

## Ispat Industries

### Management Meet Note

We met management of Ispat Industries. Key takeaways of our meeting are as follows:

**Joint venture with Stemcor to set up a coke oven plant:** Ispat has entered into a JV (Amba River Coke) with Stemcor for setting up a 1mn tonne coke oven plant at a cost of Rs1,124cr. Ispat holds 26% equity stake & the balance is held by Stemcor. The project will be funded through debt-equity ratio of 2:1 and is yet to achieve the financial closure. Ispat's equity contribution will be Rs100cr (Rs50cr will be through land and infrastructure support and balance Rs50cr through cash infusion). Once commissioned, the plant will cater to 100% coke requirement of the company.

**110MW power plant to lead to cost savings:** Ispat under its subsidiary, Ispat Energy, is setting up 110MW captive power plant (CPP) comprising of two units of 55MW each. The plant will primarily use gases from coke oven and blast furnace. Land for the project has been acquired and the civil work has also started. Total cost of the project is expected to be Rs491cr and the company expects savings of Rs1,300cr post commissioning of the power plant.

**Captive raw material holds the key for future performance:** Ispat has already secured the prospecting license for developing iron ore mines in Maharashtra. The management expects to start mining in FY2012 and targets iron ore production of 2mn tonnes. The company in a JV with Essar Steel, Mukand, Kalyani Steel and Ind Synergy has also been allotted Behrabad (North) coking coal block in Madhya Pradesh. The mine has reserves of 170mn tonnes, with Ispat's share being 76mn tonnes.

**Outlook and Valuation:** At the CMP, the stock is trading at P/BV of 1.4x and EV/EBITDA of 7.8x FY2010. We believe that future stock performance would be dependent upon improvement in raw material integration and successful commissioning of the power and coke oven plants.

#### Key Financials (Consolidated)

| Y/E March (Rs cr) | FY2007       | FY2008       | FY2009       | FY2010E      |
|-------------------|--------------|--------------|--------------|--------------|
| <b>Net Sales</b>  | <b>7,473</b> | <b>8,323</b> | <b>8,264</b> | <b>7,783</b> |
| % chg             | 48.8         | 11.4         | (0.7)        | (5.8)        |
| <b>Net Profit</b> | <b>(10)</b>  | <b>31</b>    | <b>(690)</b> | <b>(253)</b> |
| % chg             | -            | -            | -            | -            |
| <b>EPS (Rs)</b>   | <b>(0.8)</b> | <b>-</b>     | <b>(6.3)</b> | <b>(3.4)</b> |
| EBITDA (%)        | 20.4         | 14.6         | 5.3          | 16.1         |
| P/E (x)           | -            | -            | -            | -            |
| P/BV (x)          | 0.8          | 0.9          | 1.2          | 1.4          |
| RoE (%)           | -            | 0.0          | -            | -            |
| RoCE (%)          | 8.3          | 5.4          | -            | 6.8          |
| EV/Sales (x)      | 1.4          | 1.2          | 1.2          | 1.2          |
| EV/EBITDA (x)     | 6.9          | 7.9          | 22.4         | 7.8          |

Source: Company, Angel Research

## NOT RATED

|                   |      |
|-------------------|------|
| CMP               | Rs20 |
| Target Price      | -    |
| Investment Period | -    |

#### Stock Info

|                    |         |
|--------------------|---------|
| Sector             | Steel   |
| Market Cap (Rs cr) | 2,488   |
| Beta               | 1.4     |
| 52 Week High / Low | 25/16   |
| Avg. Daily Volume  | 5392856 |
| Face Value (Rs)    | 10      |
| BSE Sensex         | 18,667  |
| Nifty              | 5,608   |
| Reuters Code       | ISPT.BO |
| Bloomberg Code     | NDEN@IN |

#### Shareholding Pattern (%)

|                         |      |
|-------------------------|------|
| Promoters               | 41.1 |
| MF / Banks / Indian Fls | 11.9 |
| FII / NRIs / OCBs       | 2.5  |
| Indian Public / Others  | 44.5 |

| Abs. (%) | 3m   | 1yr    | 3yr  |
|----------|------|--------|------|
| Sensex   | 12.3 | 15.8   | 19.7 |
| Ispat    | 22.6 | (14.1) | 8.0  |

#### Paresh Jain

Tel: 022 – 4040 3800 Ext: 348

E-mail: pareshn.jain@angeltrade.com

#### Pooja Jain

Tel: 022 – 4040 3800 Ext: 311

E-mail: pooja.j@angeltrade.com

## Other key takeaways

- Ispat buys iron ore fines and lump ore from NMDC and imports pellets from GIIC Bahrain. The landed cost of iron ore from Bachel complex is Rs8,500/tonne and from the Kirandul complex is Rs7,200/tonne. Ispat also has a contract with GIIC Bahrain for supply of pellets, with prices being fixed on a quarterly basis.
- The blended cost of natural gas is ~Rs10/scm. Ispat sources gas from Reliance, PMT and ONGC.
- Currently, the company purchases power at Rs5.5/unit, which is expected to reduce post the commissioning of the 110MW power plant.
- The current cost of production for sponge iron, pig iron and hot rolled coils is Rs17,500, Rs22,000 and Rs29,000/tonne, respectively.
- The main advantage of using natural gas in sponge iron plants is that the product quality is superior and the plant can produce both long and flat products, whereas coal-based plants manufacture only long products.
- Maintenance costs are low as gas-based plants undertake 10-15 days of annual maintenance shutdown as compared to coal-based plants, which undergo quarterly shutdown.
- Total debt at the end of 4QFY2010 was Rs6,739cr. This included foreign currency loan of Rs2,335cr, with the balance being rupee loan. The average annual interest rate for the debt was 9.91%. Management indicated annual debt repayment of Rs723cr and Rs755cr in FY2011 and FY2012, respectively.

## Company Profile

Incorporated in 1984, Ispat Industries produces sponge iron, pig iron, hot rolled coils, galvanised sheets and cold rolled coils at its steel plants, located at Dolvi and Kalmeshwar in Maharashtra. The company's upstream facilities (sponge iron, pig iron, hot rolled coils) are located at Dolvi (Maharashtra), 80-85kms away from Mumbai and are spread across 1,400 acres. The downstream facilities (galvanized sheets, cold rolled coils) are located at Kalmeshwar (Nagpur, Maharashtra).

### Dolvi complex

The complex has a 1.6mn tonne sponge iron plant, which was commissioned in 1994 and is the world's largest single module gas-based plant using Midrex technology. The management plans to increase the capacity to 1.8mn tonnes. Ispat owns a jetty at the Dharmatar port, which is connected to the steel plant by a 1.5km long conveyor belt. The jetty has a cargo handling capacity of 12mn tonne with 3-4mn tonne being surplus capacity. Management indicated it would outsource the surplus capacity for commercial purposes. Feasibility studies are being undertaken to increase the hot strip mill capacity from 3.3mn tonnes to 4.2mn tonnes.

#### Exhibit 1: Dolvi - Capacity details

| Facilities                                   | Capacity (mn tonnes) |
|--|----------------------|
| Sponge iron plant (expansion of sponge iron) | 1.6                  |
| Sinter plant                                 | 2.8                  |
| Blast furnace                                | 2.0                  |
| Conarc furnace                               | 4.2                  |
| Hot strip mill                               | 3.3                  |

Source: Company

### Kalmeshwar complex

Hot rolled coils from Dolvi are transported to the Kalmeshwar complex via road/rail. The complex manufactures downstream products like cold rolled coils, galvanised, galvalume, colour coated sheets, pipes and tubes.

#### Exhibit 2: Kalmeshwar - Capacity details

| Facilities          | Capacity (mn tonnes) |
|---------------------|----------------------|
| Cold rolling mill   | 0.330                |
| Galvanising line    | 0.225                |
| Galvalume line      | 0.100                |
| Colour-coating line | 0.060                |
| Pipe and tube mill  | 0.056                |

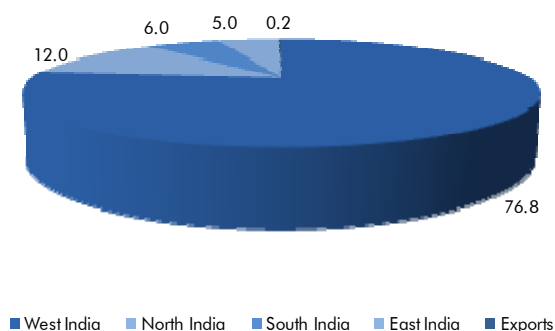
Source: Company

Ispat produces steel using the twin shell conarc furnace technology developed by SMS Siemag, Germany. The technology provides flexibility in terms of raw material feed, ie. sponge iron, hot metal or scrap. Generally, the charge mix is 55:35:10 of hot metal:DRI:scrap. Also, energy consumption is lower at ~240 units/tonne compared to the conventional EAF requirement of ~550 units/tonne of steel.

Ispat enjoys close proximity to its customers as 71% of its domestic sales are within Maharashtra, where it avails deferred VAT credit. In FY2010, total sales in West India stood at 77% followed by North India (12%), South India (6%), exports (5%) and East India accounted for 0.2% of the revenue mix. The top-ten customers of HRC contributed ~35% to total sales in FY2010.

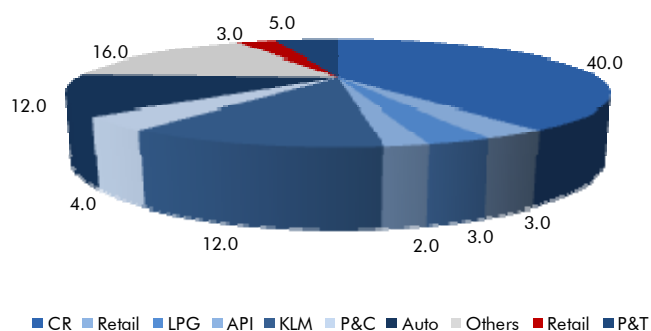
The company caters to the major steel-end user markets in the vicinity including automobiles, consumer durables, construction, ship-building, etc. In FY2010, cold rolled (CR) products accounted for 40% of the company's domestic sales whereas auto sales accounted for 12%. The company has entered into quarterly pricing contracts with the automotive and OEM customers, while for others it has a monthly pricing mechanism.

**Exhibit 3: Geographic revenue mix (FY2010)**



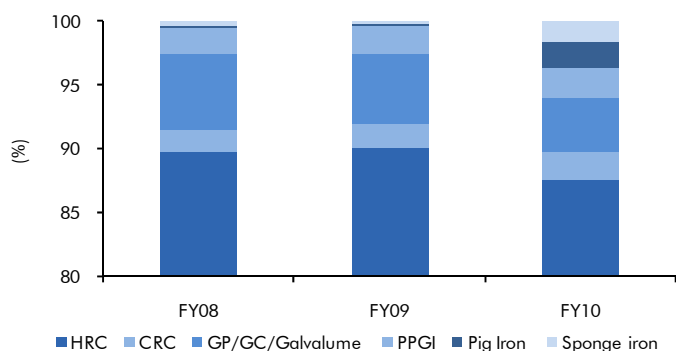
Source: Company, Angel Research

**Exhibit 4: Domestic sales breakup sector wise**



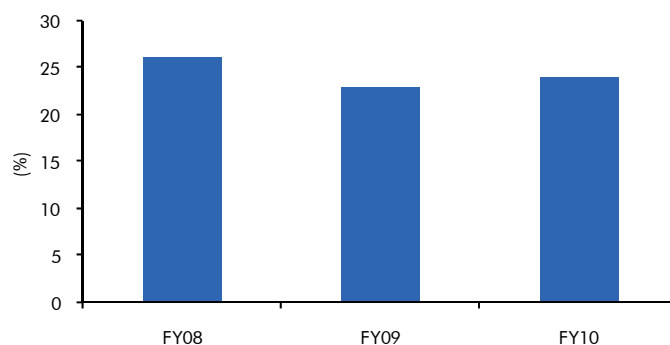
Source: Company, Angel Research

**Exhibit 5: Product-wise sales volume breakup**



Source: Company, Angel Research

**Exhibit 6: Value-added product accounts for 25%**



Source: Company, Angel Research

**Profit & Loss Statement (Consolidated)**

| Y/E March (Rs cr)              | FY2007       | FY2008       | FY2009         | FY2010       |
|--------------------------------|--------------|--------------|----------------|--------------|
| Gross sales                    | 8,363        | 9,440        | 9,177          | 8,398        |
| Less: Excise duty              | 890          | 1,117        | 913            | 615          |
| <b>Net Sales</b>               | <b>7,473</b> | <b>8,323</b> | <b>8,264</b>   | <b>7,783</b> |
| Other operating income         | -            | -            | -              | 236          |
| <b>Total operating income</b>  | <b>7,473</b> | <b>8,323</b> | <b>8,264</b>   | <b>8,019</b> |
| % chg                          | 48.8         | 11.4         | (0.7)          | (3.0)        |
| Total Expenditure              | 5,952        | 7,105        | 7,829          | 6,770        |
| Net Raw Materials              | 3,742        | 4,706        | 4,756          | 4,232        |
| Other Mfg costs                | 2,048        | 2,201        | 2,876          | 2,321        |
| Personnel                      | 162          | 198          | 197            | 216          |
| Other                          | -            | -            | -              | -            |
| <b>EBITDA</b>                  | <b>1,521</b> | <b>1,218</b> | <b>435</b>     | <b>1,249</b> |
| % chg                          | 435.0        | (19.9)       | (64.3)         | 187.2        |
| (% of Net Sales)               | 20.4         | 14.6         | 5.3            | 16.1         |
| Depreciation                   | 624          | 638          | 647            | 625          |
| <b>EBIT</b>                    | <b>897</b>   | <b>580</b>   | <b>(212)</b>   | <b>624</b>   |
| % chg                          | (412.6)      | (35.4)       | -              | (394.9)      |
| (% of Net Sales)               | 12.0         | 7.0          | (2.6)          | 8.0          |
| Interest charges               | 1,100        | 1,108        | 1,227          | 1,026        |
| Other Income                   | 205          | 640          | 414            | 2            |
| (% of PBT)                     | 7,730.9      | 573.1        | -              | -            |
| <b>Recurring PBT</b>           | <b>3</b>     | <b>112</b>   | <b>(1,026)</b> | <b>(400)</b> |
| % chg                          | -            | 4,111.3      | -              | -            |
| Extraordinary Inc/(Expense)    | 0            | 0            | 0              | 130          |
| <b>PBT</b>                     | <b>3</b>     | <b>112</b>   | <b>(1,026)</b> | <b>(270)</b> |
| Tax                            | 13           | 81           | (336)          | (17)         |
| <b>PAT (reported)</b>          | <b>(10)</b>  | <b>31</b>    | <b>(690)</b>   | <b>(253)</b> |
| Less: Minority interest (MI)   | -            | -            | 0              | -            |
| <b>PAT after MI (reported)</b> | <b>(10)</b>  | <b>31</b>    | <b>(690)</b>   | <b>(253)</b> |
| (% of Net Sales)               | -            | 0.4          | -              | -            |
| <b>Basic EPS (Rs)</b>          | <b>(0.8)</b> | <b>-</b>     | <b>(6.3)</b>   | <b>(3.4)</b> |
| <b>Fully Diluted EPS (Rs)</b>  | <b>(0.8)</b> | <b>-</b>     | <b>(6.3)</b>   | <b>(3.4)</b> |

**Balance Sheet (Consolidated)**

| Y/E March (Rs cr)           | FY2007        | FY2008        | FY2009       | FY2010E        |
|-----------------------------|---------------|---------------|--------------|----------------|
| <b>SOURCES OF FUNDS</b>     |               |               |              |                |
| Equity Share Capital        | 2,289         | 2,294         | 2,273        | 2,273          |
| Reserves & Surplus          | 652           | 605           | (275)        | (528)          |
| <b>Shareholders Funds</b>   | <b>2,941</b>  | <b>2,899</b>  | <b>1,997</b> | <b>1,744</b>   |
| Share Warrants              | -             | 0             | 97           | 97             |
| Total Loans                 | 8,316         | 7,225         | 7,355        | 6,944          |
| <b>Total Liabilities</b>    | <b>11,256</b> | <b>10,124</b> | <b>9,449</b> | <b>8,784</b>   |
| <b>APPLICATION OF FUNDS</b> |               |               |              |                |
| Gross Block                 | 13,067        | 13,178        | 13,567       | 13,667         |
| Less: Acc. Depreciation     | 3,244         | 3,962         | 4,670        | 5,294          |
| <b>Net Block</b>            | <b>9,823</b>  | <b>9,216</b>  | <b>8,897</b> | <b>8,373</b>   |
| Capital Work-in-Progress    | 475           | 547           | 582          | 582            |
| Investments                 | 2             | 2             | 13           | 13             |
| Current Assets              | 2,512         | 2,552         | 2,754        | 2,372          |
| Cash                        | 330           | 93            | 82           | 89             |
| Loans & Advances            | 481           | 511           | 727          | 577            |
| Other                       | 1,701         | 1,948         | 1,945        | 1,706          |
| Current liabilities         | 2,180         | 2,739         | 3,747        | 3,504          |
| <b>Net Current Assets</b>   | <b>332</b>    | <b>(188)</b>  | <b>(993)</b> | <b>(1,133)</b> |
| Net deferred tax asset      | 624           | 547           | 950          | 950            |
| <b>Total Assets</b>         | <b>11,256</b> | <b>10,124</b> | <b>9,449</b> | <b>8,784</b>   |

Note: Cash and Bank balance includes fixed deposits

**Cash Flow Statement (Consolidated)**

| Y/E March (Rs cr)                | FY2007       | FY2008         | FY2009         | FY2010E      |
|----------------------------------|--------------|----------------|----------------|--------------|
| Profit before tax                | 3            | 112            | (1,026)        | (270)        |
| Depreciation                     | 624          | 638            | 647            | 625          |
| Change in Working Capital        | (148)        | 329            | 532            | 147          |
| Less: Other income               | 943          | 468            | 1,149          | 0            |
| Direct taxes paid                | (4)          | (3)            | (3)            | 17           |
| <b>Cash Flow from Operations</b> | <b>1417</b>  | <b>1544</b>    | <b>1299</b>    | <b>518</b>   |
| Inc./ (Dec.) in Fixed Assets     | (285)        | (199)          | (144)          | (100)        |
| Inc./ (Dec.) in Investments      | (0)          | 0              | (10)           | -            |
| Other income                     | 7            | (10)           | 57             | 0            |
| <b>Cash Flow from Investing</b>  | <b>(278)</b> | <b>(209)</b>   | <b>(97)</b>    | <b>(100)</b> |
| Issue of Equity                  | 0.1          | 13             | 97             | 0            |
| Inc./ (Dec.) in loans            | 259          | (877)          | (479)          | (412)        |
| Dividend Paid (Incl. Tax)        | 0            | 0              | 0              | 0            |
| Others                           | (1,217)      | (720)          | (820)          | 0            |
| <b>Cash Flow from Financing</b>  | <b>(958)</b> | <b>(1,584)</b> | <b>(1,202)</b> | <b>(412)</b> |
| Inc./ (Dec.) in Cash             | 181          | (249)          | 0              | 7            |
| <b>Opening Cash balances</b>     | <b>71</b>    | <b>252</b>     | <b>3</b>       | <b>82</b>    |
| <b>Closing Cash balances</b>     | <b>252</b>   | <b>3</b>       | <b>3</b>       | <b>89</b>    |

**Key Ratios**

| Y/E March                    | FY2007 | FY2008 | FY2009 | FY2010E |
|------------------------------|--------|--------|--------|---------|
| <b>Valuation Ratio (x)</b>   |        |        |        |         |
| P/E (on FDEPS)               | -      | -      | -      | -       |
| P/CEPS                       | 4.0    | 3.7    | -      | 6.7     |
| P/BV                         | 0.8    | 0.9    | 1.2    | 1.4     |
| Dividend yield (%)           | -      | -      | -      | -       |
| EV/Sales                     | 1.4    | 1.2    | 1.2    | 1.2     |
| EV/EBITDA                    | 6.9    | 7.9    | 22.4   | 7.5     |
| EV/Total Assets              | 0.9    | 0.9    | 1.0    | 1.1     |
| <b>Per Share Data (Rs)</b>   |        |        |        |         |
| EPS (Basic)                  | (0.8)  | -      | (6.3)  | (3.4)   |
| EPS (fully diluted)          | (0.8)  | -      | (6.3)  | (3.4)   |
| Cash EPS                     | 5.0    | 5.5    | (0.4)  | 3.0     |
| DPS                          | -      | -      | -      | -       |
| Book Value                   | 24.1   | 23.7   | 16.3   | 14.3    |
| <b>DuPont Analysis</b>       |        |        |        |         |
| EBIT margin                  | 12.0   | 7.0    | -      | 7.8     |
| Tax retention ratio (%)      | -      | 27.6   | 67.3   | 93.7    |
| Asset turnover (x)           | 0.7    | 0.8    | 0.9    | 0.9     |
| RoIC (Post-tax)              | -      | 1.6    | -      | 6.7     |
| Cost of Debt (Post Tax)      | 13.3   | 14.3   | 16.8   | 14.4    |
| Leverage (x)                 | 2.7    | 2.5    | 3.6    | 3.9     |
| <b>Returns (%)</b>           |        |        |        |         |
| RoCE (Pre-tax)               | 8.3    | 5.4    | -      | 6.8     |
| Angel RoIC (Pre-tax)         | 9.2    | 5.8    | -      | 7.2     |
| RoE                          | -      | 0.0    | -      | -       |
| <b>Turnover ratios (x)</b>   |        |        |        |         |
| Asset Turnover (Gross Block) | 0.6    | 0.6    | 0.6    | 0.6     |
| Inventory (days)             | 50     | 53     | 61     | 55      |
| Receivables (days)           | 30     | 27     | 25     | 25      |
| Payables (days)              | 56     | 53     | 75     | 80      |
| Working capital cycle (days) | 88     | 59     | 60     | 46      |
| <b>Solvency ratios (x)</b>   |        |        |        |         |
| Net debt to equity           | 2.7    | 2.5    | 3.6    | 4.1     |
| Net debt to EBITDA           | 5.2    | 5.9    | 16.7   | 5.8     |
| Interest Coverage            | 0.8    | 0.5    | -      | 0.6     |



Research Team Tel: 022 - 4040 3800

E-mail: research@angeltrade.com

Website: www.angeltrade.com

## DISCLAIMER

This document is solely for the personal information of the recipient, and must not be singularly used as the basis of any investment decision. Nothing in this document should be construed as investment or financial advice. Each recipient of this document should make such investigations as they deem necessary to arrive at an independent evaluation of an investment in the securities of the companies referred to in this document (including the merits and risks involved), and should consult their own advisors to determine the merits and risks of such an investment.

Angel Broking Limited, its affiliates, directors, its proprietary trading and investment businesses may, from time to time, make investment decisions that are inconsistent with or contradictory to the recommendations expressed herein. The views contained in this document are those of the analyst, and the company may or may not subscribe to all the views expressed within.

Reports based on technical and derivative analysis center on studying charts of a stock's price movement, outstanding positions and trading volume, as opposed to focusing on a company's fundamentals and, as such, may not match with a report on a company's fundamentals.

The information in this document has been printed on the basis of publicly available information, internal data and other reliable sources believed to be true, but we do not represent that it is accurate or complete and it should not be relied on as such, as this document is for general guidance only. Angel Broking Limited or any of its affiliates/ group companies shall not be in any way responsible for any loss or damage that may arise to any person from any inadvertent error in the information contained in this report. Angel Broking Limited has not independently verified all the information contained within this document. Accordingly, we cannot testify, nor make any representation or warranty, express or implied, to the accuracy, contents or data contained within this document. While Angel Broking Limited endeavours to update on a reasonable basis the information discussed in this material, there may be regulatory, compliance, or other reasons that prevent us from doing so.

This document is being supplied to you solely for your information, and its contents, information or data may not be reproduced, redistributed or passed on, directly or indirectly.

Angel Broking Limited and its affiliates may seek to provide or have engaged in providing corporate finance, investment banking or other advisory services in a merger or specific transaction to the companies referred to in this report, as on the date of this report or in the past.

Neither Angel Broking Limited, nor its directors, employees or affiliates shall be liable for any loss or damage that may arise from or in connection with the use of this information.

**Note: Please refer to the important 'Stock Holding Disclosure' report on the Angel website (Research Section). Also, please refer to the latest update on respective stocks for the disclosure status in respect of those stocks. Angel Broking Limited and its affiliates may have investment positions in the stocks recommended in this report.**

### Disclosure of Interest Statement

### Ispat Industries

|  |    |
|--|----|
| 1. Analyst ownership of the stock                                  | No |
| 2. Angel and its Group companies ownership of the stock            | No |
| 3. Angel and its Group companies' Directors ownership of the stock | No |
| 4. Broking relationship with company covered                       | No |

Note: We have not considered any Exposure below Rs 1 lakh for Angel, its Group companies and Directors.

### Ratings (Returns):

Buy (&gt; 15%)

Reduce (-5% to 15%)

Accumulate (5% to 15%)

Sell (&lt; -15%)

Neutral (-5 to 5%)

**Address: Acme Plaza, 'A' Wing, 3rd Floor, M.V. Road, Opp. Sangam Cinema, Andheri (E), Mumbai - 400 059.**

**Tel: (022) 3952 4568 / 4040 3800**

## Research Team

### Fundamental:

|                      |  |                                  |
|----------------------|--|----------------------------------|
| Sarabjit Kour Nangra | VP-Research, Pharmaceutical              | sarabjit@angeltrade.com          |
| Vaibhav Agrawal      | VP-Research, Banking                     | vaibhav.agrawal@angeltrade.com   |
| Vaishali Jajoo       | Automobile                               | vaishali.jajoo@angeltrade.com    |
| Shailesh Kanani      | Infrastructure, Real Estate              | shailesh.kanani@angeltrade.com   |
| Anand Shah           | FMCG, Media                              | anand.shah@angeltrade.com        |
| Deepak Pareek        | Oil & Gas                                | deepak.pareek@angeltrade.com     |
| Sushant Dalmia       | Pharmaceutical                           | sushant.dalmia@angeltrade.com    |
| Rupesh Sankhe        | Cement, Power                            | rupeshd.sankhe@angeltrade.com    |
| Param Desai          | Real Estate, Logistics, Shipping         | paramv.desai@angeltrade.com      |
| Sageraj Bariya       | Fertiliser, Mid-cap                      | sageraj.bariya@angeltrade.com    |
| Viraj Nadkarni       | Retail, Hotels, Mid-cap                  | virajm.nadkarni@angeltrade.com   |
| Paresh Jain          | Metals & Mining                          | pareshn.jain@angeltrade.com      |
| Amit Rane            | Banking                                  | amitn.rane@angeltrade.com        |
| John Perinchery      | Capital Goods                            | john.perinchery@angeltrade.com   |
| Srishti Anand        | IT, Telecom                              | srishti.anand@angeltrade.com     |
| Jai Sharda           | Mid-cap                                  | jai.sharda@angeltrade.com        |
| Sharan Lillaney      | Mid-cap                                  | sharanb.lillaney@angeltrade.com  |
| Amit Vora            | Research Associate (Oil & Gas)           | amit.vora@angeltrade.com         |
| V Srinivasan         | Research Associate (Cement, Power)       | v.srinivasan@angeltrade.com      |
| Mihir Salot          | Research Associate (Logistics, Shipping) | mihir.salot@angeltrade.com       |
| Chitrangda Kapur     | Research Associate (FMCG, Media)         | chitrangdar.kapur@angeltrade.com |
| Vibha Salvi          | Research Associate (IT, Telecom)         | vibhas.salvi@angeltrade.com      |
| Pooja Jain           | Research Associate (Metals & Mining)     | pooja.j@angeltrade.com           |
| Yaresh Kothari       | Research Associate (Automobile)          | yareshb.kothari@angeltrade.com   |
| Shrinivas Bhutda     | Research Associate (Banking)             | shrinivas.bhutda@angeltrade.com  |
| Sreekanth P.V.S      | Research Associate (FMCG, Media)         | sreekanth.s@angeltrade.com       |
| Hemang Thaker        | Research Associate (Capital Goods)       | hemang.thaker@angeltrade.com     |

### Technical:

|                  |                       |                                   |
|------------------|-----------------------|-----------------------------------|
| Shardul Kulkarni | Sr. Technical Analyst | shardul.kulkarni@angeltrade.com   |
| Mileen Vasudeo   | Technical Analyst     | vasudeo.kamalakant@angeltrade.com |

### Derivatives:

|                 |                    |                                |
|-----------------|--------------------|--------------------------------|
| Siddarth Bhamre | Head - Derivatives | siddarth.bhamre@angeltrade.com |
| Jaya Agarwal    | Derivative Analyst | jaya.agarwal@angeltrade.com    |

### Institutional Sales Team:

|                  |                           |                                  |
|------------------|---------------------------|----------------------------------|
| Mayuresh Joshi   | VP - Institutional Sales  | mayuresh.joshi@angeltrade.com    |
| Abhimanyu Sofat  | AVP - Institutional Sales | abhimanyu.sofat@angeltrade.com   |
| Nitesh Jalan     | Sr. Manager               | niteshk.jalan@angeltrade.com     |
| Pranav Modi      | Sr. Manager               | pranavs.modi@angeltrade.com      |
| Sandeep Jangir   | Sr. Manager               | sandeep.jangir@angeltrade.com    |
| Ganesh Iyer      | Sr. Manager               | ganeshb.lyer@angeltrade.com      |
| Jay Harsora      | Sr. Dealer                | jayr.harsora@angeltrade.com      |
| Meenakshi Chavan | Dealer                    | meenakshis.chavan@angeltrade.com |
| Gaurang Tisani   | Dealer                    | gaurangp.tisani@angeltrade.com   |

### Production Team:

|                 |                 |                                |
|-----------------|-----------------|--------------------------------|
| Bharathi Shetty | Research Editor | bharathi.shetty@angeltrade.com |
| Simran Kaur     | Research Editor | simran.kaur@angeltrade.com     |
| Bharat Patil    | Production      | bharat.patil@angeltrade.com    |
| Dilip Patel     | Production      | dilipm.patel@angeltrade.com    |