JSW Steel Limited
Investor Presentation
November 2017
JSW Group – overview

**Presence across the core sectors**

- **JSW Steel**: India’s leading integrated steel producer (Steel making capacity: 18 MTPA)
- **JSW Energy**: Engaged across the value chain of power business (Operational plants’ capacity: 4,531 MW)
- **JSW Infrastructure**: Engaged in development and operations of ports (Operational capacity: 70 MTPA)
- **JSW Cement**: Manufacturer of PSC, OPC and GGBS cement (Operational plants’ capacity: 11.6 MTPA)

**Market cap of listed businesses ($11.8 bn^\text{^})**

- **JSW Steel**: 9.6
- **JSW Energy**: 2.2

As on October 31, 2017

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* Listed company

^ USD/₹ = 64.7745 (RBI reference rate as on October 31, 2017)
JSW Steel – India’s leading steel manufacturer

- Installed capacity 18 MTPA, at strategic locations in South and West India
- Pan India marketing and distribution network, export presence in ~100 countries across the 5 continents
- Extensive portfolio of products – HR, CR, galvanized/galvalume, pre-painted, tinplate, electrical steel (CRNO), TMT bars, wire rods, special steel bars, rounds and blooms
- Leading steel manufacturer in India
- Integrated manufacturing process
- Strong distribution network and export presence
- Technological competence
- Diversified product portfolio
- Global presence
- Integrated steel manufacturing facilities – from raw material processing plants to value-added product capacities
- Combination of state-of-the-art steel making technologies: Corex, DRI, Blast Furnace
- International presence in mining assets (Chile, US and Mozambique) and value-added facilities (Plate and Pipe mill in US)
# Transformational journey to market leadership

<table>
<thead>
<tr>
<th></th>
<th>FY2002</th>
<th>FY2010</th>
<th>FY2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity (MTPA)</td>
<td>1.6</td>
<td>7.8</td>
<td>18.0</td>
</tr>
<tr>
<td>Production (MTPA)</td>
<td>1.3</td>
<td>6.0</td>
<td>15.8</td>
</tr>
<tr>
<td>Revenue (USD mn)</td>
<td>268</td>
<td>3,006</td>
<td>9,336</td>
</tr>
<tr>
<td>EBITDA (USD mn)</td>
<td>43</td>
<td>641</td>
<td>1,878</td>
</tr>
<tr>
<td>EBITDA/ton(1) (USD/ton)</td>
<td>34</td>
<td>112</td>
<td>128</td>
</tr>
<tr>
<td>Market Cap (USD mn)</td>
<td>81</td>
<td>3,565</td>
<td>7,016</td>
</tr>
<tr>
<td>Technology</td>
<td>Corex</td>
<td>Corex, BF</td>
<td>Corex, BF, DRI</td>
</tr>
<tr>
<td>Product Mix</td>
<td>Flats</td>
<td>Flats, long, special steel and value added</td>
<td>Flat, long, special steel &amp; high value-added auto, electrical grade</td>
</tr>
</tbody>
</table>

**CAGR FY2002–FY2017:**
- 18% for Capacity
- 18% for Production
- 27% for Revenue
- 29% for EBITDA
- 9% for EBITDA/ton

- Capacity increased to 18MTPA in Mar 2016
- CAGR FY2002–FY2017: 18%
- CAGR FY2002–FY2017: 27%
- CAGR FY2002–FY2017: 29%
- Significant value creation with 86x increase in market value(2)
- Combination of industry leading technologies
- Continuously expanding product canvas with focus on high-end value-added products

**Notes:**
1. Calculated as consolidated EBITDA/steel sales
2. From 31st March 2002 to 31st March 2017
3. USD/₹ = 64.8386 (RBI reference rate as on Mar 31, 2017)

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**Persistent progress through the economic cycles**
Continuously evaluating opportunities to deliver value enhancing growth

Key new projects by 2020
- Dolvi: Capacity expansion to 10 MTPA, 1.5MTPA Coke Oven at Dolvi Coke Projects Limited
- Vijayanagar: BF-3 revamp & upgradation, CRM-1 complex capacity expansion, Pipe Conveyor System for Iron ore and new Water Reservoir
- Salem: capacity expansion to 1.2MTPA
- Vasind and Tarapur: modernization-cum-capacity enhancement, 0.2MTPA Tin plate mill

Combination of Organic and Inorganic growth

- 2002
  - 1.6 MTPA

- 2004
  - SISCOL

- 2005
  - 2.5 MTPA
  - Color Coating Line
  - EURO IKON

- 2006
  - 3.8 MTPA

- 2007
  - 4.8 MTPA
  - 1.0 MTPA—CRM
  - Plate and Pipe Mill in US
  - Coal mining concessions in Mozambique

- 2008
  - Iron Ore mines in Chile

- 2009
  - 7.8 MTPA

- 2010
  - 3.5 MTPA—HSM-2
  - JSW-JFE Strategic Partnership
  - Coal mining concessions in US

- 2011
  - 49.3% stake in Ispat Industries

- 2012
  - HSM-2 Capacity Expansion to 5 MTPA

- 2013
  - 14.3 MTPA post Ispat merger

- 2014
  - New CRM2—Phase I
  - 4 MTPA—Pellet Plant
  - 1 MTPA—Coke Oven Plant
  - Welspun Maxsteel
  - 50% stake in Vallabh Tinplate

- 2015
  - CRM2—Phase 2
  - 0.2MTPA Electrical Steel Mill

- 2016
  - 18 MTPA
  - Won Moitra coal mine in Jharkhand

- 2017
  - 74% stake in Praxair’s the industrial gases joint venture
  - Won 5 iron ore mines in Karnataka (111 mn tonnes estimated resources)

(1) Southern Iron and Steel Company, (2) Amba River Coke Limited, (3) Praxair India Private Limited, (4) JSW Praxair Oxygen Private Limited
JSW – JFE strategic partnership

- One of the largest FDI in the Indian Metals and Mining space – Equity infusion by JFE of Rs. 5,410 Crores (~US$1.2 bn) (1) for 14.99% equity stake
- Deleveraged Balance Sheet to support next phase of growth
- Access to cutting edge technologies and fast growing automotive steel market
- Operational excellence to result in cost reduction

Value creation for both the partners

JSW Steel:
- Focused expansion plans in India
- Optimized capital structure through deleveraging
- Access to cutting edge technologies

JFE:
- Presence in growing Indian market
- Future growth through equity participation
- Strategic production base in India for existing automobile customers

Technology agreements

Benefits to JSW Steel driven by:
- Access to fast growing auto steel market
- Technical know-how for electrical steel manufacturing
- Short learning curve
- Application engineering
- New product development
- Benchmarking and personnel training

General technical assistance agreements

Operational excellence and cost reduction for sustainable operations by:
- Improvement in quality, productivity, yield, and energy efficiency
- Sharing best maintenance, environment management, and safety practices
- Benchmarking, training, and talent sharing
- Standardization of processes

(1) Translated at USD/₹ = 44.65 (RBI reference rate as on Mar 31, 2011)
## Balanced corporate strategy

### Selective Growth
- Maintain market share through selective organic and inorganic growth
- Undertake brownfield expansions at low specific investment cost per ton
- Consider inorganic opportunities that are value accretive

### Diversification of Product Profile and Customer Base
- Increase proportion of high margin value-added products
- Diversify customer base, both within India and abroad
- Continue to focus on rural markets in India

### Backward & Forward Integration, and Focus on Resource Optimization
- Continue to evaluate raw material assets in India and abroad to secure key raw material supplies and reduce cost of production by targeting strategic tie-ups and investments
- Focus on cost reduction and energy efficiency

### Prudent balance sheet management
- Continuously seek to improve financial profile
- Manage capacity expansion and debt profile to capture market opportunities without excessive risk

### Sustainability with focus on Quality, R&D and Innovation
- Committed to sustainable and eco-friendly technologies to drive growth
- Focus on Quality, R&D and Innovation to drive cost efficiency and new product development
### Strong and balanced Board comprising experts of eminence & integrity

<table>
<thead>
<tr>
<th>Chairperson—Emeritus</th>
<th>Executive Directors</th>
<th>Independent Directors</th>
<th>Nominee Directors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Savitri Devi Jindal</strong></td>
<td><strong>Seshagiri Rao M.V.S</strong></td>
<td><strong>Malay Mukherjee</strong></td>
<td><strong>N.Jayaram, IAS</strong></td>
</tr>
<tr>
<td></td>
<td>Joint Managing Director &amp; Group CFO</td>
<td>40yrs of rich experience in mining and steel industry</td>
<td>Nominee Director of KSIIDC</td>
</tr>
<tr>
<td><strong>Promoter Director</strong></td>
<td><strong>Dr. Vinod Nowal</strong></td>
<td><strong>Kannan Vijayaraghavan</strong></td>
<td><strong>Hiroyuki Ogawa</strong></td>
</tr>
<tr>
<td><strong>Sajjan Jindal</strong></td>
<td>Dy. Managing Director</td>
<td>FCA and Certified Management Consultant</td>
<td>Nominee Director of JFE</td>
</tr>
<tr>
<td>Chairman &amp; Managing Director</td>
<td><strong>Jayant Acharya</strong></td>
<td><strong>Dr. Vijay Kelkar</strong></td>
<td>Steel Corporation</td>
</tr>
<tr>
<td></td>
<td>Director (Commercial &amp; Marketing)</td>
<td>Ex-Finance Secretary, Ex-Secretary of MoP&amp;G, Ex-Chairman Finance Commission</td>
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<td></td>
<td></td>
<td><strong>Dr. Punita Kumar Sinha</strong></td>
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<td></td>
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<td>Former CIO at The Asia Tigers Fund</td>
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<td><strong>Haigreve Khaitan</strong></td>
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<td>Senior Partner at M/s. Khaitan &amp; Co, India’s one of the oldest and full service law firm</td>
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<td></td>
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<td><strong>Seturaman Mahalingam</strong></td>
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<tr>
<td></td>
<td></td>
<td>CA, Ex-CFO of TCS, Ex member of the Tax Administration Reform Commission</td>
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</table>

**Board committed to sustainable business**
**FY17 performance on sustainability matrixes**

- **Material Recycled**: 4.12 MT
- **Waste heat utilized**: 8,73,635 GJ
- **Recycled & reused water**: 35%
- **Increase in Expenditure for corporate social responsibility over FY16**: 18%
- **Decrease in LTIFR over FY16**: 28%
- **Reduction in Specific Energy consumption over FY16**: 18.4%
- **Reduction in Specific Water consumption over FY16**: 20%

**2017**
- 1st iron & steel company in India to get an Environment Product Declaration certificate as per ISO 14025 for hot rolled steel strips at Vijayanagar
- 1st Prize for Fair Business Practices to JSW Steel Coated Products Ltd by CFBP Jamnalal Bajaj Trust
- Indian Merchants Chamber Ramakrishna Bajaj National Quality Performance Excellence Trophy in the Manufacturing Category to JSW Steel Coated Products Ltd

**2016**
- Golden Peacock Innovative Product Award
- World Steel Association: Steelie 2016 - Innovation, for “development of advanced high strength automotive steels with speed and innovation”
- Confederation of Indian Industry: National Award for Supply Chain & Logistics Excellence in steel industry
- Confederation of Indian Industry: Accreditation with Level 5 for Total Cost Management Maturity
- Bureau of Energy Efficiency: 2nd Prize in National Energy Conservation Awards 2016 to Vijayanagar Works in integrated steel facilities and Kalmeshwar Works in steel re-rolling mills
<table>
<thead>
<tr>
<th>Overview</th>
<th>Value Proposition</th>
<th>Performance Overview</th>
<th>Guidance</th>
<th>Business Environment</th>
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</thead>
</table>

**Agenda**
A platform of strength and agility

1. Strong fundamentals to boost India steel demand
2. Multi-location manufacturing facilities
3. Diversified product profile
4. Domestic market leader with significant export presence
5. Strong sales and marketing platform
6. Focus on operational efficiency
7. Strategic expansion aided by superior project execution
8. Proven ability to acquire and turnaround assets
9. Robust financial profile
1. Strong fundamentals to boost India steel demand

- **Strong economic growth with improving fundamentals**
  - India’s GDP growth continues to register stellar performance in a world seeing relatively weaker growth
  - Post the impact of introduction of GST, economic activity is expected to rebound with public spending on infrastructure, proposed recapitalisation of banks, declining fiscal deficit, benign inflation, lower oil prices and easing interest rate trajectory

- **India GDP growth**
  - (%)
  - FY13: 6.4%
  - FY14: 7.5%
  - FY15: 8.0%
  - FY16: 7.1%
  - FY17E: 6.7%
  - FY18E: 7.4%

- **Government reforms to boost industry growth**
  - Various measures in different sectors, easing FDI norms and initiatives such as ‘Make in India’ aim at driving growth & development
  - The government is focussed on continuing with economic reforms along with increase in public investment in infrastructure and development projects.
  - c.$60 Bn allocated for infrastructure development in 2017-18

- **Potential for substantial growth in steel consumption**
  - World per capita consumption was ~208 Kgs in 2016
  - India per capita consumption was ~63 Kgs in 2016

- **India steel consumption to rise at a faster rate**
  - India’s steel consumption was 84 million tonnes in 2016 and is expected to rise to ~87 million tonnes in 2017 and ~92 million tonnes in 2018

With the growth in economy, JSW Steel is well positioned to be part of the India growth story

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(1) IMF, (2) World Steel Association [World Steel in Figures – 2016], IMF [World Economic Outlook – October 2017], (3) World Steel Association [Short range outlook – Oct 2017], (4) Bubble size represents total steel demand of respective country
2 Multi-location manufacturing facilities

Geographically diversified with manufacturing facilities in South and West India

- **Dolvi**: 5 MTPA
  - 3.5 MTPA Blast Furnace
  - 1.6 MTPA gas based DRI
  - 55 MW Power Plant

- **Salav**: 0.9 MTPA DRI (**)

- **Vasind & Tarapur (JSCPL*)**
  - 1.18 MTPA GP/GC
  - 0.5 MTPA Colour Coating Line
  - 30 MW Power Plant

- **Kalmeshwar (JSCPL*)**
  - 0.58 MTPA GP/GC
  - 0.19 MTPA Colour Coating Line

- **Vijayanagar**: 12 MTPA
  - 1.7 MTPA Corex
  - 10.4 MTPA Blast Furnaces
  - 854 MW Power Plant

- **Salem**: 1 MTPA
  - 1 MTPA Blast Furnaces
  - 0.5 MTPA Blooming Mill
  - 60 MW Power Plant

- **Kalmeshwar**: 0.58 MTPA GP/GC
- **Vijayanagar**: 12 MTPA
  - 1.7 MTPA Corex
  - 10.4 MTPA Blast Furnaces
  - 854 MW Power Plant

Strategic overseas presence

- **US plate and pipe mill**
  - JSW Steel ownership: 90%
  - Acquisition cost: $810mn
  - Capacity: 1.2 Net MTPA Plates and 0.55 Net MTPA Pipes
  - Acquired in 2007
  - Opportunity for diversification in terms of products, markets and geographies

- **US coal mines**
  - JSW Steel ownership: 100%
  - Acquisition cost: $70mn

- **Chile iron ore mines**
  - JSW Steel ownership: 70%
  - Acquisition cost: $252mn
  - Started operations in FY11
  - Maritime concession to develop cape size port in North Caldera

- **Mozambique coal mines**
  - JSW Steel ownership: 100%
  - Early stage development in progress

Leveraging locational advantage to increase market share strategically
Wide offering of Flat and Long products

- Slabs
- HRC
- HR Plates
- GC
- CRC
- Colour Coated
- Billets
- Blooms
- TMT
- Wire Rods

Continuously increasing value added products

- Diversified portfolio to address growing demand for value-added steel
- Commissioned new facilities to further enrich product mix
- Leveraging JFE Steel’s well-established manufacturing technology for high value-added products for auto-grade steel

Developing new products, capturing niche markets

- Automotive Grade Steel:
  - Enhanced focus on cold rolled, galvanised and galvanneal products for body panels of automobiles
- Electrical Steel:
  - Commissioned Cold Rolled Non-grain Oriented (CRNO) steel plant to address domestic demand by substituting imports of high grade electrical steel
- Colour Coated Products:
  - Largest colour coated facility to address construction, warehousing and roofing requirements
  - State-of-the-art colour coating line for appliance grade products used in consumer durables

Continuously enriching product mix
Domestic market leader with strong export presence

- Penetrating further to capture growing domestic demand with unique marketing strategy – pan India retail network with more than 8,100 outlets (includes JSW Connect, JSW Shoppe, JSW Explore as well as non-exclusive retailers)
- Delivered industry leading sales volume growth at 20% YoY in FY17
- One of the largest exporter of steel products from India with export presence in over 100 countries
- Ability to re-align sales effort and shift between domestic and export markets as per market conditions – strategically reduced share of exports to 12% of total sales in FY16, as global steel consumption declined 3% YoY in CY15. Exports have increased in FY17

Flexibility to shift between domestic and international markets based on market conditions

(1) Joint Plant Committee, (2) Revenue from operations as per Ind-AS from FY16 onwards
Multi-sectoral volume growth

- Optimizing market mix and product mix to derive maximum benefit from sector growth
- Leveraging export presence
- New product approvals for original equipment manufacturers (OEMs) and automotive customers
- Increase in value added products leading to incremental growth in focus sectors and also facilitating import substitution
- Focused on retail sales for increased reach and penetration – JSW has footprints across 575 districts with over 8,500 exclusive and non-exclusive retail outlets

Segmented approach to address different retail segments

**Metro / Urban**
- ‘JSW explore’
  - Branded, multiple product service center for steel solutions
  - Just-in-time solution with in-house profiling lines and Value Added Services
  - Franchisee Model

**Urban / Semi-urban**
- ‘JSW Shoppe’
  - Steel distribution
  - Enhanced customer experience

**Semi-urban / Rural**
- ‘JSW Shoppe Connect’
  - Smaller retail format linked to JSW explore/Shoppe
  - Last mile link to talukas/rural areas
  - Sales to end consumers and MSMEs

Increased customer focus and market penetration
# Focus on operational efficiency

<table>
<thead>
<tr>
<th>Diverse blend of technology</th>
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<tbody>
<tr>
<td>✓ Coke Making: Recovery and Non-recovery Coke Ovens</td>
</tr>
<tr>
<td>✓ Agglomeration: Pelletisation and Beneficiation Plants</td>
</tr>
<tr>
<td>✓ Iron Making: Blast Furnace, Corex, Sponge Iron (DRI)</td>
</tr>
<tr>
<td>✓ Steel Making: Basic Oxygen Furnace (BOF), Electric Arc Furnace (EAF), Conarc</td>
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<tr>
<td>✓ Casting: Continuous Casting, Thin Slab Casting, Billet Casting</td>
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<tr>
<th>High labour productivity</th>
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<tbody>
<tr>
<td>✓ Improving labour productivity: Current production of ~1,334 tons/ employee(1)</td>
</tr>
<tr>
<td>✓ In-house training programmes</td>
</tr>
<tr>
<td>✓ Continuously investing, building and enhancing competencies</td>
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<table>
<thead>
<tr>
<th>Integrated operations</th>
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<tbody>
<tr>
<td>✓ Integrated manufacturing facilities: From pelletisation / beneficiation to downstream value-add capabilities</td>
</tr>
<tr>
<td>✓ Dedicated port and railway siding for logistics support</td>
</tr>
<tr>
<td>✓ 100% assured power supply through captive power plants and arrangements with JSW Energy and the power grid</td>
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</tbody>
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### Resulting in operational efficiency with:

- Reduced raw material costs
- Focus on process improvements
- Waste gas utilization for power generation
- Solid waste management and zero effluent discharge
- Efficient operations resulting in low conversion cost

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*(1) Total production (15.80MT) divided by total no. of employees on Company payroll (11,848) in FY17*
Strategic expansion aided by strong project execution

Strong project execution capabilities ...
- Experienced in-house project management team
- Supported by cross-functional team (commercial, finance and legal department)
- Established long-term relationship with key domestic and international suppliers
- Savings in procurement cost by negotiating firm prices for follow-on orders

... at low specific investment cost\(^{(1)}\)
- Low specific investment cost of $561/ton of capacity expansion shows cost and project management efficiency

Major new & on-going Projects

- **Vijayanagar Works:**
  - BF-3 revamp & upgradation, CRM-1 complex capacity expansion, Pipe Conveyor System for Iron ore and new Water Reservoir

- **Dolvi Works:**
  - Capacity expansion to 10 MTPA, 1.5MTPA Coke Oven at Dolvi Coke Projects Limited

- **Salem Works:**
  - Capacity expansion from 1 MTPA to 1.2 MTPA by setting up certain new facilities and debottlenecking/modification of existing facilities
  - Setting-up of Reheating Furnace in Bar Rod Mill, Coke Oven and Turbo Generator

- **Vasind and Tarapur Works:**
  - Modernization-cum-capacity enhancement, 0.2MTPA Tin plate mill

Focus on low cost and returns accretive brownfield projects to capitalise on expected demand growth

(1) IGAAP based Gross Block as on Mar 31, 2017 (₹65,485 Crores translated at USD/₹ = 64.8386 RBI Reference as on Mar 31, 2017) divided by total capacity (18MTPA)
Proven ability to acquire and turnaround assets

JSW Steel has a proven track record of acquiring troubled assets and turning them around in record time by closely integrating them with its existing operations – thus creating synergies and optimising cost.

Case Study: Turnaround strategy at JSW Ispat’s Dolvi plant

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<tbody>
<tr>
<td>Inability to service existing debt</td>
<td>Infusion of equity</td>
<td>Capacity expanded to 5MTPA</td>
</tr>
<tr>
<td>Inadequate cashflows</td>
<td>Alignment of marketing strategies resulting in freight synergies and VAT benefits</td>
<td>Diversified product offering from Flat steel only to mix of Flat and Long steel</td>
</tr>
<tr>
<td>Corporate debt restructuring (CDR) case</td>
<td>Reduction of high cost working capital funding</td>
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<td></td>
<td>Refinancing of existing debt</td>
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<tr>
<td></td>
<td>Electricity sourcing from JSW Energy at competitive prices</td>
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<tr>
<td></td>
<td>Commissioning of 4MTPA pellet plant(1), 1MTPA coke oven(1), waste gas based 55MW power plant, railway siding, and lime calcination plant</td>
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<tr>
<td></td>
<td>Exit from CDR</td>
<td>Stabilized/ ramped-up the expanded capacity</td>
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<td></td>
<td>Generating positive profit after tax</td>
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</table>

Able to leverage an acquisition to maximum value accretion through application of knowledge and experience

(1) Implemented in a wholly owned subsidiary Amba River Coke Limited.
<table>
<thead>
<tr>
<th>Robust financial profile</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strong track record of volume growth</strong></td>
</tr>
<tr>
<td>✓ Increased capacity to 18MTPA in 2016 from 1.6MTPA in 2002</td>
</tr>
<tr>
<td>✓ Delivered 20% sales volumes in FY17 growth despite weak economic growth and sluggish domestic demand</td>
</tr>
<tr>
<td><strong>Superior profitability supported by efficient operations</strong></td>
</tr>
<tr>
<td>✓ Resilient operations with improved EBITDA margin marked by several productivity and cost improvement measures</td>
</tr>
<tr>
<td>✓ While FY16 EBITDA was impacted by weak steel pricing due to steel supply glut and planned shutdowns; there has been large margin expansion in FY17</td>
</tr>
<tr>
<td><strong>Well-capitalized balance sheet</strong></td>
</tr>
<tr>
<td>✓ Leverage profile has improved significantly with steep growth in profitability</td>
</tr>
<tr>
<td>✓ Adequate liquidity levels owing to prearranged funding in place for capacity expansions and a committed working capital facility</td>
</tr>
<tr>
<td><strong>Diverse sources of funding</strong></td>
</tr>
<tr>
<td>✓ Financial flexibility to raise capital</td>
</tr>
<tr>
<td>✓ Healthy mix of local and foreign currency debt</td>
</tr>
<tr>
<td>✓ Strong relationships with over 50 banks/financial institutions with access to low cost credit</td>
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</tbody>
</table>
Historical EBITDA per ton – JSW Steel Standalone
## Key highlights – Q2 FY18

### Standalone performance
- Crude Steel production: 3.94 million tonnes
- Saleable Steel sales: 3.92 million tonnes
- Quarterly Operating EBITDA: ₹2,927 crores
- Quarterly PAT: ₹845 crores
- Net Debt to Equity: 1.62x and Net Debt to EBITDA: 3.66x

### Consolidated performance
- Highest ever quarterly Saleable Steel sales: 3.96 million tonnes
- Quarterly Operating EBITDA: ₹3,036 crore and PAT: ₹836 crores
- Net Debt to Equity: 1.87x and Net Debt to EBITDA: 3.67x
### Quarterly volumes – standalone

#### Crude Steel Production

<table>
<thead>
<tr>
<th></th>
<th>Q2 FY17</th>
<th>Q2 FY18</th>
<th>Q1 FY18</th>
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<tbody>
<tr>
<td>Flat</td>
<td>2.86</td>
<td>2.89</td>
<td>2.76</td>
</tr>
<tr>
<td>Long</td>
<td>0.79</td>
<td>0.77</td>
<td>0.83</td>
</tr>
</tbody>
</table>

#### Steel Sales

<table>
<thead>
<tr>
<th></th>
<th>Q2 FY17</th>
<th>Q2 FY18</th>
<th>Q1 FY18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flat</td>
<td>2.80</td>
<td>2.83</td>
<td>2.57</td>
</tr>
<tr>
<td>Long</td>
<td>0.81</td>
<td>0.86</td>
<td>0.75</td>
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<tr>
<td>Semis</td>
<td>0.23</td>
<td>0.24</td>
<td>0.18</td>
</tr>
</tbody>
</table>

*All figures are in million tonnes*
### Half yearly volumes – standalone

#### Crude Steel Production

<table>
<thead>
<tr>
<th></th>
<th>H1 FY17</th>
<th>H1 FY18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flat</td>
<td>7.85</td>
<td>7.86</td>
</tr>
<tr>
<td>Long</td>
<td>5.28</td>
<td>5.40</td>
</tr>
</tbody>
</table>

#### Saleable Steel Sales

<table>
<thead>
<tr>
<th></th>
<th>H1 FY17</th>
<th>H1 FY18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flat</td>
<td>5.60</td>
<td>5.65</td>
</tr>
<tr>
<td>Long</td>
<td>1.64</td>
<td>1.61</td>
</tr>
<tr>
<td>Semis</td>
<td>0.35</td>
<td>0.42</td>
</tr>
</tbody>
</table>

+4% YoY

All figures are in million tonnes
Quarterly sales highlights – consolidated

✓ Overall sales grew 4% YoY
✓ Overall Value added & special products (VASP) and Special products sales grew by 17% YoY –
  ▪ CRCA sales grew 11%, Galvanised sales grew 9%, Colour Coated sales grew 30% and Electrical Steel sales grew 30%
  ▪ 22% growth in sales to Automotive customers, 71% growth in sales to Appliance segment, and 67% growth in sales to the Solar segment

Focused efforts towards value added & special products sales

All figures are in million tonnes. * Domestic sales, ^ Total sales (JSW Steel Standalone + JSW Steel Coated Products after netting-off inter-company sales). Value added and Special products (VASP) include HRPO, CRFH, CRCA, ES, Galvanised, Colour Coated and Special Bars and Rounds. Special products include HR special, TMT Special and WR Special
Retail sales improved by 24% QoQ as the effects of GST rollout on channel demand is stabilising

- Added 447 new Retailers and 20 new Distributors to the network – JSW now has footprints across 575 districts with over 8,500 exclusive and non-exclusive retail outlets
- Engaged with 7500+ influencers through 744+ meets
## Q2 Financials – standalone

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Q2 FY18</th>
<th>Q2 FY17</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>₹ Crores</td>
<td>USD mn</td>
</tr>
<tr>
<td>Revenue from operations</td>
<td>14,956</td>
<td>2,288</td>
</tr>
<tr>
<td>Operating EBITDA</td>
<td>2,927</td>
<td>448</td>
</tr>
<tr>
<td>Other Income</td>
<td>49</td>
<td>7</td>
</tr>
<tr>
<td>Finance Cost</td>
<td>919</td>
<td>141</td>
</tr>
<tr>
<td>Depreciation</td>
<td>772</td>
<td>118</td>
</tr>
<tr>
<td>Profit Before Tax</td>
<td>1,285</td>
<td>197</td>
</tr>
<tr>
<td>Tax</td>
<td>440</td>
<td>67</td>
</tr>
<tr>
<td>Profit after Tax</td>
<td>845</td>
<td>129</td>
</tr>
<tr>
<td>Diluted EPS (₹)*</td>
<td>3.50</td>
<td></td>
</tr>
</tbody>
</table>

* Not Annualized

**USD/ ₹ = 65.3552 (RBI reference rate as on Sep 29, 2017)**
## H1 Financials – standalone

<table>
<thead>
<tr>
<th>Particulars</th>
<th>H1 FY18</th>
<th>H1 FY17</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>₹ Crores</td>
<td>USD mn</td>
</tr>
<tr>
<td>Total Income from Operations</td>
<td>30,052</td>
<td>4,598</td>
</tr>
<tr>
<td>Operating EBITDA</td>
<td>5,125</td>
<td>784</td>
</tr>
<tr>
<td>Other Income</td>
<td>97</td>
<td>15</td>
</tr>
<tr>
<td>Finance Cost</td>
<td>1,826</td>
<td>279</td>
</tr>
<tr>
<td>Depreciation</td>
<td>1,504</td>
<td>230</td>
</tr>
<tr>
<td>Profit Before Tax</td>
<td>1,892</td>
<td>289</td>
</tr>
<tr>
<td>Tax</td>
<td>628</td>
<td>96</td>
</tr>
<tr>
<td>Profit after Tax</td>
<td>1,264</td>
<td>193</td>
</tr>
<tr>
<td>Diluted EPS (₹)*</td>
<td>5.23</td>
<td></td>
</tr>
</tbody>
</table>

*Not Annualized*
Operating EBITDA movement – standalone

<table>
<thead>
<tr>
<th></th>
<th>EBITDA Q2 FY17</th>
<th>Volume</th>
<th>NSR</th>
<th>Cost</th>
<th>Others</th>
<th>EBITDA Q2 FY18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume</td>
<td>2,692</td>
<td>56</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NSR</td>
<td></td>
<td></td>
<td>2,635</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost</td>
<td></td>
<td></td>
<td></td>
<td>(2,459)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>EBITDA Q2 FY18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2,927</td>
</tr>
</tbody>
</table>
## Operational performance – JSW Steel Coated Products

### Volumes

<table>
<thead>
<tr>
<th></th>
<th>Q2 FY18</th>
<th>Q2 FY17</th>
<th>H1 FY18</th>
<th>H1 FY17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production</td>
<td>0.43</td>
<td>0.45</td>
<td>0.87</td>
<td>0.86</td>
</tr>
<tr>
<td>Sales</td>
<td>0.56</td>
<td>0.44</td>
<td>1.04</td>
<td>0.84</td>
</tr>
</tbody>
</table>

### Key P&L data

<table>
<thead>
<tr>
<th></th>
<th>Q2 FY18</th>
<th>Q2 FY17</th>
<th>H1 FY18</th>
<th>H1 FY17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue from Operations</td>
<td>3,416</td>
<td>2,389</td>
<td>6,486</td>
<td>4,583</td>
</tr>
<tr>
<td>Operating EBITDA</td>
<td>141</td>
<td>167</td>
<td>346</td>
<td>326</td>
</tr>
<tr>
<td>Profit after Tax</td>
<td>53</td>
<td>79</td>
<td>170</td>
<td>153</td>
</tr>
</tbody>
</table>
# Operational performance – US Plate & Pipe Mill

## Production (net tonnes)

<table>
<thead>
<tr>
<th></th>
<th>Q2 FY18</th>
<th>Q2 FY17</th>
<th>H1 FY18</th>
<th>H1 FY17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plate Mill</td>
<td>52,315</td>
<td>48,787</td>
<td>1,17,806</td>
<td>86,646</td>
</tr>
<tr>
<td>Utilization (%)</td>
<td>22%</td>
<td>20%</td>
<td>25%</td>
<td>18%</td>
</tr>
<tr>
<td>Pipe Mill</td>
<td>11,488</td>
<td>12,249</td>
<td>23,050</td>
<td>16,847</td>
</tr>
<tr>
<td>Utilization (%)</td>
<td>8%</td>
<td>9%</td>
<td>8%</td>
<td>6%</td>
</tr>
</tbody>
</table>

## Sales (net tonnes)

<table>
<thead>
<tr>
<th></th>
<th>Q2 FY18</th>
<th>Q2 FY17</th>
<th>H1 FY18</th>
<th>H1 FY17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plate Mill</td>
<td>49,226</td>
<td>30,925</td>
<td>1,01,635</td>
<td>58,468</td>
</tr>
<tr>
<td>Pipe Mill</td>
<td>11,822</td>
<td>12,564</td>
<td>23,815</td>
<td>18,182</td>
</tr>
</tbody>
</table>

## Key P&L data

<table>
<thead>
<tr>
<th></th>
<th>Q2 FY18</th>
<th>Q2 FY17</th>
<th>H1 FY18</th>
<th>H1 FY17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue from Operations</td>
<td>54.24</td>
<td>37.31</td>
<td>112.91</td>
<td>62.57</td>
</tr>
<tr>
<td>EBITDA</td>
<td>1.00</td>
<td>0.22</td>
<td>6.10</td>
<td>(5.23)</td>
</tr>
</tbody>
</table>

**USD mn**

Net tonnes = 0.907 metric tonnes
## Q2 Financials – consolidated

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Q2 FY18</th>
<th>Q2 FY17</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>₹ Crores</td>
<td>USD mn</td>
</tr>
<tr>
<td>Total Income from Operations</td>
<td>16,818</td>
<td>2,573</td>
</tr>
<tr>
<td>Operating EBITDA</td>
<td>3,036</td>
<td>465</td>
</tr>
<tr>
<td>Other Income</td>
<td>39</td>
<td>6</td>
</tr>
<tr>
<td>Finance Cost</td>
<td>950</td>
<td>145</td>
</tr>
<tr>
<td>Depreciation</td>
<td>851</td>
<td>130</td>
</tr>
<tr>
<td>Profit Before Tax</td>
<td>1,274</td>
<td>195</td>
</tr>
<tr>
<td>Tax</td>
<td>445</td>
<td>68</td>
</tr>
<tr>
<td>Share of Associates, JV and non-controlling Interest</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Profit after Tax</td>
<td>836</td>
<td>128</td>
</tr>
<tr>
<td>Diluted EPS (₹)*</td>
<td>3.47</td>
<td></td>
</tr>
</tbody>
</table>

*Not Annualized

**USD/₹ = 65.3552 (RBI reference rate as on Sep 29, 2017)**
# 1H Financials – consolidated

<table>
<thead>
<tr>
<th>Particulars</th>
<th>H1 FY18</th>
<th>H1 FY17</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>₹ Crores</td>
<td>USD mn</td>
</tr>
<tr>
<td>Total Income from Operations</td>
<td>32,795</td>
<td>5,018</td>
</tr>
<tr>
<td>Operating EBITDA</td>
<td>5,653</td>
<td>865</td>
</tr>
<tr>
<td>Other Income</td>
<td>80</td>
<td>12</td>
</tr>
<tr>
<td>Finance Cost</td>
<td>1,895</td>
<td>290</td>
</tr>
<tr>
<td>Depreciation</td>
<td>1,670</td>
<td>256</td>
</tr>
<tr>
<td>Profit Before Tax</td>
<td>2,168</td>
<td>332</td>
</tr>
<tr>
<td>Tax</td>
<td>729</td>
<td>112</td>
</tr>
<tr>
<td>Share of Associates, JV and non-controlling Interest</td>
<td>21</td>
<td>3</td>
</tr>
<tr>
<td>Profit after Tax</td>
<td>1,460</td>
<td>223</td>
</tr>
<tr>
<td>Diluted EPS (₹)*</td>
<td>6.06</td>
<td></td>
</tr>
</tbody>
</table>

*Not Annualized

USD/ ₹ = 65.3552 (RBI reference rate as on Sep 29, 2017)
**Net debt movement – consolidated**

- **Net Debt** as on Sep'17: ₹42,764, New Loan Taken: ₹6,629, Repayments: ₹43,323, Fx Impact: ₹2,165, Movement in Cash & Cash Equivalents: ₹144, Net Debt: ₹6,543.

**Particulars**

<table>
<thead>
<tr>
<th>Particulars</th>
<th>30.09.2017</th>
<th>30.06.2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash &amp; cash equivalent (₹ crore)</td>
<td>1,163</td>
<td>1,336</td>
</tr>
<tr>
<td>Net Debt/Equity (x)</td>
<td>1.87</td>
<td>1.97</td>
</tr>
<tr>
<td>Net Debt/EBITDA (x)</td>
<td>3.67</td>
<td>3.76</td>
</tr>
</tbody>
</table>

*USD/ ₹ = 65.3552 (RBI reference rate as on Sep 29, 2017)*

*Net Debt excludes Acceptances*
Project updates

Pipe conveyor at Vijayanagar
(expected commissioning: May 2018)

Kiln refractory at Dolvi
(expected commissioning: March 2020)

CAL furnace erection for Tinplate at Tarapur
(expected commissioning: June 2018)

BF#2 reinforcement work at Dolvi
(expected commissioning: March 2020)
Volume guidance for FY18

Crude Steel Production

FY17: 15.80 million tonnes
FY18 E: 16.50 million tonnes
+4.4% YoY%

Saleable Steel Sales

FY17: 14.77 million tonnes
FY18 E: 15.50 million tonnes
+4.9% YoY%

All figures are in million tonnes
Rolling Capex Plan: FY18-21

<table>
<thead>
<tr>
<th></th>
<th>FY17</th>
<th>FY18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capex Carried forward</td>
<td>2,800</td>
<td></td>
</tr>
<tr>
<td>Ind-AS impact of 1.5mtpa Coke Oven at DCPL</td>
<td>1,050</td>
<td></td>
</tr>
<tr>
<td>Mining Capex</td>
<td>530</td>
<td></td>
</tr>
<tr>
<td>Expansion/upgradation projects</td>
<td></td>
<td>3,235</td>
</tr>
<tr>
<td>Other cost saving projects</td>
<td></td>
<td>19,200</td>
</tr>
<tr>
<td>Total Rolling Capex (FY17-FY18)</td>
<td>7,000</td>
<td>26,815</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>FY18</th>
<th>FY19-FY21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capex</td>
<td>8,000</td>
<td>18,815</td>
</tr>
<tr>
<td>Expansion/upgradation projects</td>
<td>8,000</td>
<td></td>
</tr>
<tr>
<td>Other cost saving projects</td>
<td>5,000</td>
<td></td>
</tr>
<tr>
<td>Total Rolling Capex (FY18-FY21)</td>
<td>18,815</td>
<td></td>
</tr>
</tbody>
</table>

Debt: 10,000
Equity: 8,815

All figures in ₹ crores
### Key Projects

<table>
<thead>
<tr>
<th>Project</th>
<th>Details</th>
</tr>
</thead>
</table>
| **Dolvi: increasing steel making capacity to 10 MTPA** | - Total project cost – ₹15,000 crore  
- Total capacity will be increased from 5 MTPA to 10 MTPA. The major facilities to be set-up under the expansion project are:  
  - 4.5 MTPA Blast furnace with 5 MTPA Steel Melt Shop  
  - 5.75 MTPA Sinter plant, 4 MTPA Pellet plant, and 4 Kilns of 600 TPD LCPs  
  - 5 MTPA Hot Strip Mill  
- Commissioning: by March 2020 |
| **Vijayanagar: BF-3 revamp and upgradation** | - Total project cost – ₹1,000 crore  
- BF-3 capacity will be increased to 4.5 MTPA after the revamp and upgradation project  
- Commissioning: 20 months from zero date  
- Overall Vijayanagar works capacity will remain at 12 MTPA as existing high cost operations at BF-2 will be shut down post completion of this project. |
### Key Projects contd. ...

<table>
<thead>
<tr>
<th>Project</th>
<th>Details</th>
</tr>
</thead>
</table>
| **Vijayanagar: CRM-1 complex capacity expansion** | - Total project cost – ₹2,000 crore  
- CRM1 complex capacity will be increased from 0.85 MTPA to 1.80 MTPA alongwith two Continuous Galvanizing Line of 0.45 MTPA each, a new 1.2 MTPA Continuous Pickling Line for HRPO products, and a new 0.80 MTPA HR Skin Pass Mill for HR Black & HRSPO products  
- Commissioning: by Sep 2019 |
| **Vasind and Tarapur: modernisation-cum-capacity enhancement** | - Total project cost – ₹1,200 crore  
- The modernisation cum capacity enhancement project includes:  
  - increase in cold rolling capacity from 1.16 MTPA to 2.12 MTPA by replacing existing CR mills with Batch Tandem CR mills  
  - increase in GI/GL capacity by 0.63 MTPA  
  - increase in colour coating capacity by 0.08 MTPA  
- Commissioning: by April 2019 |
<table>
<thead>
<tr>
<th>Overview</th>
<th>Value Proposition</th>
<th>Performance Overview</th>
<th>Guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Environment</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Agenda**
Global growth momentum is broad based and remains buoyant

- Global growth outlook remains positive over the near term as economic indicators across regions point towards accelerating momentum.
- US growth remains firmly on course with strong business and consumer confidence, supported by accommodative financial conditions
- Recovery for the Euro area continues with steady domestic demand and higher exports amidst expansionary monetary policy, and lower political risk and policy uncertainty
- Outlook for Japan is improving with strengthening global demand and supportive fiscal stance
- Economic growth in China has been strong with high public investments and the momentum is expected to continue with robust domestic demand

Source: Bloomberg, IMF
Global steel scenario

- WSA expects world steel demand to grow at 2.8%* in 2017 - more than double of the growth rate expected at the beginning of the year
- Steel exports from China has reduced further in the last quarter with closure of inefficient production facilities and continued strong domestic demand
- Exports from Japan reduced slightly with stronger domestic demand but Korean exports continue to remain at elevated levels with weakness in the domestic market
- Steel prices have strengthened with improved demand outlook, production discipline and support from raw material prices

Global steel prices are supported by improving demand and steady raw material prices

Source: WSA, Bloomberg

* Excluding the China base effect
Steel imports have increased sharply in the last quarter displacing domestic volumes. Q2FY18 imports run rate was ~12mt (up by 59% QoQ). Imports from Korea, China and Japan continue to be ~70% of total imports.

A surge in imports of flat products in Q2 met almost the entire Q/Q growth in flat products consumption in Q2FY18.

Rising imports of defective material and import of substandard products under the garb of prime products, especially in the coated segment is alarming.

Crude steel production increased by 4.5%YoY in H1FY18, while apparent finished steel consumption grew by 4.3%YoY. However, consumption of domestic steel increased only by 2.8%YoY.

Steel demand is expected to improve further with government focus on infrastructure build up like roads, DFC, water & gas pipelines, metro, irrigation projects, solar energy, power T&D etc. Bank recapitalisation will pave way for an uptick in credit growth and possible restart of the investment cycle.

### Rising imports despite trade measures need immediate intervention

Source: JPC and JSW Steel, All figures are in million tonnes, ^Average monthly imports during the year, * Apparent finished steel consumption net of double counting effect
Certain statements in this report concerning our future growth prospects are forward looking statements, which involve a number of risks, and uncertainties that could cause actual results to differ materially from those in such forward looking statements. The risk and uncertainties relating to these statements include, but are not limited to risks and uncertainties regarding fluctuations in earnings, our ability to manage growth, intense competition within Steel industry including those factors which may affect our cost advantage, wage increases in India, our ability to attract and retain highly skilled professionals, time and cost overruns on fixed-price, fixed-time frame contracts, our ability to commission mines within contemplated time and costs, our ability to raise the finance within time and cost client concentration, restrictions on immigration, our ability to manage our internal operations, reduced demand for steel, our ability to successfully complete and integrate potential acquisitions, liability for damages on our service contracts, the success of the companies in which the Company has made strategic investments, withdrawal of fiscal/governmental incentives, impact of regulatory measures, political instability, legal restrictions on raising capital or acquiring companies outside India, unauthorized use of our intellectual property and general economic conditions affecting our industry. The company does not undertake to update any forward looking statements that may be made from time to time by or on behalf of the company.
Thank you