sell the investments in/ security of company (ies) mentioned herein or (b) be engaged in any other transaction involving such investments/ securities of company (ies) discussed herein or act as advisor or lender / borrower to such company (ies) these and other activities of ARSSBL and its associates or employees may not be construed as potential conflict of interest with respect to any recommendation and related information and opinions. Without limiting any of the foregoing, in no event shall ARSSBL and its associates or employees or any third party involved in, or related to computing or compiling the information have any liability for any damages of any kind.

Details of Associates of ARSSBL and Brief History of Disciplinary action by regulatory authorities & its associates are available on our website i.e. www.rathionline.com

Disclaimers in respect of jurisdiction: This report is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would subject ARSSBL to any registration or licensing requirement within such jurisdiction(s). No action has been or will be taken by ARSSBL in any jurisdiction (other than India), where any action for such purpose(s) is required. Accordingly, this Report shall not be possessed, circulated and/or distributed in any such country or jurisdiction unless such action is in compliance with all applicable laws and regulations of such country or jurisdiction. ARSSBL requires such recipient to inform himself about and to observe any restrictions at his own expense, without any liability to ARSSBL. Any dispute arising out of this Report shall be subject to the exclusive jurisdiction of the Courts in India.

Statements on ownership and material conflicts of interest, compensation - ARSSBL and Associates

Answers to the Best of the knowledge and belief of ARSSBL/ its Associates/ Research Analyst who is preparing this report

Research analyst or research entity or his associate or his relative has any financial interest in the subject company and the nature of such financial interest.	No
ARSSBL/its Associates/ Research Analyst/ his Relative have actual/beneficial ownership of one per cent or more securities of the subject company, at the end of the month immediately preceding the date of publication of the research report?	No
ARSSBL/its Associates/ Research Analyst/ his Relative have actual/beneficial ownership of one per cent or more securities of the subject company	No
ARSSBL/its Associates/ Research Analyst/ his Relative have any other material conflict of interest at the time of publication of the research report?	No
ARSSBL/its Associates/ Research Analyst/ his Relative have received any compensation from the subject company in the past twelve months	No
ARSSBL/its Associates/ Research Analyst/ his Relative have managed or co-managed public offering of securities for the subject company in the past twelve months	No
ARSSBL/its Associates/ Research Analyst/ his Relative have received any compensation for investment banking or merchant banking or brokerage services from the subject company in the past twelve months	No
ARSSBL/its Associates/ Research Analyst/ his Relative have received any compensation for products or services other than investment banking or merchant banking or brokerage services from the subject company in the past twelve months	No
ARSSBL/its Associates/ Research Analyst/ his Relative have received any compensation or other benefits from the subject company or third party in connection with the research report	No
ARSSBL/its Associates/ Research Analyst/ his Relative have served as an officer, director or employee of the subject company.	No
ARSSBL/its Associates/ Research Analyst/ his Relative has been engaged in market making activity for the subject company.	No

Other Disclosures pertaining to distribution of research in the United States of America

Research report is a product of Anand Rathi Share and Stock Brokers Ltd. (hereinafter refer as ARSSBL) under Marco Polo Securities 15a6 chaperone service which is the employer of the research analyst(s) who has prepared the research report. The research analyst(s) preparing the research report is/are resident outside the United States (U.S.) and are not associated persons of any U.S. regulated broker-dealer and therefore the analyst(s) is/are not subject to supervision by a U.S. broker-dealer, and is/are not required to satisfy the regulatory licensing requirements of FINRA or required to otherwise comply with U.S. rules or regulations regarding, among other things, communications with a subject company, public appearances and trading securities held by a research analyst account.

Research reports are intended for distribution by only to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the U.S. Securities and Exchange Act, 1934 (the Exchange Act) and interpretations thereof by U.S. Securities and Exchange Commission (SEC) in reliance on Rule 15a 6(a)(2). If the recipient of this report is not a Major Institutional Investor as specified above, then it should not act upon this report and return the same to the sender. Further, this report may not be copied, duplicated and/or transmitted onward to any U.S. person, which is not the Major Institutional Investor. In reliance on the exemption from registration provided by Rule 15a-6 of the Exchange Act and interpretations thereof by the SEC in order to conduct certain business with Major Institutional Investors, ARSSBL has entered into a chaperoning agreement with a U.S. registered broker-dealer, Marco Polo Securities Inc. ("Marco Polo").

1. ARSSBL or its Affiliates may or may not have been beneficial owners of the securities mentioned in this report.

2. ARSSBL or its affiliates may have or not managed or co-managed a public offering of the securities mentioned in the report in the past 12 months.

3. ARSSBL or its affiliates may have or not received compensation for investment banking services from the issuer of these securities in the past 12 months and do not expect to receive compensation for investment banking services from the issuer of these securities within the next three months.

4. However, one or more of ARSSBL or its Affiliates may, from time to time, have a long or short position in any of the securities mentioned herein and may buy or sell those securities or options thereon, either on their own account or on behalf of their clients.

5. ARSSBL or its Affiliates may or may not, to the extent permitted by law, act upon or use the above material or the conclusions stated above, or the research or analysis on which they are based before the material is published to recipients and from time to time, provide investment banking, investment management or other services for or solicit to seek to obtain investment banking, or other securities business from, any entity referred to in this report.

As of the publication of this report, ARSSBL does not make a market in the subject securities.

Additional information on recommended securities/instruments is available on request.

Compliance officer-Deepak Kedia, email id - deepakkedia@rathi.com, Contact no. +91 22 6281 7000

Grievance officer-Madhu Jain-email id- grievance@rathi.com, Contact no. +91 22 6281 7191

ARSSBL registered address: Express Zone, A Wing, 9th Floor, Western Express Highway, Diagonally Opposite Oberoi Mall, Malad (E), Mumbai – 400097.
Tel No: +91 22 6281 7000 | Fax No: +91 22 4001 3770 | CIN: U67120MH1991PLC064106.