

# Tatva Chintan Pharma Chem Ltd

## Subscribe

Price Band: INR 1073-1083

### ISSUE SUMMARY

Issue Opens	16-July-21
Issue Closes	20-July-21
Offer Price (INR per share)	1073-1083
Bid Lot	13 shares
Face Value (INR)	10.0
Pre Issue Shares o/s (mn)	20.1
^*Offer for Sale (No of sh. mn)	2.5
^Fresh Issue (No of sh. mn)	2.1
^Post Issue shares o/s (mn)	22.2
^Issue Size (INR bn)	5.0
QIB	=>50%
Non-institutional	<15%
Retail	<35%
^ Issue Size (@INR1083)	

### POST ISSUE DETAILS

M.Cap @INR1083/sh. (INR bn)	24.0
<b>Shareholding pattern</b>	
Promoters	79.2%
Non-Promoters	20.8%

Tatva Chintan Pharma Chem Ltd (TCPCL) is a specialty chemicals manufacturer, with a diverse portfolio of structure directing agents (SDAs; 40% of revenues), phase transfer catalysts (PTCs; 27%), electrolyte salts (ES; 1%) for super capacitor batteries (SCB) and pharmaceutical/ agrochemical intermediates and other specialty chemicals (PASC; 30%).

**Leading manufacturer of SDA and PTC globally:** TCPCL is the largest and the only manufacturer of SDAs (40% of revenue) for Zeolites in India while it is the 2<sup>nd</sup> largest globally. In case of PTC (27%), it is the largest producer in India and one of the global leaders. The SDA and PTC products have various applications in green chemistry, which is gaining prominence considering the growing focus on green and sustainable technologies. TCPCL derives ~71% of its revenue from exports where multiple opportunities are emerging.

**Robust expansion plans to capitalize on the industry growth prospects:** Indian specialty chemical market is expected to grow at 11.3% CAGR over CY19-24E (F&S report) vs 5.3% globally. Further India's chemical export is expected to grow at 13% CAGR (CY19-24E) vs China's 7% due to China+1 strategy being adopted by majority of the global firms. TCPCL is well placed to capture this opportunity with niche and diversified product portfolio across various industries. It plans to expand its product portfolio and increase wallet share with existing clients along with expanding customer base. It further plans to focus on green chemistry by developing new-age technologies, demand for which is expected to grow at 10.5% CAGR globally.

**Robust financials:** Over FY18-21, TCPCL Revenue/EBITDA/Adj. PAT grew at a CAGR of 30%/42%/62%, supported by margin expansion of 499bps to 21.9% and lower taxes due to tax holiday enjoyed by its Dahej facility. The return ratios are healthy with FY21 RoE/RoCE at 20.5%/16.8% on post diluted basis.

**Issue Size:** INR5.0bn IPO consists of fresh issue of INR2.3bn and OFS of INR2.7bn (by promoters), which will reduce promoters stake to 79.2% from earlier 100%. The funds will be utilized for expansion of Dahej plant (INR14.7bn) and for upgradation of R&D facility in Vadodara (INR2.4bn).

**Valuation & View:** We like TCPCL due its leadership position, wide product portfolio, strong client relationship and high entry barriers. The company is expected to witness strong growth for next 2-3 years given its expansion plans. It is well placed to tap opportunity in the fast growing specialty chemical space with increasing focus on green chemistry by leveraging its strong R&D capabilities. The issue is valued at 45.9x FY21 P/E on post issue basis, which appears reasonable compared to peers (avg. P/E of 59x), as it enjoys higher earnings growth (62% CAGR vs. avg. 38% CAGR for peers over FY18-21). Hence, we recommend **Subscribe**.

### Exhibit 1: Financials & Valuations (INR mn)

Y/E March	FY18	FY19	FY20	FY21
Revenue	1,358	2,063	2,632	3,004
Growth (%)	-	51.9	27.6	14.1
Adj PAT	123	200	378	523
Growth (%)	-	62.6	89.1	38.3
EPS (INR)	5.5	9.0	17.0	23.6
RoE (%)	20.8	25.1	38.3	20.5
P/E	195.3	120.1	63.5	45.9

\*Calculated on post issue basis, at the upper price band of INR1083; Source: RHP, MOFSL

## Peer Comparison

### Exhibit 2: Financial Comparison

Company	M.Cap. INR Bn	Revenue CAGR FY18-21 (%)	EBITDA CAGR FY18-21 (%)	PAT CAGR FY18-21 (%)	EBITDA Margin FY21 (%)	ROE FY21 (%)
PI Industries	410.8	26.2	27.1	26.2	22.1	18.5
Aarti Industries	311.4	5.8	12.0	17.1	21.8	18.0
Atul	277.5	3.8	22.0	33.3	24.6	18.5
Deepak Nitrite	262.7	37.5	85.2	114.1	28.6	39.6
Vinati Organics	208.5	8.7	21.4	23.2	36.9	19.1
Alkyl Amines	188.6	25.7	54.5	66.2	34.5	44.4
Navin Fluorin	186.2	8.5	13.8	11.9	27.4	16.5
Fine Organics	90.3	9.0	5.4	4.3	17.1	16.8
SRF	77.6	14.5	33.0	41.9	25.4	20.1
Tatva Chemicals	24.0	30.3	42.0	62.0	21.9	20.5

### Exhibit 3: Valuation Comparison

Company	Net D/E FY21 (x)	PE FY21 (x)	EV/Sales FY21 (x)	EV/EBITDA FY21 (x)	P/BV FY21 (x)
PI Industries	-0.4	61.5	9.6	43.4	8.5
Aarti Industries	0.7	59.5	5.6	25.5	8.9
Atul	-0.1	42.4	7.4	30.0	7.2
Deepak Nitrite	0.2	34.1	6.1	21.5	11.3
Vinati Organics	0.0	74.7	21.9	59.2	13.0
Alkyl Amines	-0.1	63.6	15.1	43.7	23.7
Navin Fluorin	-0.2	75.7	16.1	58.6	11.5
Fine Organics	-0.3	80.8	7.9	45.9	12.6
SRF	0.4	38.6	5.7	22.4	6.7
Tatva Chemicals	-0.9	45.9	7.5	34.2	6.1

Source: Company RHP, Bloomberg, MOFSL

\*Price Data as on 9<sup>th</sup> July, 2021

^Calculated on fully diluted basis at upper price band of INR1083

## About the Company

Incorporated in 1996, Tatva Chintan Pharma Chem Ltd (TCPCL) is a specialty chemicals manufacturing company engaged in the manufacture of a diverse portfolio of structure directing agents (SDAs), phase transfer catalysts (PTCs), electrolyte salts for super capacitor batteries and pharmaceutical and agrochemical intermediates and other specialty chemicals (PASC). The Company is the largest and only commercial manufacturer of SDAs for zeolites in India. It also enjoys the second largest position globally as per F&S Report. In addition, Tatva is one of the leading global producers of an entire range of PTCs in India and one of the key producers across the globe.

**Exhibit 4: Diverse Product portfolio**

Particulars	SDAs	PTCs	Electrolyte Salts for SCB	PASC
Revenue in FY21 (Rs. mn)	1,202.4	816.1	30.4	912.2
Contribution to FY21 Revenue	40.0%	27.2%	1.0%	30.4%
Number of Products	47	48	6	53
India	Largest and only commercial manufacturer of SDAs for Zeolites	Largest producer	Largest producer	NA
Globally	Second largest manufacturer of SDAs for Zeolites	One of the leaders	NA	NA
Key Applications / End Uses of the Product Segment	<ul style="list-style-type: none"> <li>• Manufacture of zeolites, which are used in emission control</li> <li>• Refining catalysts</li> </ul>	<ul style="list-style-type: none"> <li>• Pharmaceutical intermediates</li> <li>• Agrochemical intermediates</li> </ul>	<ul style="list-style-type: none"> <li>• Organic battery electrolytes</li> <li>• Automotive</li> <li>• Transportation</li> <li>• Consumer Electronics</li> </ul>	<ul style="list-style-type: none"> <li>• Pharma/Agrochem intermediates</li> <li>• Paints and coatings</li> <li>• Personal care and disinfectants</li> <li>• Flavours and fragrances</li> </ul>

Source: RHP, MOFSL

As a manufacturer of specialty chemicals, TCPCL focuses on application of products which form a key ingredient to the customers’ manufacturing and industrial processes. Its SDA and PTC products have various applications in green chemistry, which is pertinent considering the growing focus on green and sustainable technologies. The company has thus undertaken various ‘green’ chemistry processes such as electrolysis to improve processes and infrastructure to help reduce impact on the environment. TCPCL has manufactured over 154 products so far.

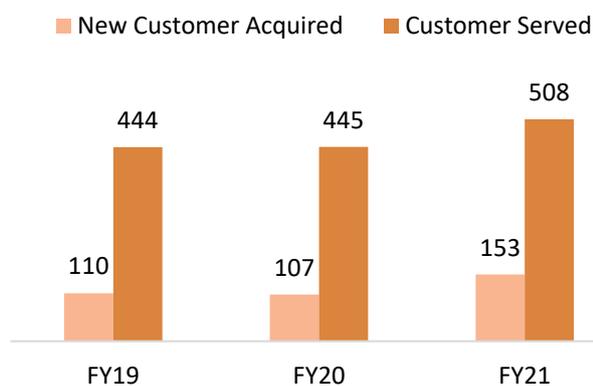
**Exhibit 5: Key Clients across Various Industries**



Source: RHP, MOFSL

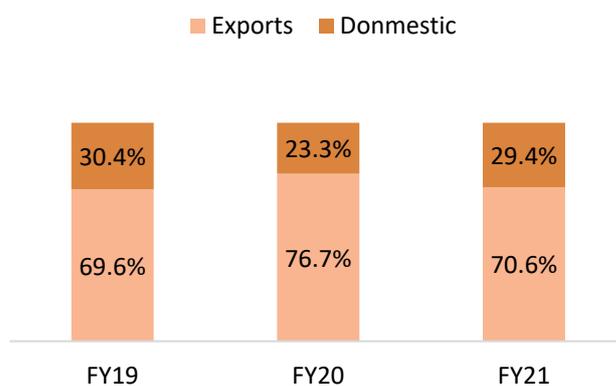
Considering the wide application of its products, TCPCL serves customers across various industries, including the automotive, petroleum, pharmaceutical, agro chemicals, paints and coatings, dyes and pigments, personal care and flavour and fragrances industries. Apart from customers in India, they also export products to over 25 countries, including the USA, China, Germany, Japan, South Africa, and the UK. Exports contributed ~70.6% of FY21 revenue while the top 10 customers contribute ~60% of revenue (FY21).

**Exhibit 6: Wide Customer Base**



Source: RHP, MOFSL

**Exhibit 7: Geographical Revenue Mix**



Source: RHP, MOFSL

TCPCL currently operates through two manufacturing facilities situated at Ankleshwar and Dahej in Gujarat, both of which are strategically located very close to the Hazira port. These manufacturing facilities have an annual installed reactor capacity of 280 KL and 17 Assembly Lines, as on March 31, 2021. The manufacturing facilities employ various modern machinery and equipment, including reactors, Assembly Lines, ANFDs, centrifuges and RCVDs, which help to undertake various chemistry processes, such as, quaternization, methylation, amination, phase transfer reactions, cyclization, halogenation, condensation, and electrolysis.

**Exhibit 8: Capacity and Utilization Details**

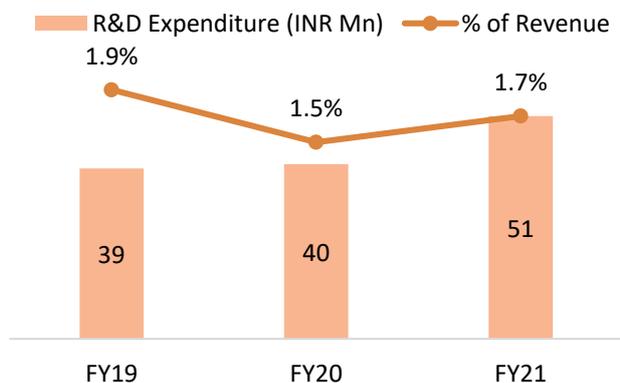
Type	Installed Production Capacity (KL)			Capacity Utilization (%)		
	FY19	FY20	FY21	FY19	FY20	FY21
Reactor Capacity	160	280	280	77.3	90.3	68.9
Assembly Lines	10	13	17	18.9	91.5	54.5

Source: RHP, MOFSL

As part of its eco-friendly and environmentally sustainable initiatives, the company has adopted various ‘green’ chemistry processes, including electrolysis as part of its manufacturing process. Besides the single starting raw material, electrolysis only uses water and electricity to produce the target product. Considering that no additional chemicals are used, this helps ensure TCPCL does not generate any additional waste or by-products. Over the years, it has invested in its processes and manufacturing infrastructure and systems. From FY19-21, its installed reactor capacity grew from 160 KL to 280 KL, and Assembly Lines grew from 10 to 17.

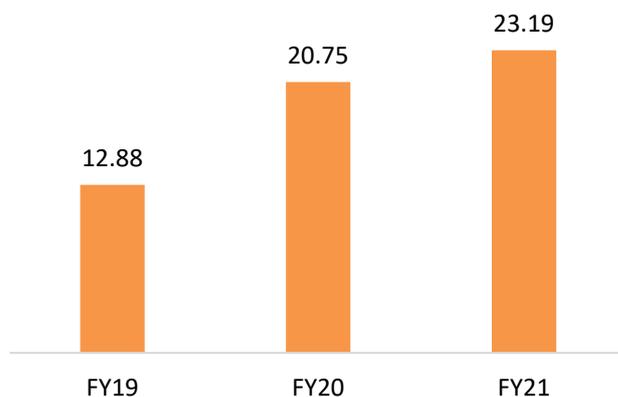
Tatva Chintan also have a dedicated R&D facility that is recognized by DSIR, at Vadodara, Gujarat. It is equipped with glass assemblies, continuous flow reactors, and high pressure autoclaves. TCPCL has developed 22 products, 15 products, and 16 products in FY19, FY20, and FY21, respectively. R&D capabilities have enabled expansion of product offerings from 72 products as at FY11 end to over 154 products as at FY21.

**Exhibit 9: Consistent R&D expenditure**



Source: RHP, MOFSL

**Exhibit 10: Revenue Contribution (%) of new products commercialized since FY11**

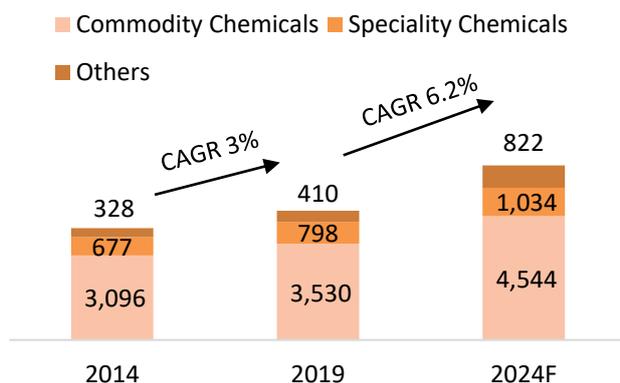


Source: RHP, MOFSL

### About Industry

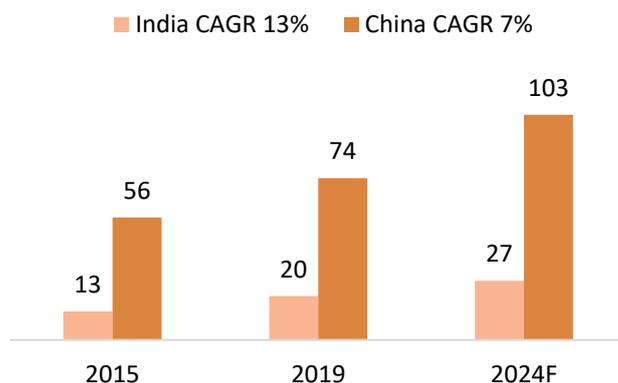
The global chemicals market is valued at around USD4,738 bn and is expected to grow at 6.2% CAGR; reaching USD6,400 bn by 2024. Going forward, the APAC region is anticipated to grow at the fastest rate of 7-8%, while Western Europe, North America, and Japan are relatively mature and hence would record slow growth rates of ~ 3-4%.

**Exhibit 11: 2019 Global Chemical Market Size (USD bn)**



Source: RHP, MOFSL

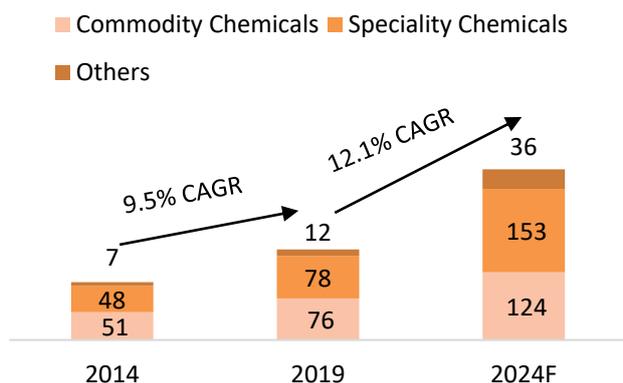
**Exhibit 12: Chemicals Export (USD bn)**



Source: RHP, MOFSL

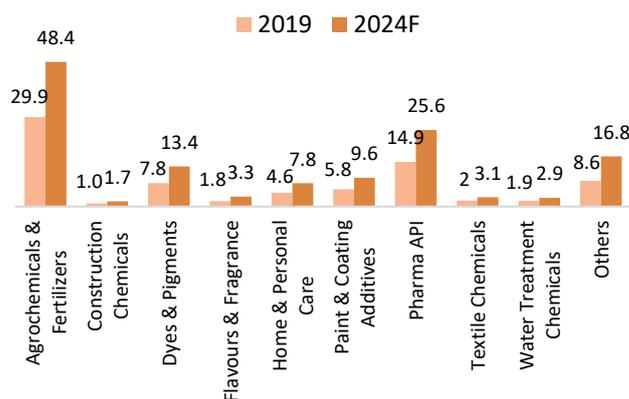
The global specialty chemical market stood at ~USD800bn in 2019 and is expected to grow ~5-6% over the next five years. On the other hand, the Indian chemicals market is valued at USD 166bn (~4% share in the global chemical industry) and is expected to reach ~USD280-300bn in the next 5 years, with an anticipated growth of ~12% CAGR.

Exhibit 13: 2019 Indian Chemicals Market Size (USD bn)



Source: RHP, MOFSL

Exhibit 14: Indian Specialty Chemical market – segment wise (USD bn)



Source: RHP, MOFSL

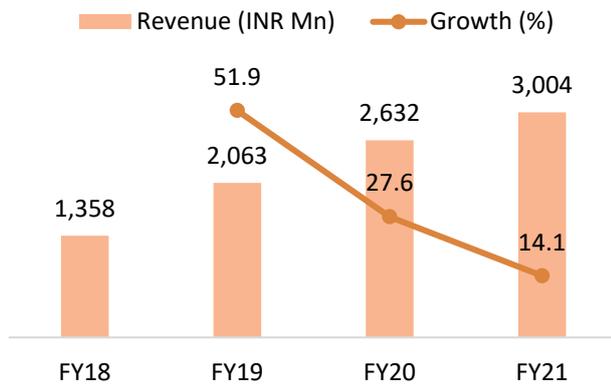
The Specialty chemicals industry is driven by both domestic consumption and exports. India’s specialty chemical companies are gaining favour with global MNCs because of the geopolitical shift after the outbreak of Covid-19 as the world looks to reduce its dependence on China. Currently China accounts for ~15-17% of the world’s exportable specialty chemicals, whereas India accounts for merely 1-2% indicating that the country has large scope of improvement and widespread opportunity. It is anticipated that Specialty chemicals will be the next great export pillar for India.

### Risk and concerns

- Top 10 customers account for 60% of FY21 revenue. Moreover, TCPCL does not enter into any long term contract with them. Thus loss of any customer could impact its business.
- High exposure to foreign currency risk as exports form 71% of revenue.
- TCPCL depends on limited number of suppliers for certain raw materials and does not have any long term contracts. ~49% of RM expenditure is met through top 10 suppliers. Thus loss of one or more such suppliers could adversely affect its business.

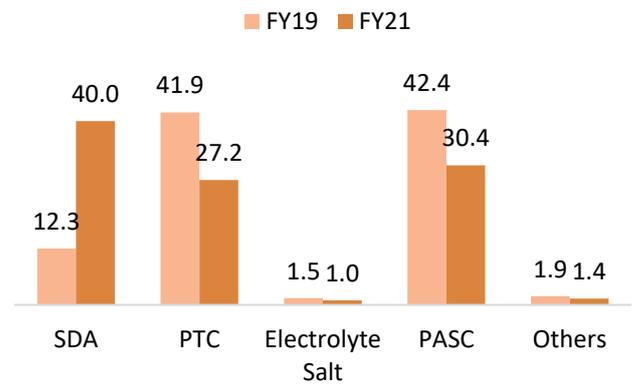
## Story in Charts

**Exhibit 15: Revenue grew at 30% CAGR over FY18-21**



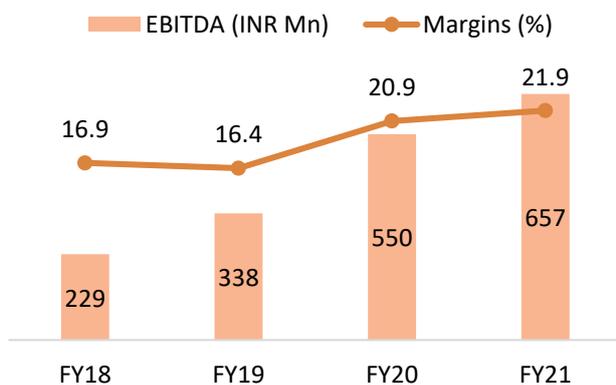
Source: RHP, MOFSL

**Exhibit 16: Revenue mix segment wise (%)**



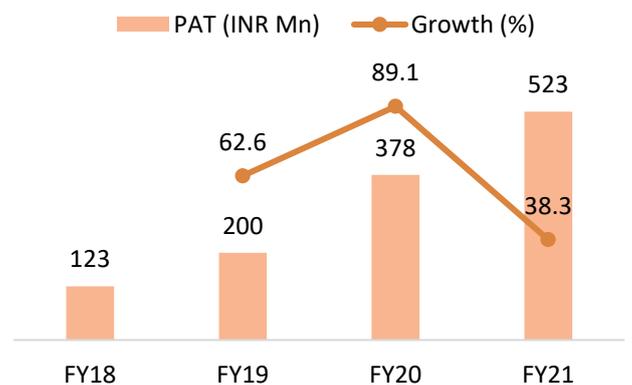
Source: RHP, MOFSL

**Exhibit 17: EBITDA margin expanded 499 bps**



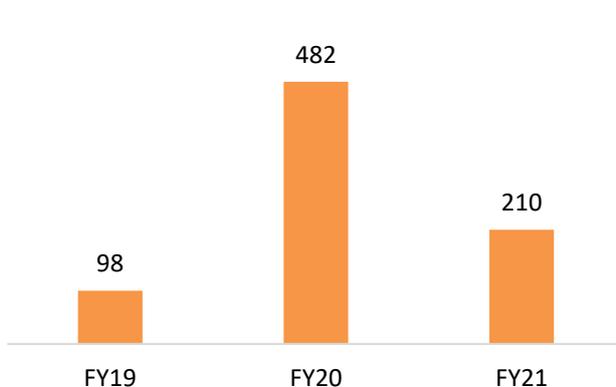
Source: RHP, MOFSL

**Exhibit 18: PAT grew at a 62% CAGR over FY18-21**



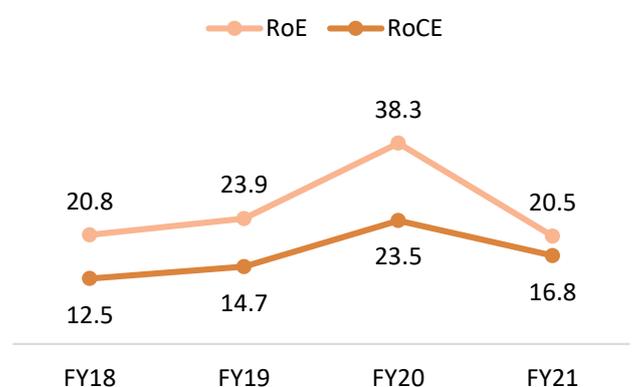
Source: RHP, MOFSL

**Exhibit 19: Capital Expenditure Trend (Rs mn)**



Source: RHP, MOFSL

**Exhibit 20: Healthy Return ratios**



Source: RHP, MOFSL

## Financials

### Income Statement

(INR mn)

Y/E March	FY18	FY19	FY20	FY21
<b>Net Sales</b>	<b>1,358</b>	<b>2,063</b>	<b>2,632</b>	<b>3,004</b>
Change (%)	-	51.9	27.6	14.1
<b>Total Expenditure</b>	<b>1,129</b>	<b>1,725</b>	<b>2,083</b>	<b>2,347</b>
% of Sales	83.1	83.6	79.1	78.1
<b>EBITDA</b>	<b>229</b>	<b>338</b>	<b>550</b>	<b>657</b>
Margin (%)	16.9	16.4	20.9	21.9
Depreciation	30	40	48	67
<b>EBIT</b>	<b>200</b>	<b>298</b>	<b>502</b>	<b>590</b>
Int. and Finance Charges	24	36	39	42
Other Income	15	5	14	59
Exceptional Item	0	-7	0	0
<b>PBT</b>	<b>190</b>	<b>274</b>	<b>476</b>	<b>607</b>
Tax	67	69	98	84
Tax Rate (%)	35.4	26.5	20.6	13.9
Minority Interest	0.0	0.0	0.0	0.0
<b>Reported PAT</b>	<b>123</b>	<b>205</b>	<b>378</b>	<b>523</b>
Adjustments	0	-6	0	0
<b>Adjusted PAT</b>	<b>123</b>	<b>200</b>	<b>378</b>	<b>523</b>
Change (%)	-	62.6	89.1	38.3
Margin (%)	9.0	9.7	14.4	17.4

Source: Company RHP, MOFSL

### Balance Sheet

(INR mn)

Y/E March	FY18	FY19	FY20	FY21
Share Capital	80	80	80	201
Reserves	511	717	1,097	1,459
<b>Net Worth</b>	<b>591</b>	<b>797</b>	<b>1,177</b>	<b>1,660</b>
Debt	520	714	792	761
Deferred Tax (Net)	16	33	45	21
<b>Total Capital Employed</b>	<b>1,127</b>	<b>1,544</b>	<b>2,013</b>	<b>2,441</b>
<b>Net Fixed Assets</b>	<b>570</b>	<b>667</b>	<b>1,112</b>	<b>1,204</b>
Capital WIP	99	60	49	98
Investments	5	-	-	-
<b>Current Assets</b>	<b>762</b>	<b>1,148</b>	<b>1,329</b>	<b>1,845</b>
Inventory	288	356	636	720
Debtors	288	413	496	907
Cash and Bank Balance	78	157	108	53
Loans and Advances & OCA	108	222	89	164
<b>Curr. Liability &amp; Provisions</b>	<b>310</b>	<b>331</b>	<b>476</b>	<b>707</b>
Account Payables	247	221	316	475
Current Liabilities	61	106	155	211
Other Long Term Liab. & Provs.	2	4	5	21
<b>Net Current Assets</b>	<b>452</b>	<b>817</b>	<b>853</b>	<b>1,138</b>
Misc Expenditure	-	-	-	-
<b>Appl. of Funds</b>	<b>1,127</b>	<b>1,544</b>	<b>2,013</b>	<b>2,441</b>

Source: Company RHP, MOFSL

**Key Ratios**

Y/E March	FY18	FY19	FY20	FY21
<b>Basic (INR)</b>				
<b>EPS</b>	<b>5.5</b>	<b>9.0</b>	<b>17.0</b>	<b>23.6</b>
Cash EPS	6.9	10.8	19.2	26.6
BV/Share	26.7	36.0	53.1	176.4
DPS	0.0	0.0	0.0	1.8
<b>Valuation (x)</b>				
P/E	195.3	120.1	63.5	45.9
Cash P/E	157.5	100.0	56.4	40.7
P/BV	40.6	30.1	20.4	6.1
EV/Sales	18.0	11.9	9.4	7.5
EV/EBITDA	106.6	72.7	44.9	34.2
Dividend Yield (%)	0.0	0.0	0.0	0.2
<b>Return Ratios (%)</b>				
RoE	NA	25.1	38.3	20.5
RoCE	NA	15.0	23.5	16.8
<b>Working Capital Ratios</b>				
Asset Turnover (x)	1.2	1.3	1.3	0.6
Inventory (Days)	77	63	88	88
Debtor (Days)	77	73	69	110
Creditor (Days)	66	39	44	58
<b>Leverage Ratio (x)</b>				
Net Debt/Equity	0.7	0.7	0.6	-0.9

Source: Company RHP, MOFSL

\*All ratios calculated on fully diluted basis at the upper price band of INR1803

**Cash Flow Statement****(INR mn)**

Y/E March	FY18	FY19	FY20	FY21
OP/(Loss) before Tax	190	259	476	607
Depreciation	30	40	48	67
Finance Cost	24	36	39	42
Income Taxes paid	-116	-60	-82	-98
(Inc)/Dec in WC	-1	-217	-226	-378
<b>CF from Operations</b>	<b>127</b>	<b>59</b>	<b>255</b>	<b>241</b>
Others	-1	14	-2	3
<b>CF from Operating (Net)</b>	<b>126</b>	<b>74</b>	<b>253</b>	<b>243</b>
(Pur)/Sale of FA	-304	-98	-481	-210
(Pur)/Sale of Investments	-	5	-	-
Interest/Dividend received	2	2	5	-3
Bank Deposits	0	-77	74	2
Others	-	0	-	-
<b>CF from Investments</b>	<b>-302</b>	<b>-168</b>	<b>-402</b>	<b>-210</b>
Proceeds from borrowings	98	210	135	-4
Dividend Paid	-	-	-	-40
Interest Paid	-23	-33	-34	-41
Other	-2	-3	-2	-2
<b>CF from Fin. Activity</b>	<b>73</b>	<b>174</b>	<b>100</b>	<b>-88</b>
<b>Net Inc/Dec of Cash</b>	<b>-102</b>	<b>80</b>	<b>-49</b>	<b>-55</b>
Opening Balance	180	78	158	108
<b>Closing Balance</b>	<b>78</b>	<b>158</b>	<b>108</b>	<b>53</b>

Source: Company RHP, MOFSL

Explanation of 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

**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. MOFSL, the Research Entity (RE) as defined in the Regulations, is engaged in the business of providing Stock broking services, Investment Advisory Services, Depository participant services & distribution of various financial products. MOFSL is a subsidiary company of Passionate Investment Management Pvt. Ltd., (PIMPL). MOFSL is a listed public company, the details in respect of which are available on [www.motilaloswal.com](http://www.motilaloswal.com). 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 <http://online.reports.motilaloswal.com/Dormant/documents/Associate%20Details.pdf>

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, its 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 associate 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.

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

- a) received any compensation 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 its 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 Prince Piper & Fittings Ltd.

Analyst ownership of the stock No

A graph of daily closing prices of securities is available at [www.nseindia.com](http://www.nseindia.com), [www.bseindia.com](http://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") [Co.Reg. NO. 2011294012] which is a holder of a capital markets services license and an exempt financial adviser in Singapore, as per the approved agreement under Paragraph 9 of Third Schedule of Securities and Futures Act (CAP 289) and Paragraph 11 of First Schedule of Financial Advisors Act (CAP 110) provided to MOCMSPL by Monetary Authority of 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, Chapter 289 of Singapore ("the SFA"). Accordingly, if a Singapore person is not or ceases to be such an institutional investor, such Singapore Person must immediately discontinue any use of this Report and inform MOCMSPL.

**Disclaimer:**

This report is intended for distribution to Retail Investors.

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, and other 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 alterations 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, nor 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.

Registered Office Address: Motilal Oswal Tower, Rahimtullah Sayani Road, Opposite Parel ST Depot, Prabhadevi, Mumbai-400025; Tel No.: 022-3980 4263; [www.motilaloswal.com](http://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. Compliance Officer: Neeraj Agarwal, Email Id: [na@motilaloswal.com](mailto:na@motilaloswal.com), Contact No.:022-71881085.

Registration details of group entities: Motilal Oswal Financial Services Ltd. (MOFSL): INZ000158836 (BSE/NSE/MCX/NCDEX); CDSL: IN-DP-16-2015; NSDL: IN-DP-NSDL-152-2000; Research Analyst: INH000000412. AMFI: ARN.: 146822. Investment Adviser: INA000007100. IRDA Corporate Agent – CA0579. Motilal Oswal Financial Services Ltd. is a distributor of Mutual Funds, PMS, Fixed Deposit, Insurance, Bond, NCDs and IPO products.