

# **Happy Forgings**

Estimate changes

TP change

Rating change

Bloomberg	HAPPYFOR IN
Equity Shares (m)	94
M.Cap.(INRb)/(USDb)	106.9 / 1.3
52-Week Range (INR)	1300 / 813
1, 6, 12 Rel. Per (%)	2/12/-
12M Avg Val (INR M)	190

### Consol. Financials & Valuations (INR b)

Conson i manciais & valuations (mix b)						
Y/E March	FY25E	FY26E	FY27E			
Sales	14.8	18.2	22.4			
EBITDA	4.3	5.5	6.8			
Adj. PAT	2.8	3.8	4.9			
EPS (INR)	30.2	40.8	51.6			
EPS growth %	17.2	34.9	26.5			
BV/Sh. (INR)	196	230	273			
Ratios						
RoE (%)	16.5	19.1	20.5			
RoCE (%)	15.5	18.3	19.8			
Payout (%)	17.0	17.0	17.0			
Valuations						
P/E (x)	37.6	27.9	22.0			
P/BV (x)	5.8	4.9	4.2			
EV/EBITDA (x)	24.4	19.2	15.3			
Div. Yield (%)	0.5	0.6	0.8			

### **Shareholding Pattern (%)**

As On	Sep-24	Jun-24
Promoter	78.6	78.6
DII	17.1	16.7
FII	2.3	2.2
Others	2.0	2.5

CMP: INR1,135 TP: INR1,300 (+15%)

### Buy

### Margin beats estimate, led by better product mix

### Focusing on gradually ramping up presence in Industrial segment

- Happy Forgings (HFL)'s 2QFY25 result was encouraging as it reported a healthy EBITDA margin of 29.2% (+190bp YoY, est. 28%) led by a higher mix of machining and industrial segment. Despite a muted demand outlook for its core CV division, we expect HFL to continue outperforming, driven by new order ramp-up, particularly in exports and industrials, growth in new segments such as PVs, and higher value addition.
- To account for the weakness in CVs and export geographies, we have reduced our FY26E EPS estimate by 4.5%, while FY25E remains unchanged. Reiterate BUY with a TP of INR1,300 (premised on 28x Sep'26E EPS).

### Machining mix improves to 88% in 1HFY25 (vs 84% in 1HFY24)

- HFL's revenue/EBITDA/adj. PAT grew 5%/12%/21% YoY to INR3.6b/INR1.05b/INR0.67b (est. INR3.6b/INR0.99b/INR0.67b).
- In Q2FY24, its avg ASP was boosted by compensation towards air freight order of a customer. Adjusting for the same in the base quarter, revenue/EBITDA/PAT grew 6%/15%/24% YoY in 2QFY25.
- Finished goods volume for the quarter grew 3% YoY while realizations grew ~4% YoY. Realizations improved INR9/kg YoY in 1HFY25 despite a fall in raw material costs during this period. This growth was driven by a favorable product mix following an increase in the share of the industrials segment and higher machining mix.
- This resulted in the gross margin expansion of 350bp YoY (+230bp QoQ) to 58.8%. The machining mix was at 88% in 1HFY25, up from 84% in 1HFY24.
- However, higher other expenses (+170bp YoY/ +180bp QoQ; as a % of sales) limited the EBITDA margin expansion. The margin expanded 190bp YoY to 29.2% (est. 28%). Other expenses rose mainly due to higher logistics costs driven by geopolitical factors.
- 1HFY25 revenue/ EBITDA/ adj. PAT grew 4%/5%/9% YoY while we expect 2HFY25 to grow ~14%/20%/25%, led by a recovery in tractors demand outlook, execution of orders in industrials, and better margins.
- The operating cash flow grew 41% YoY; meanwhile, cash inflow stood at INR9.1m in 1HFY25 (vs. outflow of INR207m in 1HFY24) following the capex spend.

### Highlights from the management interaction

Outlook: Top-line growth in the medium term is expected at around 15-18%, driven by new projects in the PV, CV, and industrial segments.
Exports: Direct exports currently make up 20% while 9% are indirect; this is projected to rise to 30-35% together over the next 2-3 years.
Approximately 70% of orders are from global players.

Amber Shukla - Research analyst (Amber.Shukla@MotilalOswal.com)

Research analyst: Aniket Mhatre (Aniket.Mhatre@MotilalOswal.com) | Aniket Desai (Aniket.Desai@motilaloswal.com)

■ Industrial business: The business contributes 12-13% of the revenue and the company expects it to reach 18-20% over the next 2-3 years. Additionally, it aims to expand its product offerings and weight range to 1 ton, currently capped at 250 kg.

- Farm equipment: While agri segment in Europe and US is seeing a marked slowdown, HFL's outperformance in this segment is expected to supported by healthy order inflows
- The projected annual capex for FY25 and FY26 is INR2-2.5b, primarily focused on expanding machining capacity and product development in key growth segments. Utilization of the 14k ton press line currently stands at 50-55%, and the company aims to increase this to 70% by next year.

### **Valuation & view**

- Given its stable performance in CVs and healthy outlook for domestic tractors, we expect HFL to continue to perform well. Further, its healthy order wins in the Industrials and Exports segments will contribute to an improved mix. HFL's superior financial track record relative to peers serves as a testament to its inherent operational efficiencies and is likely to be a key competitive advantage going forward.
- To account for the weakness in CVs and export geographies, we have reduced our FY26E EPS estimate by 4.5%, while FY25E remains unchanged. We estimate an 18%/21%/ 26% CAGR in the standalone revenue/EBITDA/PAT during FY24-27. We reiterate our BUY rating on the stock with a TP of INR1,300 (based on 28x Sep'26E EPS).

Quarterly (Standalone) (INR M)

		FY2	4			FY2	5E		FY24	FY25E	Va	ariance
	1Q	2Q	3Q	4Q	1Q	2Q	3QE	4QE			2QE	(%)
Net operating income	3,298	3,431	3,420	3,433	3,415	3,611	3,830	3,988	13,582	14,844	3,568	1.2
Change (%)			16.2	13.5	3.5	5.3	12.0	16.1	13.5	9.3	4.0	
RM/Sales (%)	43.0	44.7	44.5	43.5	43.5	41.2	41.0	41.3	43.9	41.7	43.5	
Staff Cost (%)	7.5	8.5	9.0	8.6	8.5	8.5	8.7	8.6	8.4	8.6	8.9	
Other Exp. (%)	19.1	19.5	18.7	19.6	19.4	21.2	20.8	20.5	19.1	20.5	19.7	
EBITDA	1,002	938	952	971	976	1,054	1,130	1,181	3,875	4,340	998	5.5
EBITDA Margins (%)	30.4	27.3	27.8	28.3	28.6	29.2	29.5	29.6	28.5	29.2	28.0	
Non-Operating Income	34	7	33	72	77	83	82	81	134	323	80	
Interest	27	44	38	9	14	16	14	14	118	57	15	
Depreciation	155	162	171	160	180	197	200	207	647	783	182	
EO Exp						-48						
PBT after EO items	855	738	777	875	859	973	998	1,042	3,244	3,823	881	
Tax	214	185	198	217	220	259	254	242	814	975	226	
Eff. Tax Rate (%)	25.1	25.1	25.5	24.8	25.6	26.6	25.5	23.2	25.1	25.5	25.6	
Rep. PAT	640	553	579	658	639	714	743	800	2,430	2,848	655	
Change (%)			39.2	29.7	-0.3	29.3	28.4	21.6	18.3	17.2	18.6	
Adj. PAT	640	553	579	658	639	666	743	800	2,430	2,848	655	1.7
Change (%)			39.2	29.7	-0.3	20.6	28.4	21.6	16.4	17.2	18.6	

E: MOFSL Estimates

 $\operatorname{Motilal}$   $\operatorname{Oswal}$  Happy Forgings



## Highlights from the management interaction

 Outlook: Top-line growth in the medium term is expected at around 15-18%, driven by new projects in the PV, CV, and industrial segments.

- **Exports:** Direct exports currently make up 20% while 9% are indirect; this is projected to rise to 30-35% together over the next 2-3 years. Approximately 70% of the current orders are from global players.
- Delay in execution: While there are some customer-side delays due to cost pressures and global slowdown, management remains confident about outperforming industry growth on account of new order wins across each of its core segments.
- Industrial business: The business contributes 12-13% of the revenue and the company expects it to reach 18-20% in the next 2-3 years. Additionally, it aims to expand its product offerings and weight range to 1 ton, currently capped at 250 kg.
- ➤ **Growth opportunities:** In the next 2-3 years, the company's focus will be on expanding businesses within highway projects and large axle programs. In the next 3-5 years, it plans to further expand its product range, opening up opportunities in large gensets, industrial products, and railway gears.
- Portable and high HP gensets: Portable and mid-category genset opportunities will not require capex for forging, as existing capacity is sufficient. However, dedicated investments will be required in machining. Higher HP gensets will require additional investments in forging capacity, with more clarity expected in the coming quarters as they are in advanced discussions with few OEMs. Over the next 2-3 years, HFL aims to cover a smaller portion of the large genset opportunity, with potential growth in higher HP products from the third year onwards. This could become a major industrial segment in the long run.
- Wind business makes up 7% of the total revenue and they expect huge growth potential in the long run from this segment. It is currently catered from a 14k ton press line that can forge up to 250kg and an 8k ton line that is fully machined.
- Ring-rolling business: It plans to enter the ring-rolling (ring forging) business, adding capacity to serve the bearing industry.
- ➤ **Defense:** The business is in the initial stages and they have started studying the same. It has started working on components under 200 kg, such as those related to tank products, with a focus on machining. These will be sourced through government tenders, not through Tier 1 or Tier 2 suppliers.
- **Farm equipment:** Growth in this quarter was driven by new business ramp-up and product range expansion for both new and existing customers, especially in crankshaft manufacturing.
- In the domestic tractor segment, October experienced a strong festive pick-up and November is likely to witness a seasonal slowdown. However, demand in Europe and North America remains weak with inventory destocking exercise expected to be complete by December.
- However, the company's outperformance in this segment is expected to continue over FY25-26, supported by strong customer relationships and market recovery.

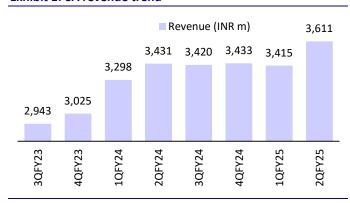
Passenger car: It contributed 4% to overall revenue. Deliveries to North American customers, scheduled for 2HFY25, are expected to further boost the revenue share.

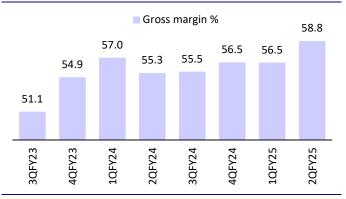
- Updates on capex:
- The projected annual CapEx for FY25 and FY26 is INR2-2.5b, primarily focused on expanding machining capacity and product development in key growth segments.
- Machining capacity increased from 50k to 57k tons in 1H and is expected to reach 62k tons in 2H. The machining mix has improved to 89% of the business in Q2.
- 6,300 ton line for PV & genset: It is dedicated to PV and portable genset components and should reach full utilization by next year, led by strong demand.
- > **14,000 ton press utilization**: Utilization currently stands at 50-55%. Key growth areas include the wind sector business and front axle beams for CVs, which are set to ramp up from 4Q, aiming for 70% utilization next year.
- > Jammu machining facility: The Jammu facility is awaiting government approval, with proposals filed for INR1.6b. The formation of a subsidiary has been completed but election delays have impacted the execution.
- American Axle business: HFL is a supplier to American Axle's India entity and this contributes approximately INR450-500m to HFL's revenues. However, despite its acquisition by a competitor, management expects continuity and potential growth from this customer due to a strong product range and longstanding relationships.

 $Motilal\ Oswal$ 

**Exhibit 1: SA revenue trend** 

**Exhibit 2: SA gross margin trend** 



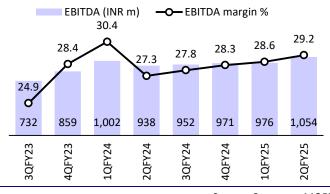


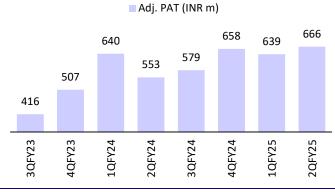
Source: Company, MOFSL

Source: Company, MOFSL

**Exhibit 3: EBITDA and margin trends** 

Exhibit 4: Adj. PAT trend over the quarters





Source: Company, MOFSL

Source: Company, MOFSL

### Valuation and view

- Ability to deliver safety-critical, complex forged and machined products: HFL embarked on its journey by manufacturing basic forged components, and evolved to manufacture complex and safety-critical products with tight tolerances. This transformation involved expanding capabilities in both light and heavy forgings as well as machining processes. It is the second company in India to have a 14k ton forging press and one of the four companies to have an 8k ton or higher press. It is a supplier to each of the top five Indian OEMs in the M&HCV industry. The addition of the 14k ton press line in 3QFY23 has enabled the company to forge heavier, safety-critical parts, weighing up to 250kg, while also expanding its capabilities across various industries. Transitioning from solely a forgings player, HFL has now evolved into a fully machined player, with its machining mix increasing to 88% in 1HFY25 from 53% in FY14.
- Well-diversified mix to help offset cyclical uncertainty: Over the years, HFL has successfully diversified its user industry across segments and customers. Its exports have surged to 19% in 1HFY25 from just 13% in FY23. Additionally, the contribution from its Industrials segment increased to 13% in 1HFY25 from just 4% in FY23. This diversified customer base has helped HFL reduce cyclicality to its core segments, such as CVs and tractors. It is noteworthy that despite weak demand in CVs and tractors, HFL has been able to deliver healthy revenue growth of ~13.5% YoY in FY24 due to a strong performance in the Industrials (non-tractor) segment.

New orders to drive near-term weakness in core Autos: HFL's major revenue share is attributed to CV and Farm Equipment, constituting 39% and 33%, respectively, in 1HFY25. While the near-term demand outlook is maintained, we believe structural drivers are in place for recovery in 2HFY25. Further, we understand that HFL has won orders for new CV products from major CV OEMs as well as in the tractor segment. HFL has already secured orders from both domestic and global PV OEMs. This is expected to help drive outperformance in its core auto segments. We expect HFL's CV/tractor segment revenue to register a CAGR of 6%/10% over FY24-27, well ahead of our industry forecasts.

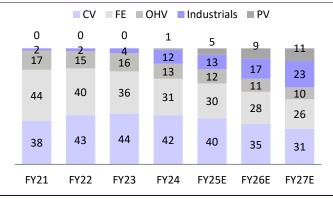
- Industrials and exports to be the key growth drivers for HFL: Following the successful installation of its 14k MT press, HFL experienced a major influx of new orders from the Industrials segment. This led to a spike in the segment's revenue contribution, which rose to 12% in 1HFY25 from just 4% in FY23. Further, due to its relatively low manufacturing costs and favorable government policies promoting localization, India is now emerging as the key beneficiary of this trend. Like its peers, HFL is also emerging as one of the beneficiaries of this trend. This is evident from its healthy share of exports in the order book. Accordingly, management expects the export contribution to rise to 30-35% by FY25 from the current level of 19%.
- Valuation & view: Given its stable performance in CVs and healthy outlook for domestic tractors, we expect HFL to continue to perform well. Further, its healthy order wins in the Industrials and Exports segments would help drive an improved mix. HFL's superior financial track record relative to peers serves as a testament to its inherent operational efficiencies and is likely to be a key competitive advantage going forward. We forecast an 18%/21%/26% CAGR in the standalone revenue/ EBITDA/PAT during FY24E-27. We reiterate our BUY rating on the stock with a TP of INR1,300 (based on 28x Sep'26E EPS).

**Exhibit 5: Our revised forecasts** 

(INR b)		FY25E		FY26E			
(INK D)	Rev	Old	Chg (%)	Rev	Old	Chg (%)	
Net Sales	14.8	15.3	-3.0	18.2	19.2	-4.8	
EBITDA Margin (%)	29.2	28.4	90bp	30.0	29.8	20bp	
PAT	2.8	2.9	-1.0	3.8	4.0	-4.5	
EPS (INR)	30.2	30.5	-1.0	40.8	42.7	-4.5	

## **Key operating indicators**

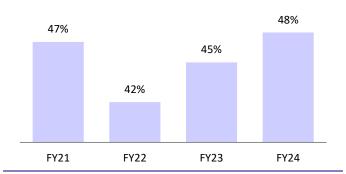
Exhibit 6: Revenue mix % - Share of industrials to rise



Source: Company, MOFSL

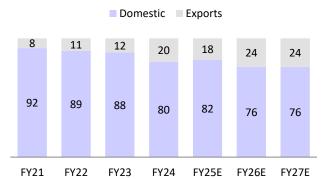
Exhibit 8: Crankshaft contribution at ~48% of revenue

■ Share % of revenue from crankshaft



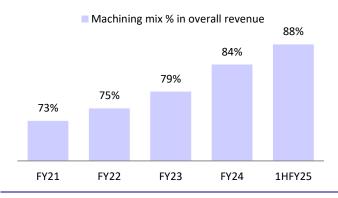
Source: Company, MOFSL

Exhibit 7: Revenue share % of exports has been growing



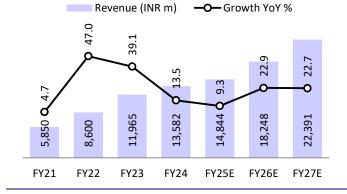
Source: Company, MOFSL

**Exhibit 9: Focusing on increasing the machining mix** 



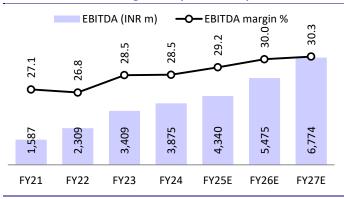
Source: Company, MOFSL

Exhibit 10: Revenue to register ~18% CAGR over FY24-27



Source: Company, MOFSL

Exhibit 11: EBITDA margin to expand ~180bp over FY24-27

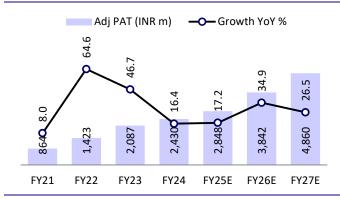


Source: Company, MOFSL

7 8 November 2024

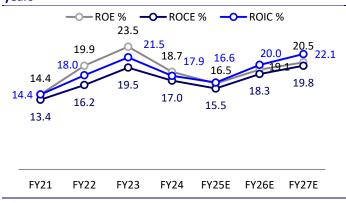
 $Motilal\ Oswal$ 

Exhibit 12: PAT to register ~26% CAGR over FY24-27



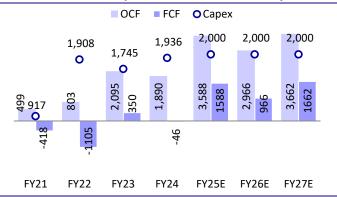
Source: Company, MOFSL

Exhibit 14: Returns to improve steadily over the next three years



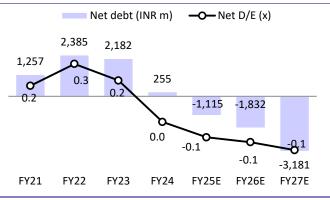
Source: Company, MOFSL

Exhibit 13: FCF/OCF expected to increase over the years



Source: Company, MOFSL

Exhibit 15: Overall debt continues to decline



Source: Company, MOFSL

## **Financials and valuations**

Income Statement							(INR M)
Y/E March	FY21	FY22	FY23	FY24	FY25E	FY26E	FY27E
Net Sales	5,850	8,600	11,965	13,582	14,844	18,248	22,391
Change (%)	4.7	47.0	39.1	13.5	9.3	22.9	22.7
EBITDA	1,587	2,309	3,409	3,875	4,340	5,475	6,774
Margin (%)	27.1	26.8	28.5	28.5	29.2	30.0	30.3
Depreciation	358	377	542	647	783	824	893
EBIT	1,230	1,931	2,868	3,228	3,557	4,651	5,881
Int. and Finance Charges	118	72	125	118	57	45	37
Other Income	59	61	58	134	323	450	550
PBT after EO Exp.	1,171	1,920	2,800	3,244	3,823	5,056	6,394
Current Tax	316	471	685	748	975	1,213	1,535
Deferred Tax	-10	27	29	65.67	-	-	-
Tax Rate (%)	26.2	25.9	25.5	25.1	25.5	24.0	24.0
Reported PAT	864	1,423	2,087	2,430	2,848	3,842	4,860
Adj PAT	864	1,423	2,087	2,430	2,848	3,842	4,860
Change (%)	8	65	47	16	17	35	26

Balance Sheet							(INR M)
Y/E March	FY21	FY22	FY23	FY24	FY25E	FY26E	FY27E
Equity Share Capital	90	179	179	188	188	188	188
Total Reserves	6,362	7,697	9,704	15,937	18,300	21,490	25,523
Net Worth	6,452	7,876	9,883	16,125	18,489	21,678	25,712
Deferred Liabilities	202	229	230	316	316	316	316
Total Loans	1,535	2,404	2,185	1,430	1,230	1,030	830
Capital Employed	8,188	10,509	12,299	17,871	20,035	23,024	26,858
Gross Block	5,066	5,858	8,591	9,880	11,880	13,880	15,880
Less: Accum. Deprn.	919	1,296	1,807	2,444	3,227	4,051	4,944
Net Fixed Assets	4,147	4,562	6,784	7,437	8,653	9,829	10,936
Capital WIP	404	2,123	748	1,267	1,267	1,267	1,267
Total Investments	0	4	0	1	2,001	2,201	3,401
Curr. Assets, Loans&Adv.	4,214	4,610	5,730	10,155	9,180	11,027	12,839
Inventory	1,216	1,840	1,696	2,242	2,152	2,645	3,246
Account Receivables	1,658	2,220	3,081	3,569	3,634	4,467	5,481
Cash and Bank Balance	278	15	3	1,174	344	661	610
Loans and Advances	1,062	535	950	3,170	3,050	3,254	3,502
Curr. Liability & Prov.	576	790	963	988	1,066	1,300	1,585
Creditors	379	442	477	555	564	694	851
Other Current Liabilities	178	321	448	388	457	562	689
Provisions	19	27	38	45	45	45	45
Net Current Assets	3,638	3,821	4,767	9,167	8,114	9,728	11,254
Appl. of Funds	8,188	10,509	12,299	17,871	20,035	23,024	26,858

E: MOFSL Estimates

 $Motilal\ Oswal$ 

### **Financials and valuations**

Y/E March	FY21	FY22	FY23	FY24	FY25E	FY26E	FY27E
Basic (INR)							
EPS	19.3	15.9	23.3	25.8	30.2	40.8	51.6
Cash EPS	27.3	20.1	29.4	32.7	38.5	49.5	61.1
BV/Share	144.2	88.0	110.4	171.2	196.3	230.1	272.9
DPS	-	-	-	4.0	5.1	6.9	8.8
Payout (%)	-	-	-	15.5	17.0	17.0	17.0
Dividend Yield (%)	-	-	-	0.4	0.5	0.6	0.8
FCF per share	-9.3	-12.4	3.9	-0.5	16.9	10.3	17.6
Valuation (x)							
P/E	58.5	71.1	48.5	43.8	37.4	27.7	21.9
Cash P/E	41.4	56.2	38.5	34.6	29.3	22.8	18.5
P/BV	7.8	12.8	10.2	6.6	5.8	4.9	4.1
EV/Sales	8.9	12.0	8.6	7.9	7.1	5.7	4.6
EV/EBITDA	32.6	44.8	30.3	27.5	24.3	19.1	15.2
Return Ratios (%)							
RoE	14.4	19.9	23.5	18.7	16.5	19.1	20.5
RoCE (Post-tax)	13.4	16.2	19.5	17.0	15.5	18.3	19.8
RoIC	14.4	18.0	21.5	17.9	16.6	20.0	22.1
<b>Working Capital Ratios</b>							
Fixed Asset Turnover (x)	1.2	1.5	1.4	1.4	1.2	1.3	1.4
Inventory (Days)	62	65	54	53	54	48	48
Debtor (Days)	95	82	81	89	89	81	81
Creditor (Days)	37	17	14	14	14	13	13
Working Capital (Days)	169	152	131	171	194	168	161
Leverage Ratio (x)							
Net Debt/Equity	0.2	0.3	0.2	0.0	-0.1	-0.1	-0.1
Cash Flow Statement							(INR M)
Y/E March	FY21	FY22	FY23	FY24	FY25E	FY26E	FY27E
Operating PBT	1,171	1,921	2,800	3,244	3,823	5,056	6,394
Depreciation	358	377	542	647	783	824	893
Interest/Div paid	-118	-72	-125	118	57	45	37
Direct Taxes Paid	-399	-431	-638	-839	-975	-1,213	-1,535
(Inc)/Dec in WC	-825	-1,088	-779	-1,230	223	-1,296	-1,577
Other items	312	96	295	-50	-323	-450	-550
CF from Operations	499	803	2,095	1,890	3,588	2,966	3,662
(inc)/dec in FA	-917	-1,908	-1,745	-1,936	-2,000	-2,000	-2,000
Free Cash Flow	-418	-1,105	350	-46	1,588	966	1,662
(Pur)/Sale of Investments	288	230	15	-2,770	-2,000	-200	-1,200
Others	41	21	5	12	323	450	550
CF from Investments	-587	-1,657	-1,725	-4,694	-3,677	-1,750	-2,650
Issue of Shares	=	-	-	3,810	-	-	-

Closing Balance
E: MOFSL Estimates

**CF from Fin. Activity** 

Add: Beginning Balance

Inc/(Dec) in Debt

**Interest Paid** 

**Dividend Paid** 

Inc/Dec of Cash

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

895

-68

825

-29

29

0

-251

-119

-370

-0

0

0

-755

-130

-116

2,809

5

0

5

-200

-57

-484

-741

-830

1,174

344

-200

-45

-653

-898

318

344

661

-200

-37

-826

-51

661

610

-1,063

351

-254

97

8

20

29

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 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).

Motial Oswal Financial Services Ltd. (MOFSL) is a SEBI Registered Research Analyst having registration no. INH000000412. 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 <a href="https://www.motialoswal.com">www.motialoswal.com</a>. MOFSL (erstwhile Motilal Oswal Securities Limited - MOSL) 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. Details of associate entities of Motilal Oswal Financial Services Ltd. are available on the website at <a href="http://onlinereports.motilaloswal.com/Dormant/documents/Associate%20Details.pdf">http://onlinereports.motilaloswal.com/Dormant/documents/Associate%20Details.pdf</a>

Details of pending Enquiry Proceedings of Motilal Oswal Financial Services Limited are available on the website at https://galaxy.motilaloswal.com/ResearchAnalyst/PublishViewLitigation.aspx

MOFSL, it's associates, Research Analyst or their relatives may have any financial interest in the subject company. MOFSL and/or its associates and/or Research Analyst or their relatives may have 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. MOFSL and its associates company(ies), their directors and Research Analyst and their relatives may have any other potential conflict of interests at the time of publication of the research report or at the time of public appearance, 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.

In the past 12 months, MOFSL or any of its associates may have:

- a) received any compensation/other benefits from the subject company of this report
- b) managed or co-managed public offering of securities from subject company of this research report,
- c) received compensation for investment banking or merchant banking or brokerage services from subject company of this research report,
- d) received compensation for products or services other than investment banking or merchant banking or brokerage services from the subject company of this research report.
- . MOFSL and it's associates have not received any compensation or other benefits from the subject company or third party in connection with the research report.
- . Subject Company may have been a client of MOFSL or its associates during twelve months preceding the date of distribution of the research report.
- Research Analyst may have served as director/officer/employee in the subject company.
- MOFSL and research analyst may engage in market making activity for the subject company.

MOFSL and its associate company(ies), and Research Analyst and their relatives from time to time may have:

a) 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.

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. To enhance transparency, MOFSL has incorporated a Disclosure of Interest Statement in this document. This should, however, not be treated as endorsement of the views expressed in the 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.

### 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.

### **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.

Disclosure of Interest Statement	Happy Forging	
Disclosure of interest statement		
Analyst ownership of the stock	No	
Allary of Owner only of the Stock	140	

A graph of daily closing prices of securities is available at <a href="www.nseindia.com">www.nseindia.com</a>, <a href="www.nseindia.com">www.bseindia.com</a>. 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 Financial Services Limited (SEBI Reg No. INH000000412) has an agreement with Motilal Oswal capital Markets (Hong Kong) Private Limited for distribution only to "Professional Investors" as defined in Part I of Schedule 1 to SFO. Any 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") (Co. Reg. NO. 201129401Z) which is a holder of a capital markets services license and an exempt financial adviser in Singapore. Persons in Singapore should contact MOCMSPL in respect of any matter arising from, or in connection with this report/publication/communication. This report is distributed solely to persons who qualify as "Institutional Investors", of which some of whom may consist of "accredited" institutional investors as defined in section 4A(1) of the Securities and Futures Act of Singapore .Accordingly, if a Singapore person is not, or ceases to be, such an investor, they must immediately discontinue any use of this Report and inform MOCMSPL.

#### 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 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

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 . AMFI: ARN .: 146822. IRDA Corporate Agent – CA0579. 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.