

Estimate change	↔
TP change	↔
Rating change	↔

CMP: INR1,504 TP: INR1,850 (+23%) Buy

Strong volume growth offset by volatile PVC prices

Operating performance misses estimate

- Astral reported a decent quarter with volume growth of ~17% YoY to 61.7k MT, whereas realization declined 7% to INR174/kg, resulting in overall revenue growth of ~10% YoY. EBITDA margin slightly contracted by 30bp YoY due to inventory loss of ~INR200-250m, offset by high VAP salience.
- The company is expected to see healthy growth momentum in 4Q/FY27, led by an improving demand outlook for pipes (gaining market share and recovery in PVC prices), improving performance of UK adhesive business, steady growth in India adhesive business, and healthy outlook of paint business. The company is witnessing a good 4QFY26 to date for its piping segment and remains confident of maintaining its earlier guidance of double-digit revenue growth in FY26.
- We largely maintain our FY26/FY27/FY28 EBITDA estimates and **reiterate our BUY rating with an SoTP-based TP of INR1,850.**

Lower realization leads to subdued operating performance

- Consolidated revenue was up 10% YoY/down 2% QoQ at INR15.4b in 3Q (est. INR16.2b). EBITDA grew 8% YoY/fell 8% QoQ to INR2.4b (est. INR2.5b). EBITDA margin contracted 30bp YoY/90bp QoQ to 15.4% (est. 15.6%), impacted by a 30bp YoY increase in other expense. Adj. PAT grew 5% YoY/declined 11% QoQ to INR1.2b (est. INR1.4b).
- Plumbing business revenue stood at INR10.7b (+8% YoY, -4% QoQ), EBIT was INR1.4b (flat YoY, -12% QoQ), and EBIT margin came in at 12.9% (-130bp, -110bp QoQ). Volume grew 17% YoY/1% QoQ to 61,688MT, while EBIT/kg was down 15%/12% YoY/QoQ at INR22.5.
- Paint and adhesive business revenue stood at INR4.7b (+15% YoY, +2% QoQ), EBIT stood at INR297 (+26% YoY, -5% QoQ), and EBIT margin was 6.3% (+60bp, -50bp QoQ). UK/India adhesive business grew 17%/14% YoY to INR900m/INR3.2b with EBITDA growth of 2.2x/20% YoY to INR11m/INR550m.
- In 9MFY26, volume/revenue/EBITDA grew 12%/8%/5% YoY to 178,986MT/INR26.9b/INR6.8b, while PAT remained at INR3.4b. For 4QFY26, implied volume/revenue/EBITDA/PAT growth is ~20%/19%/20%/21%.

Bloomberg	ASTRA IN
Equity Shares (m)	269
M.Cap.(INRb)/(USDb)	403.9 / 4.5
52-Week Range (INR)	1595 / 1232
1, 6, 12 Rel. Per (%)	3/1/-9
12M Avg Val (INR M)	1056

Financials & Valuations (INR b)

Y/E Mar	FY26E	FY27E	FY28E
Sales	64.8	77.1	89.9
EBITDA	10.4	12.6	15.4
PAT	5.5	7.6	9.6
EBITDA (%)	16.1	16.4	17.2
EPS (INR)	20.5	28.1	35.7
EPS Gr. (%)	5.5	36.9	26.8
BV/Sh. (INR)	200	231	272

Ratios

Net D/E	-0.2	-0.3	-0.4
RoE (%)	14.5	17.5	19.0
RoCE (%)	15.0	17.5	19.0
Payout (%)	24.9	17.8	14.0

Valuations

P/E (x)	73.2	53.5	42.2
EV/EBITDA (x)	38.1	30.8	24.7
Div Yield (%)	0.3	0.3	0.3
FCF Yield (%)	1.2	1.7	2.2

Shareholding Pattern (%)

As on	Dec-25	Sep-25	Dec-24
Promoter	54.2	54.2	54.1
DII	19.5	17.8	13.9
FII	15.2	16.6	21.1
Others	11.0	11.4	10.9

Note: FII includes depository receipts

Highlights from the management commentary

- **Outlook:** Astral expects a strong exit in 4QFY26. FY26 volume growth guidance of 12-15% remains intact, with Jan'26 volumes already growing over 20%, and management continues to target 20%+ volume growth in 4QFY26. EBITDA margins are guided at ~16-18% for FY26, with upside toward ~18% in 4Q supported by inventory normalization.
- **Pricing/Industry:** Management believes PVC prices have bottomed out, with restocking activity starting; dealers are still running lean inventories, while demand is improving. Prices are expected to move up by INR1–2/kg and then stabilize.
- **CPVC:** The segment delivered double-digit growth in 3QFY26. Management stated Astral has not lost market share; in fact, it gained share over the last few quarters. The company will remain aggressive in CPVC pricing and volumes until backward integration kicks in. With backward integration, the company will prioritize gaining market share in CPVC by leveraging its margin spread.

Valuation and view

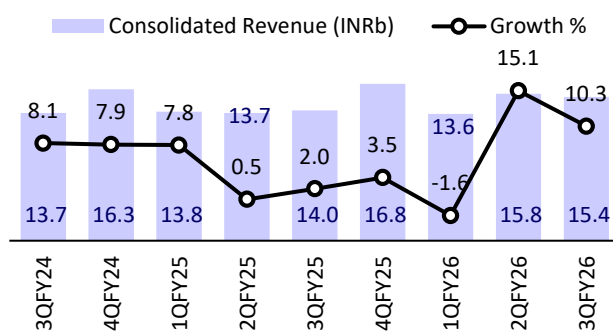
- Astral continues to strengthen its industry leadership through innovation, backward integration (CPVC resin), and capacity decentralization. Its investments in CPVC and new product categories underscore a long-term vision to reduce dependence on imports and enhance value addition. With consistent double-digit growth guidance and robust execution history, Astral remains one of the most agile players in India's plastic pipes industry.
- We expect Astral to deliver a CAGR of 16%/18%/22% in revenue/EBITDA/PAT over FY25-28. **We reiterate our BUY rating on the stock with an SoTP-based TP of INR1,850 (premised on 52x FY28E EPS).**

Consolidated - Quarterly Earning Model

Y/E March	FY25				FY26				(INR m)			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4QE	FY25	FY26E	FY26E	Var
Gross Sales	13,836	13,704	13,970	16,814	13,612	15,774	15,415	20,040	58,324	64,841	16,207	-5
YoY Change (%)	7.8	0.5	2.0	3.5	-1.6	15.1	10.3	19.2	3.4	11.2	16.0	
Total Expenditure	11,692	11,603	11,775	13,795	11,763	13,206	13,042	16,417	48,865	54,428	13,681	
EBITDA	2,144	2,101	2,195	3,019	1,849	2,568	2,373	3,624	9,459	10,414	2,526	-6
Margins (%)	15.5	15.3	15.7	18.0	13.6	16.3	15.4	18.1	16.2	16.1	15.6	
Depreciation	556	599	631	648	719	723	734	780	2,434	2,956	739	
Interest	76	102	139	96	123	160	126	105	413	514	74	
Other Income	119	88	118	88	91	114	95	150	413	450	170	
PBT before EO expense	1,631	1,488	1,543	2,363	1,098	1,799	1,608	2,889	7,025	7,394	1,883	
Extra-Ord expense	0	0	0	163	0	0	165	0	0	165	0	
PBT	1,631	1,488	1,543	2,200	1,098	1,799	1,443	2,889	7,025	7,229	1,883	
Tax	436	401	416	583	306	451	366	723	1,836	1,846	474	
Rate (%)	26.7	26.9	27.0	26.5	27.9	25.1	25.4	25.0	26.1	25.5	25.2	
Minority Interest & Profit/Loss of Asso. Cos.	-9	-13	-14	-13	-19	0	0	0	-49	-19	-15	
Reported PAT	1,204	1,100	1,141	1,630	811	1,348	1,077	2,166	5,238	5,402	1,423	
Adj PAT	1,204	1,100	1,141	1,793	811	1,348	1,201	2,166	5,238	5,526	1,423	-16
YoY Change (%)	0.5	-16.2	0.5	-1.3	-32.6	22.5	5.2	20.8	-4.3	5	25	
Margins (%)	8.7	8.0	8.2	10.7	6.0	8.5	7.8	10.8	9.0	8.5	8.8	

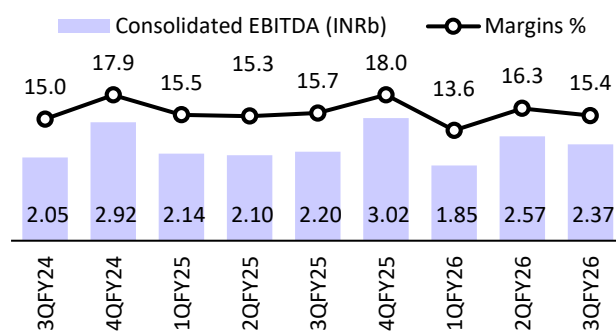
Key Exhibits

Exhibit 1: Consolidated revenue trend



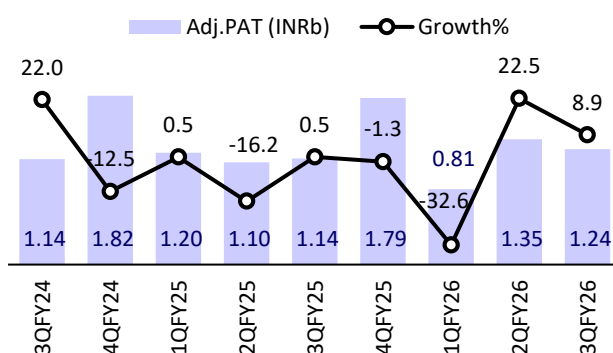
Source: Company, MOFSL

Exhibit 2: Consolidated EBITDA trend



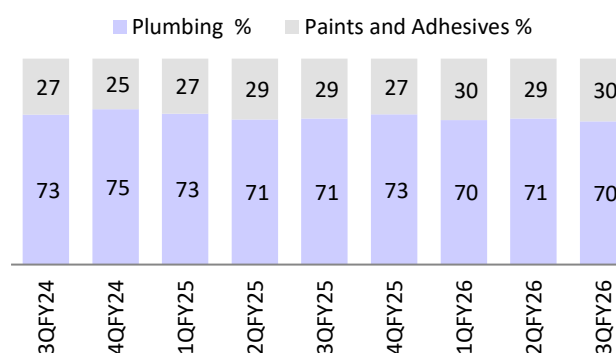
Source: Company, MOFSL

Exhibit 3: Consolidated Adj. PAT trend



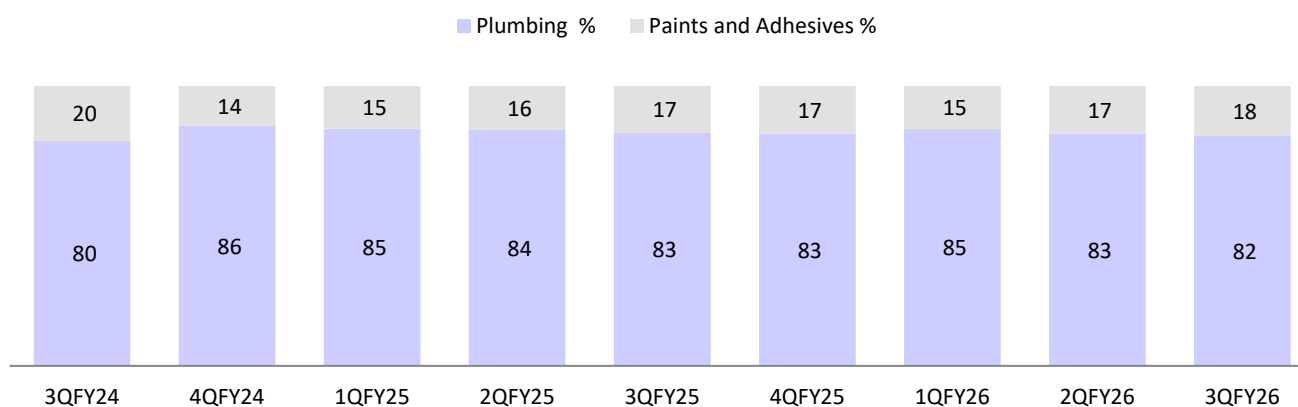
Source: Company, MOFSL

Exhibit 4: Revenue mix %



Source: Company, MOFSL

Exhibit 5: EBITDA mix %



Source: Company, MOFSL

Exhibit 6: Plumbing revenue trend

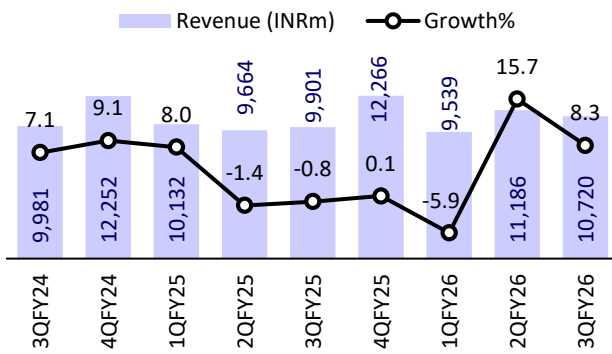


Exhibit 7: Plumbing volume trend

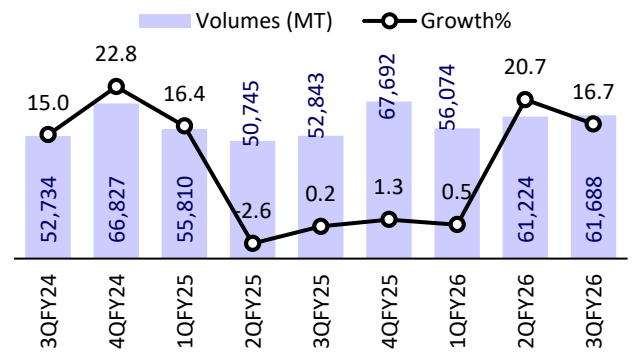


Exhibit 8: Plumbing EBITDA trend

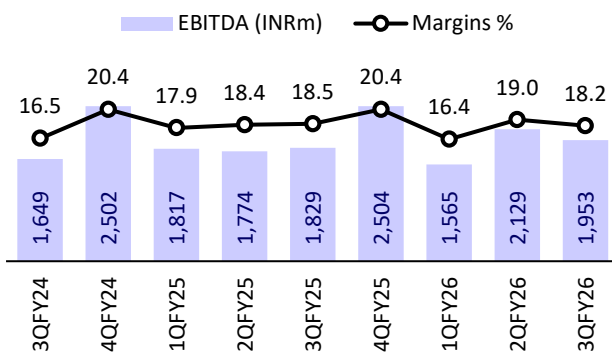


Exhibit 9: Plumbing realization/kg trend

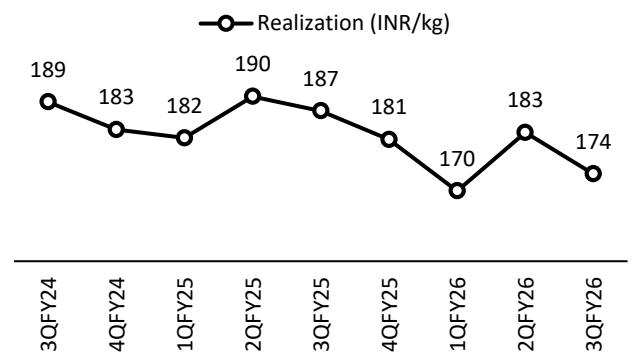


Exhibit 10: Plumbing EBITDA/kg trend

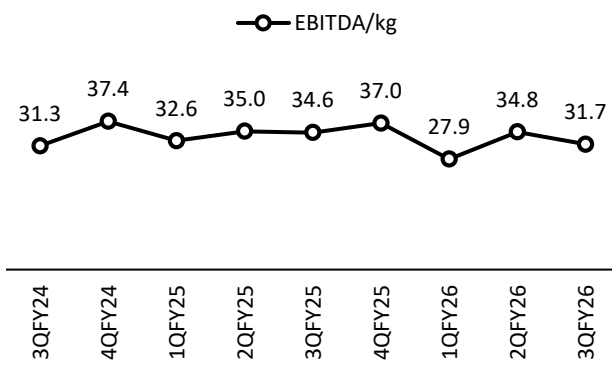


Exhibit 11: Plumbing EBIT/kg trend

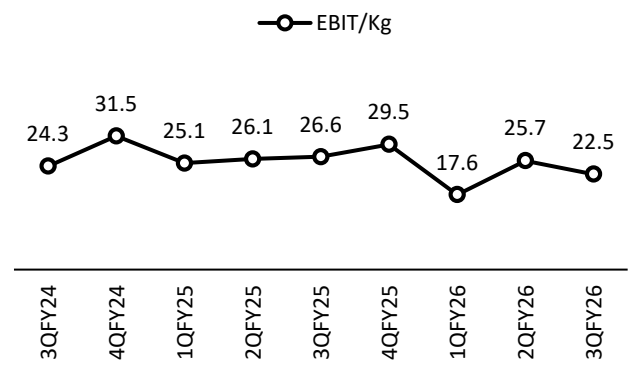


Exhibit 12: Paints and Adhesive revenue trend

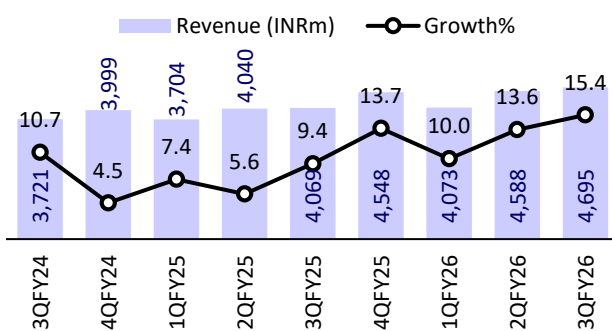
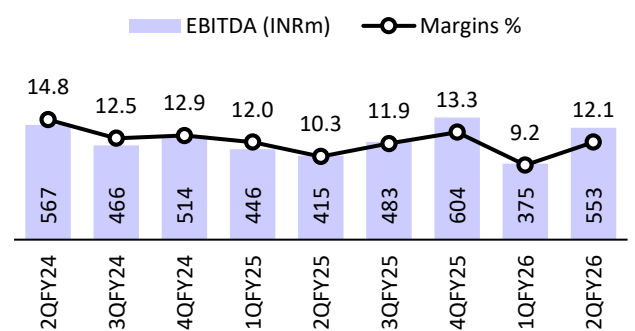


Exhibit 13: Paints and Adhesive EBITDA trend



Source: Company, MOFSL

Source: Company, MOFSL



Highlights from the management commentary

Guidance and outlook

- Management is confident of a strong exit in 4Q, with better QoQ performance across segments.
- Retains 12-15% volume growth outlook for FY26 and 20%+ for 4QFY26 (already above 20% in Jan'26), supported by strong demand and market share gains.
- Maintains FY26 EBITDA margin guidance at ~16-18%, with potential for ~18% margins in 4Q, aided by inventory normalization.
- While some inventory gains may arise in 4Q, management indicated it may sacrifice part of this gain to remain aggressive on volumes and market share.
- Industry growth remained in a single digit in 3Q, but large organized players like Astral continued to outgrow the industry, while smaller players faced pressure.
- Government capex remained muted, but B2B and B2C demand stayed healthy, supporting overall growth.

PVC/CPVC prices and inventory

- Management believes PVC prices have bottomed out, with restocking activity starting; dealers are still running lean inventories given better demand visibility. Prices are expected to move up by INR1–2/kg and then stabilize.
- The company incurred an INR200-250m inventory loss in 3QFY26 due to the sharp fall in PVC/CPVC prices. Of the INR7/kg price move, INR5/kg has already been passed on, with the remaining INR2/kg to be passed on shortly.
- No meaningful low-priced imports from China were seen earlier; however, a bulk of lower-cost Chinese material arrived during Jan-Feb, with current import prices at USD680-690/MT. Formosa guidance likely near USD700/MT next month, and the impact of the withdrawal of Chinese export rebates under close watch.

Plumbing

- Astral has undertaken ~INR14b in capex over the last four years, which is now translating into capacity availability, wider product basket, and operating leverage.
- Hyderabad plant is currently operating at ~50-55% utilization. Ramp-up is progressing steadily and expected to contribute meaningfully over coming quarters.
- In Kanpur plant, newly added capacity is already fully absorbed. Additional capacity was added during 3QFY26 and a further ramp-up is underway.
- CPVC segment delivered double-digit growth in 3QFY26. Management stated Astral has not lost market share; in fact, it gained share over the last few quarters. The company will remain aggressive in CPVC pricing and volumes until backward integration kicks in.
- Construction is substantially complete of CPVC Resin Plant (Backward Integration), and trial runs expected by Diwali (3QFY27) and commercial operations by 4QFY27. The full contribution from it is expected from FY28.
- The objective of CPVC resin plant is not only margin improvement but also market share expansion, with scope to pass on cost benefits to customers to drive volumes.
- In OPVC, performance is better than peers. The company has secured private orders, and machines are operational. It is a low-capex model with no license or

royalty costs and machines are fungible, allowing use for other products during weak OPVC demand. They got OPVC approvals across all relevant states.

- Al-Aziz Plastics received DVGW certification from Germany for electro-fusion products. Thus, certification positions Al-Aziz among globally trusted manufacturers, opening domestic and export opportunities.
- Government has allocated INR670b2 under Jal Jeevan Mission in the current budget. Management expects actual spending to pick up during the year, supporting demand.

Adhesives and paints

- India adhesives revenue grew to INR3.19b from INR2.8b YoY, while EBITDA increased to INR550m from INR460m, supported by operating leverage and better cost management.
- UK adhesives business reported 16% YoY revenue growth in 3Q and EBITDA improved to INR11m from INR5m YoY with margins turning flat after exiting loss-making levels. Management expects strong 4Q performance with mid- to high-single-digit EBITDA margins going forward.
- In US adhesives business, certain manpower rationalization measures have been implemented, and management expects improvement in growth momentum and margin profile in the coming quarters.
- In the Middle East adhesives business, an office has been established in Dubai to scale up the business across the Middle East and nearby export markets.
- Management reiterated EBITDA margin guidance of ~12-14% for FY26 for the overall segment, supported by improving international profitability and operating efficiencies.
- Paint revenue grew 21.6% YoY in 3QFY26 to INR610m (vs INR500m), with management guiding for 20%+ growth again in 4QFY26.
- In paint, EBITDA loss of INR40m (vs. INR20 profit YoY) was due to manpower build-up to support scale-up; cost rationalization over the next 2-3 quarters is expected to restore profitability.

New product launch

- The company has launched STP Pro in collaboration with a US-based partner, offering an energy-efficient, corrosion-free (plastic tank) sewage treatment solution with low maintenance, low operating costs, and remote monitoring.
- With STP pro residential, commercial, and industrial segments are being targeted, with demand supported by government mandates, water-reuse norms, and regulatory compliance requirements.
- While near-term revenue contribution from STP pro will be modest, management noted that STP is a large, scalable market in developed economies and expects meaningful ramp-up over the next few quarters, with market size estimates to be shared in 1–2 quarters.
- In PEX Aluminium progress, the machine installation is complete, and the commercial launch is expected by the end of 4QFY26.
- The bathware segment continues to perform well; management reiterated strong momentum across all businesses
- FY26 capex guidance of INR3.5b remains intact, with INR2.9b already deployed in 9MFY26.

Valuation and view

- Astral continues to strengthen its industry leadership through innovation, backward integration (CPVC resin), and capacity decentralization. Its investments in CPVC and new product categories underscore a long-term vision to reduce dependence on imports and enhance value addition. With consistent double-digit growth guidance and robust execution history, Astral remains one of the most agile players in India's plastic pipes industry.
- We expect ASTRA to clock a CAGR of 16%/18%/22% in revenue/EBITDA/PAT over FY25-28. **We reiterate our BUY rating on the stock with an SoTP-based TP of INR1,850 (premised on 52x FY28E EPS).**

Exhibit 14: Revisions to our estimates

Earnings change (INRm)	Old			New			Change		
	FY26E	FY27E	FY28E	FY26E	FY27E	FY28E	FY26E	FY27E	FY28E
Revenue	65,968	77,088	88,735	64,841	77,119	89,897	-2%	0%	1%
EBITDA	10,648	12,700	15,111	10,414	12,649	15,427	-2%	0%	2%
Adj. PAT	5,893	7,646	9,396	5,526	7,563	9,592	-6%	-1%	2%

Financials and valuations

Consolidated - Income Statement

(INRm)

Y/E March	FY20	FY21	FY22	FY23	FY24	FY25	FY26E	FY27E	FY28E
Total Income from Operations	25,779	31,763	43,940	51,585	56,414	58,324	64,841	77,119	89,897
Change (%)	2.8	23.2	38.3	17.4	9.4	3.4	11.2	18.9	16.6
Total RM Cost	15,957	19,689	29,280	34,347	34,590	35,192	38,819	46,358	54,104
Gross profit	9,822	12,074	14,660	17,238	21,824	23,132	26,022	30,761	35,793
Margin (%)	38.1	38.0	33.4	33.4	38.7	39.7	40.1	39.9	39.8
Employees Cost	1,752	1,910	2,453	3,193	4,384	5,179	5,882	6,170	6,832
Other Expenses	3,641	3,719	4,654	5,946	8,257	8,494	9,726	11,943	13,534
Total Expenditure	21,350	25,318	36,387	43,486	47,231	48,865	54,428	64,471	74,470
% of Sales	82.8	79.7	82.8	84.3	83.7	83.8	83.9	83.6	82.8
EBITDA	4,429	6,445	7,553	8,099	9,183	9,459	10,414	12,649	15,427
Margin (%)	17.2	20.3	17.2	15.7	16.3	16.2	16.1	16.4	17.2
Depreciation	1,079	1,165	1,269	1,781	1,976	2,434	2,956	3,105	3,288
EBIT	3,350	5,280	6,284	6,318	7,207	7,025	7,458	9,544	12,139
Int. and Finance Charges	211	116	129	400	291	413	514	132	132
Other Income	121	251	349	267	421	413	450	691	805
PBT bef. EO Exp.	3,260	5,415	6,504	6,185	7,337	7,025	7,394	10,103	12,813
EO Items	-183	-15	0	-18	0	0	165	0	0
PBT after EO Exp.	3,077	5,400	6,504	6,167	7,337	7,025	7,229	10,103	12,813
Total Tax	565	1,248	1,581	1,557	1,880	1,836	1,846	2,540	3,221
Tax Rate (%)	18.4	23.1	24.3	25.2	25.6	26.1	25.5	25.1	25.1
Minority Interest	33	108	85	44	-4	-49	-19	0	0
Reported PAT	2,479	4,044	4,838	4,566	5,461	5,238	5,402	7,563	9,592
Adjusted PAT	2,662	4,059	4,838	4,584	5,461	5,238	5,526	7,563	9,592
Change (%)	31.8	52.5	19.2	-5.3	19.1	-4.1	5.5	36.9	26.8
Margin (%)	10.3	12.8	11.0	8.9	9.7	9.0	8.5	9.8	10.7

Consolidated - Balance Sheet

(INRm)

Y/E March	FY20	FY21	FY22	FY23	FY24	FY25	FY26E	FY27E	FY28E
Equity Share Capital	151	201	201	269	269	269	269	269	269
Total Reserves	14,878	18,757	23,165	26,843	31,612	35,901	39,958	46,176	54,423
Net Worth	15,029	18,958	23,366	27,112	31,881	36,170	40,227	46,445	54,692
Minority Interest	168	212	278	2,477	804	757	757	757	757
Total Loans	1,856	397	851	773	964	1,439	439	439	439
Deferred Tax Liabilities	430	401	401	409	460	551	551	551	551
Capital Employed	17,483	19,968	24,896	30,771	34,109	38,917	41,974	48,192	56,439
Gross Block	14,218	15,769	18,866	24,578	29,979	35,831	38,509	41,094	43,211
Less: Accum. Deprn.	4,627	5,792	7,061	8,842	10,818	13,252	16,208	19,312	22,600
Net Fixed Assets	9,591	9,977	11,805	15,736	19,161	22,579	22,301	21,782	20,611
Goodwill on Consolidation	2,553	2,570	2,567	3,125	3,133	3,146	3,146	3,146	3,146
Capital WIP	444	566	1,232	1,261	1,506	1,160	1,982	1,396	1,279
Curr. Assets, Loans&Adv.	10,303	13,615	18,268	23,609	21,179	23,675	27,562	37,425	49,537
Inventory	5,404	4,721	7,334	8,746	9,134	10,111	10,659	12,677	14,778
Account Receivables	2,278	2,767	2,691	3,545	3,758	4,353	4,441	5,282	6,157
Cash and Bank Balance	1,301	4,760	6,418	6,821	6,096	6,083	8,571	14,838	23,208
Loans and Advances	1,320	1,367	1,825	4,497	2,191	3,128	3,890	4,627	5,394
Curr. Liability & Prov.	5,409	6,760	8,976	12,960	10,870	11,643	13,017	15,557	18,134
Account Payables	4,754	5,172	7,484	8,000	8,719	8,589	9,677	11,585	13,505
Other Current Liabilities	589	1,519	1,457	4,903	2,090	2,944	3,242	3,856	4,495
Provisions	66	69	35	57	61	110	97	116	135
Net Current Assets	4,894	6,855	9,292	10,649	10,309	12,032	14,545	21,868	31,402
Appl. of Funds	17,483	19,968	24,896	30,771	34,109	38,917	41,974	48,192	56,439

Financials and valuations

Ratios

Y/E March	FY20	FY21	FY22	FY23	FY24	FY25	FY26E	FY27E	FY28E
Basic (INR)									
EPS	9.9	15.1	18.0	17.0	20.3	19.5	20.5	28.1	35.7
Cash EPS	13.9	19.4	22.7	23.7	27.6	38.2	42.2	53.1	64.1
BV/Share	55.9	70.5	86.9	100.8	118.5	180.0	200.2	231.2	272.2
DPS	1.0	1.0	2.3	3.5	3.8	3.8	5.0	5.0	5.0
Payout (%)	13.0	6.7	12.5	20.6	18.5	19.3	24.9	17.8	14.0
Valuation (x)									
P/E	152.0	99.7	83.6	88.3	74.1	77.2	73.2	53.5	42.2
Cash P/E	108.1	77.4	66.2	63.6	54.4	39.4	35.6	28.3	23.5
P/BV	26.9	21.3	17.3	14.9	12.7	8.4	7.5	6.5	5.5
EV/Sales	15.7	12.6	9.1	7.7	7.1	6.9	6.1	5.1	4.2
EV/EBITDA	91.5	62.1	52.8	49.2	43.5	42.3	38.1	30.8	24.7
Dividend Yield (%)	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3
FCF per share	7.1	18.3	6.2	9.1	10.0	3.2	18.1	26.2	33.6
Return Ratios (%)									
RoE	19.1	23.9	22.9	18.2	18.5	15.4	14.5	17.5	19.0
RoCE	17.5	23.5	23.0	18.9	18.7	15.6	15.0	17.5	19.0
RoIC	18.1	26.7	29.8	23.7	21.8	17.8	17.6	22.5	28.4
Working Capital Ratios									
Fixed Asset Turnover (x)	1.8	2.0	2.3	2.1	1.9	1.6	1.7	1.9	2.1
Asset Turnover (x)	1.5	1.6	1.8	1.7	1.7	1.5	1.5	1.6	1.6
Inventory (Days)	77	54	61	62	59	63	60	60	60
Debtor (Days)	32	32	22	25	24	27	25	25	25
Creditor (Days)	67	59	62	57	56	54	54	55	55
Leverage Ratio (x)									
Current Ratio	1.9	2.0	2.0	1.8	1.9	2.0	2.1	2.4	2.7
Interest Cover Ratio	15.9	45.5	48.7	15.8	24.8	17.0	14.5	72.5	92.2
Net Debt/Equity	0.0	-0.2	-0.2	-0.2	-0.2	-0.1	-0.2	-0.3	-0.4

Consolidated - Cash Flow Statement

(INRm)

Y/E March	FY20	FY21	FY22	FY23	FY24	FY25	FY26E	FY27E	FY28E
OP/(Loss) before Tax	3,061	5,330	6,504	6,152	7,336	7,025	7,394	10,103	12,813
Depreciation	1,079	1,165	1,269	1,781	1,976	2,434	2,956	3,105	3,288
Interest & Finance Charges	394	131	-220	400	291	413	64	-559	-674
Direct Taxes Paid	-815	-1,162	-1,581	-1,654	-1,772	-1,701	-1,846	-2,540	-3,221
(Inc)/Dec in WC	188	1,142	-541	-1,026	500	-1,718	-25	-1,056	-1,165
CF from Operations	3,907	6,606	5,431	5,653	8,331	6,453	8,543	9,053	11,041
Others	147	36	0	-84	-97	-157	-165	0	0
CF from Operating incl EO	4,054	6,642	5,431	5,569	8,234	6,296	8,378	9,053	11,041
(Inc)/Dec in FA	-2,133	-1,711	-3,760	-3,110	-5,539	-5,448	-3,500	-2,000	-2,000
Free Cash Flow	1,921	4,931	1,671	2,459	2,695	848	4,878	7,053	9,041
(Pur)/Sale of Investments	18	48	0	0	0	0	0	0	0
Others	-1,062	-2,878	4,475	-1,687	129	322	450	691	805
CF from Investments	-3,177	-4,541	715	-4,797	-5,410	-5,126	-3,050	-1,309	-1,195
Issue of Shares	0	1	0	0	0	0	0	0	0
Inc/(Dec) in Debt	-936	-1,188	454	-384	191	440	-1,000	0	0
Interest Paid	-409	-140	-129	-366	-267	-342	-514	-132	-132
Dividend Paid	-240	-151	-605	-603	-1,007	-1,007	-1,345	-1,345	-1,345
Others	1,117	3,998	-4,208	984	-2,466	-272	19	0	0
CF from Fin. Activity	-468	2,520	-4,488	-369	-3,549	-1,181	-2,840	-1,477	-1,477
Inc/Dec of Cash	409	4,621	1,658	403	-725	-11	2,488	6,267	8,370
Opening Balance	892	139	4,760	6,418	6,821	6,094	6,083	8,571	14,838
Closing Balance	1,301	4,760	6,418	6,821	6,096	6,083	8,571	14,838	23,208

Investment in securities market are subject to market risks. Read all the related documents carefully before investing.

NOTES

Explanation of Investment Rating	
Investment Rating	Expected return (over 12-month)
BUY	>=15%
SELL	< - 10%
NEUTRAL	< - 10 % to 15%
UNDER REVIEW	Rating may undergo a change
NOT RATED	We have forward looking estimates for the stock but we refrain from assigning recommendation

*In case the recommendation given by the Research Analyst is inconsistent with the investment rating legend for a continuous period of 30 days, the Research Analyst shall be within following 30 days take appropriate measures to make the recommendation consistent with the investment rating legend.

Disclosures

The following Disclosures are being made in compliance with the SEBI Research Analyst Regulations 2014 (herein after referred to as the Regulations).

Motilal Oswal Financial Services Ltd. (MOFSL) is a SEBI Registered Research Analyst having registration no. INH000000412 and BSE enlistment no. 5028. MOFSL, the Research Entity (RE) as defined in the Regulations, is engaged in the business of providing Stock broking services, Depository participant services & distribution of various financial products. MOFSL is a listed public company, the details in respect of which are available on www.motilaloswal.com. MOFSL is registered with the Securities & Exchange Board of India (SEBI) and is a registered Trading Member with National Stock Exchange of India Ltd. (NSE) and Bombay Stock Exchange Limited (BSE), Multi Commodity Exchange of India Limited (MCX) and National Commodity & Derivatives Exchange Limited (NCDEX) for its stock broking activities & is Depository participant with Central Depository Services Limited (CDSL) National Securities Depository Limited (NSDL), NERL, COMRIS and CCRL and is member of Association of Mutual Funds of India (AMFI) for distribution of financial products and Insurance Regulatory & Development Authority of India (IRDA) as Corporate Agent for insurance products and is a member of Association of Portfolio Managers in India (APMI) for distribution of PMS products. Details of associate entities of Motilal Oswal Financial Services Ltd. are available on the website at <http://online.reports.motilaloswal.com/Dormant/documents/Associate%20Details.pdf>

MOFSL and its associate company(ies), their directors and Research Analyst and their relatives may; (a) from time to time, have a long or short position in, act as principal in, and buy or sell the securities or derivatives thereof of companies mentioned herein. (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies) or may have any other potential conflict of interests with respect to any recommendation and other related information and opinions.; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report.

MOFSL and / or its affiliates do and seek to do business including investment banking with companies covered in its research reports. As a result, the recipients of this report should be aware that MOFSL may have a potential conflict of interest that may affect the objectivity of this report. Compensation of Research Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions. Details of pending Enquiry Proceedings of Motilal Oswal Financial Services Limited are available on the website at <https://galaxy.motilaloswal.com/ResearchAnalyst/PublishViewLitigation.aspx>. As per Regulatory requirements, Research Audit Report is uploaded on www.motilaloswal.com > MOFSL-Important Links > MOFSL Research Analyst Compliance Audit Report.

A graph of daily closing prices of securities is available at www.nseindia.com, www.bseindia.com. Research Analyst views on Subject Company may vary based on Fundamental research and Technical Research. Proprietary trading desk of MOFSL or its associates maintains arm's length distance with Research Team as all the activities are segregated from MOFSL research activity and therefore it can have an independent view with regards to Subject Company for which Research Team have expressed their views.

Regional Disclosures (outside India)

This report is not directed or intended for distribution to or use by any person or entity resident in a state, country or any jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject MOFSL & its group companies to registration or licensing requirements within such jurisdictions.

For Hong Kong:

This report is distributed in Hong Kong by Motilal Oswal capital Markets (Hong Kong) Private Limited, a licensed corporation (CE AYY-301) licensed and regulated by the Hong Kong Securities and Futures Commission (SFC) pursuant to the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong) "SFO". As per SEBI (Research Analyst Regulations) 2014 Motilal Oswal Securities (SEBI Reg. No. INH000000412) has an agreement with Motilal Oswal capital Markets (Hong Kong) Private Limited for distribution of research report in Hong Kong. This report is intended for distribution only to "Professional Investors" as defined in Part I of Schedule 1 to SFO. Any investment or investment activity to which this document relates is only available to professional investor and will be engaged only with professional investors." Nothing here is an offer or solicitation of these securities, products and services in any jurisdiction where their offer or sale is not qualified or exempt from registration. The Indian Analyst(s) who compile this report is/are not located in Hong Kong & are not conducting Research Analysis in Hong Kong.

For U.S.

Motilal Oswal Financial Services Limited (MOFSL) is not a registered broker - dealer under the U.S. Securities Exchange Act of 1934, as amended (the "1934 act") and under applicable state laws in the United States. In addition MOFSL is not a registered investment adviser under the U.S. Investment Advisers Act of 1940, as amended (the "Advisers Act" and together with the 1934 Act, the "Acts"), and under applicable state laws in the United States. Accordingly, in the absence of specific exemption under the Acts, any brokerage and investment services provided by MOFSL, including the products and services described herein are not available to or intended for U.S. persons. This report is intended for distribution only to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the Exchange Act and interpretations thereof by SEC (henceforth referred to as "major institutional investors"). This document must not be acted on or relied on by persons who are not major institutional investors. Any investment or investment activity to which this document relates is only available to major institutional investors and will be engaged in only with major institutional investors. In reliance on the exemption from registration provided by Rule 15a-6 of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act") and interpretations thereof by the U.S. Securities and Exchange Commission ("SEC") in order to conduct business with Institutional Investors based in the U.S., MOFSL has entered into a chaperoning agreement with a U.S. registered broker-dealer, Motilal Oswal Securities International Private Limited. ("MOSIPL"). Any business interaction pursuant to this report will have to be executed within the provisions of this chaperoning agreement.

The Research Analysts contributing to the report may not be registered /qualified as research analyst with FINRA. Such research analyst may not be associated persons of the U.S. registered broker-dealer, MOSIPL, and therefore, may not be subject to NASD rule 2711 and NYSE Rule 472 restrictions on communication with a subject company, public appearances and trading securities held by a research analyst account.

For Singapore

In Singapore, this report is being distributed by Motilal Oswal Capital Markets (Singapore) Pte. Ltd. ("MOCMSPL") (UEN 201129401Z), which is a holder of a capital markets services license and an exempt financial adviser in Singapore. This report is distributed solely to persons who (a) qualify as "institutional investors" as defined in section 4A(1)(c) of the Securities and Futures Act of Singapore ("SFA") or (b) are considered "accredited investors" as defined in section 2(1) of the Financial Advisers Regulations of Singapore read with section 4A(1)(a) of the SFA. Accordingly, if a recipient is neither an "institutional investor" nor an "accredited investor", they must immediately discontinue any use of this Report and inform MOCMSPL.

In respect of any matter arising from or in connection with the research you could contact the following representatives of MOCMSPL. In case of grievances for any of the services rendered by MOCMSPL write to grievances@motilaloswal.com.

Nainesh Rajani

Email: nainesh.rajani@motilaloswal.com

Contact: (+65) 8328 0276

Specific Disclosures

- Research Analyst and/or his/her relatives do not have a financial interest in the subject company(ies), as they do not have equity holdings in the subject company(ies).
MOFSL has financial interest in the subject company(ies) at the end of the week immediately preceding the date of publication of the Research Report: Yes.
Nature of Financial interest is holding equity shares or derivatives of the subject company
- Research Analyst and/or his/her relatives do not have actual/beneficial ownership of 1% or more securities in the subject company(ies) at the end of the month immediately preceding the date of publication of Research Report.
MOFSL has actual/beneficial ownership of 1% or more securities of the subject company(ies) at the end of the month immediately preceding the date of publication of Research Report: No
- Research Analyst and/or his/her relatives have not received compensation/other benefits from the subject company(ies) in the past 12 months.
MOFSL may have received compensation from the subject company(ies) in the past 12 months.
- Research Analyst and/or his/her relatives do not have material conflict of interest in the subject company at the time of publication of research report.
MOFSL does not have material conflict of interest in the subject company at the time of publication of research report.
- Research Analyst has not served as an officer, director or employee of subject company(ies).
- MOFSL has not acted as a manager or co-manager of public offering of securities of the subject company in past 12 months.
- MOFSL has not received compensation for investment banking /merchant banking/brokerage services from the subject company(ies) in the past 12 months.
- MOFSL may have received any compensation for products or services other than investment banking or merchant banking or brokerage services from the subject company(ies) in the past 12 months.
- MOFSL may have received compensation or other benefits from the subject company(ies) or third party in connection with the research report.
- MOFSL has not engaged in market making activity for the subject company.

The associates of MOFSL may have:

- financial interest in the subject company
- actual/beneficial ownership of 1% or more securities in the subject company at the end of the month immediately preceding the date of publication of the Research Report or date of the public appearance.
- received compensation/other benefits from the subject company in the past 12 months
- any other potential conflict of interests with respect to any recommendation and other related information and opinions.; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report.
- acted as a manager or co-manager of public offering of securities of the subject company in past 12 months
- be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies)
- received compensation from the subject company in the past 12 months for investment banking / merchant banking / brokerage services or from other than said services.
- Served subject company as its clients during twelve months preceding the date of distribution of the research report.

The associates of MOFSL has not received any compensation or other benefits from third party in connection with the research report

Above disclosures include beneficial holdings lying in demat account of MOFSL which are opened for proprietary investments only. While calculating beneficial holdings, It does not consider demat accounts which are opened in name of MOFSL for other purposes (i.e holding client securities, collaterals, error trades etc.). MOFSL also earns DP income from clients which are not considered in above disclosures.

Analyst Certification

The views expressed in this research report accurately reflect the personal views of the analyst(s) about the subject securities or issues, and no part of the compensation of the research analyst(s) was, is, or will be directly or indirectly related to the specific recommendations and views expressed by research analyst(s) in this report.

Terms & Conditions:

This report has been prepared by MOFSL and is meant for sole use by the recipient and not for circulation. The report and information contained herein is strictly confidential and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent of MOFSL. The report is based on the facts, figures and information that are considered true, correct, reliable and accurate. The intent of this report is not recommendatory in nature. The information is obtained from publicly available media or other sources believed to be reliable. Such information has not been independently verified and no guaranty, representation of warranty, express or implied, is made as to its accuracy, completeness or correctness. All such information and opinions are subject to change without notice. The report is prepared solely for informational purpose and does not constitute an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments for the clients. Though disseminated to all the customers simultaneously, not all customers may receive this report at the same time. MOFSL will not treat recipients as customers by virtue of their receiving this report.

Disclaimer:

The report and information contained herein is strictly confidential and meant solely for the selected recipient and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent. This report and information herein is solely for informational purpose and may not be used or considered as an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments. Nothing in this report constitutes investment, legal, accounting and tax advice or a representation that any investment or strategy is suitable or appropriate to your specific circumstances. The securities discussed and opinions expressed in this report may not be suitable for all investors, who must make their own investment decisions, based on their own investment objectives, financial positions and needs of specific recipient. This may not be taken in substitution for the exercise of independent judgment by any recipient. Each recipient of this document should make such investigations as it deems necessary to arrive at an independent evaluation of an investment in the securities of companies referred to in this document (including the merits and risks involved), and should consult its own advisors to determine the merits and risks of such an investment. The investment discussed or views expressed may not be suitable for all investors. Certain transactions -including those involving futures, options, another derivative products as well as non-investment grade securities - involve substantial risk and are not suitable for all investors. No representation or warranty, express or implied, is made as to the accuracy, completeness or fairness of the information and opinions contained in this document. The Disclosures of Interest Statement incorporated in this document is provided solely to enhance the transparency and should not be treated as endorsement of the views expressed in the report. This information is subject to change without any prior notice. The Company reserves the right to make modifications and alternations to this statement as may be required from time to time without any prior approval. MOFSL, its associates, their directors and the employees may from time to time, effect or have effected an own account transaction in, or deal as principal or agent in or for the securities mentioned in this document. They may perform or seek to perform investment banking or other services for, or solicit investment banking or other business from, any company referred to in this report. Each of these entities functions as a separate, distinct and independent of each other. The recipient should take this into account before interpreting the document. This report has been prepared on the basis of information that is already available in publicly accessible media or developed through analysis of MOFSL. The views expressed are those of the analyst, and the Company may or may not subscribe to all the views expressed therein. This document is being supplied to you solely for your information and may not be reproduced, redistributed or passed on, directly or indirectly, to any other person or published, copied, in whole or in part, for any purpose. This report is not directed 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, regulation or which would subject MOFSL to any registration or licensing requirement within such jurisdiction. The securities described herein may or may not be eligible for sale in all jurisdictions or to certain category of investors. Persons in whose possession this document may come are required to inform themselves of and to observe such restriction. Neither the Firm, not its directors, employees, agents or representatives shall be liable for any damages whether direct or indirect, incidental, special or consequential including lost revenue or lost profits that may arise from or in connection with the use of the information. The person accessing this information specifically agrees to exempt MOFSL or any of its affiliates or employees from, any and all responsibility/liability arising from such misuse and agrees not to hold MOFSL or any of its affiliates or employees responsible for any such misuse and further agrees to hold MOFSL or any of its affiliates or employees free and harmless from all losses, costs, damages, expenses that may be suffered by the person accessing this information due to any errors and delays.

This report is meant for the clients of Motilal Oswal only.

Investment in securities market are subject to market risks. Read all the related documents carefully before investing.

Registration granted by SEBI, enlistment as RA with Exchange and certification from NISM in no way guarantee performance of the intermediary or provide any assurance of returns to investors

Registered Office Address: Motilal Oswal Tower, Rahimtullah Sayani Road, Opposite Parel ST Depot, Prabhadevi, Mumbai-400025; Tel No.: 022 - 71934200 / 71934263; www.motilaloswal.com. Correspondence Address: Palm Spring Centre, 2nd Floor, Palm Court Complex, New Link Road, Malad (West), Mumbai- 400 064. Tel No: 022 71881000. Details of Compliance Officer: Neeraj Agarwal, Email Id: na@motilaloswal.com, Contact No.:022-40548085.

Grievance Redressal Cell:

Contact Person	Contact No.	Email ID
Ms. Hemangi Date	022 40548000 / 022 67490600	query@motilaloswal.com
Ms. Kumud Upadhyay	022 40548082	servicehead@motilaloswal.com
Mr. Ajay Menon	022 40548083	am@motilaloswal.com
Mr. Neeraj Agarwal	022 40548085	na@motilaloswal.com
Mr. Siddhartha Khemka	022 50362452	po.research@motilaloswal.com

Registration details of group entities.: Motilal Oswal Financial Services Ltd. (MOFSL): INZ000158836 (BSE/NSE/MCX/NCDEX); CDSL and NSDL: IN-DP-16-2015; Research Analyst: INH000000412, BSE enlistment no. 5028, AMFI registered Mutual Fund Distributor and SIF Distributor: ARN : 146822. IRDA Corporate Agent – CA0579, APMI: APRN00233. Motilal Oswal Financial Services Ltd. is a distributor of Mutual Funds, PMS, Fixed Deposit, Insurance, Bond, NCDs and IPO products.

Customer having any query/feedback/ clarification may write to query@motilaloswal.com. In case of grievances for any of the services rendered by Motilal Oswal Financial Services Limited (MOFSL) write to grievances@motilaloswal.com, for DP to dpgrievances@motilaloswal.com.