



Graphite India Limited

(NSE: GRAPHITE, BSE: 509488)

Corporate Presentation
October 2017



Forward Looking Statements

This presentation contains statements that contain “forward looking statements” including, but without limitation, statements relating to the implementation of strategic initiatives, and other statements relating to Graphite India’s future business developments and economic performance.

While these forward looking statements indicate our assessment and future expectations concerning the development of our business, a number of risks, uncertainties and other unknown factors could cause actual developments and results to differ materially from our expectations.

These factors include, but are not limited to, general market, macro-economic, governmental and regulatory trends, movements in currency exchange and interest rates, competitive pressures, technological developments, changes in the financial conditions of third parties dealing with us, legislative developments, and other key factors that could affect our business and financial performance.

Graphite India undertakes no obligation to publicly revise any forward looking statements to reflect future / likely events or circumstances.

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Global Market Position

- ❖ Largest Indian producer of graphite electrodes by total capacity
- ❖ One of the leading players in a highly consolidated industry
- ❖ Accounts for approximately 12.6%¹ of capacity among leading global electrode manufacturers
- ❖ Diversified client base with a global footprint

Best-in-Class Operations

- ❖ High quality; around 45%² of electrode production exported in competition with global players
- ❖ Focus on operational efficiency, productivity and technological know-how results in operating margins in line with market leaders
- ❖ Long-standing relationship with key raw material suppliers including needle coke
- ❖ Access to low cost sources of power

Attractive Industry Dynamics

- ❖ Consolidated industry with significant entry barriers due to technology intensive nature of operations
- ❖ China shutting down selected steel and electrode capacities leading to increased production in EAF producing countries
- ❖ Share of EAF's route in global steel production is ~26%
- ❖ Strong support for EAF route over traditional blast furnace method due to:
 - Relatively lower production costs & capex requirement
 - Operational flexibility
 - Generates less carbon emissions

Strong Financial Performance

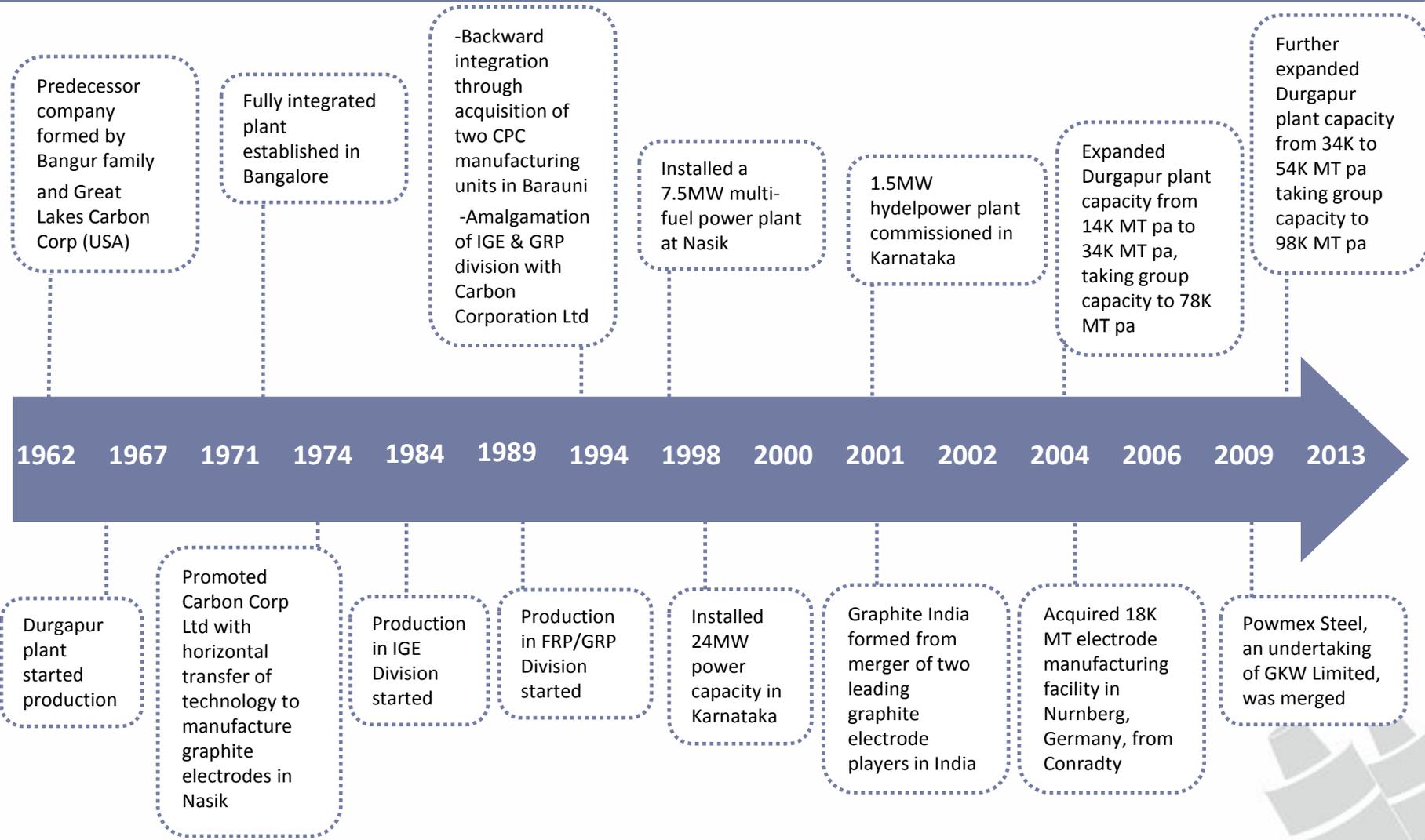
- ❖ Consistent cash flows to support organic and inorganic market opportunities
- ❖ Track record of positive cash flow generation despite the difficult market conditions in recent years
- ❖ Strong balance sheet with net cash position
- ❖ Strong cost management has resulted in one of the highest average EBITDA margins in the industry
- ❖ Consistent dividend policy

Graphite India is globally well positioned through its product quality, scale of operations and manufacturing platform base

Notes:

1. Global capacity excludes Chinese producers
2. Standalone

Over 50 Years of Experience in the Graphite Electrode Industry



Graphite India

Graphite and Carbon*
91%

GRP Pipes*
4%

Others*
5%

Highlights

- Core expertise in value-added Ultra-High Power (UHP) electrodes
- 98K tonnes/year (TPA) capacity, with flexibility to produce all grades of electrode
- Backward integrated; manufactures Calcined Petroleum Coke for use in electrode manufacturing
- Enhanced product range – large diameter UHP electrodes and specialty graphite products
- Impervious graphite equipment find applications in corrosive chemical industries such as pharma, agro-chemical, chloro-alkali & fertilizer industries
- Power generation capacity of 27MW through hydel and multi-fuel routes. It is used primarily as captive supply for the graphite electrodes business

- Pipes for water supply, sewage / industrial effluent collection and disposal, cooling towers, industrial process pipelines, seawater pipelines, industrial ducting and gasoline storage

- Largest producer of High-Speed Steel (HSS) in the country
- HSS is used in the manufacture of cutting tools such as drills, taps, milling cutters, reamers, hobs, broaches and special form tools
- HSS cutting tools are essentially utilized in automotive, machine tools, aviation and DIY markets

Products

- Graphite Electrodes
- Specialty Carbon and Graphite
- Calcined Petroleum Coke
- Carbon Paste

- Impervious Graphite Equipment: Heat Exchangers

- GRP Pipes

- High Speed Steel (HSS)
- Alloy Steel



Graphite Electrodes



Graphite Electrodes



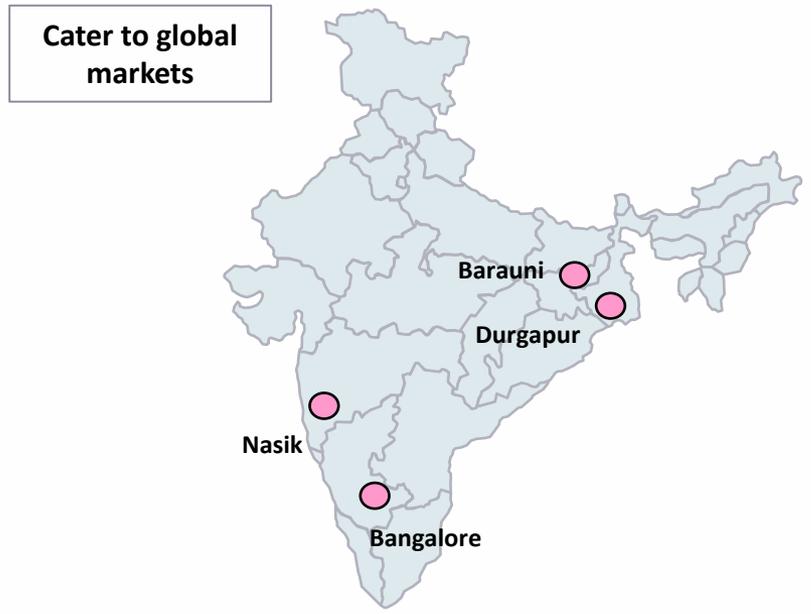
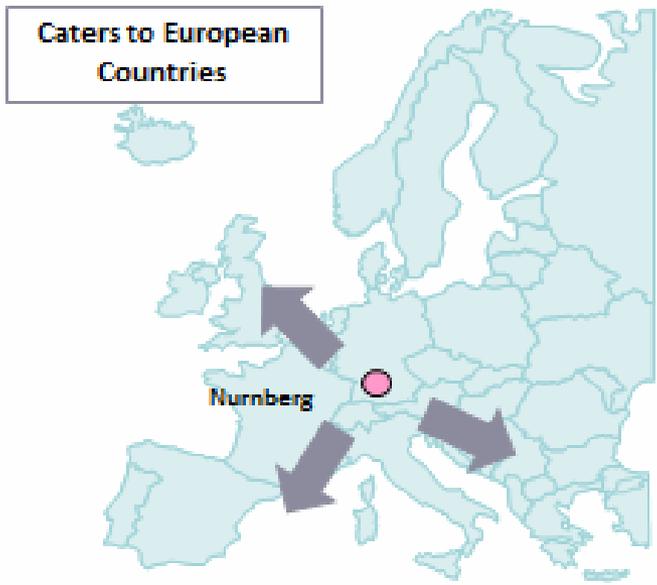
GRP Pipe



Steel Melting

*Percentage refers to FY2017 Sales Contribution

Strategically Located Manufacturing Facilities



Plant Location	Post Expansion Capacity (MT/Year)
Durgapur (India)	54,000
Bangalore (India)	13,000
Nasik (India)	13,000
Nurnberg (Germany)	18,000
Total	98,000

- ❖ The Indian plants are located close to the three main ports of India, offering logistic advantages to clients overseas
- ❖ Closer to customers in Indian markets
- ❖ The German plant caters to the needs of European customers and is located close to the EU market

Diversified Premier Global Customer Base



North America:
Nucor Group
SDI Group
SSAB
Sterling Steel

Middle East:
Diler and Yazici
Qatar Steel
Emirates Steel
EZDK
Kuwait Steel
SABIC

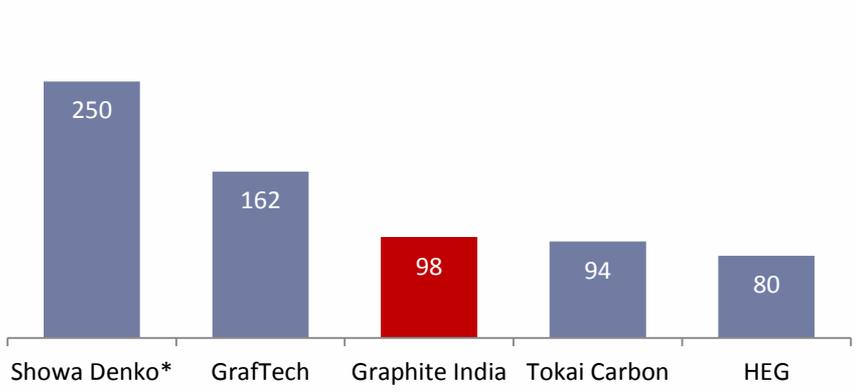
India:
Essar Steel
Jindal Steel & Power
JSW Steel
Steel Authority of India
Tata Iron & Steel

South East Asia and Far East:
PTCT Indonesia
Hyundai Steel Korea
Tokyo Steel Japan

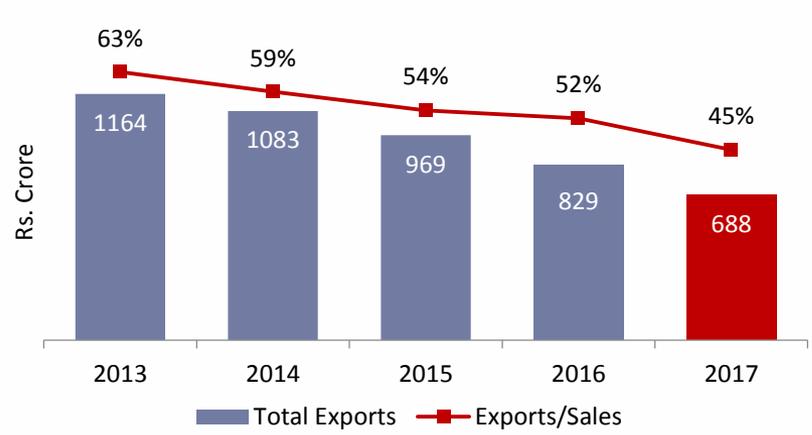


Global Player with Strong Profitability

Graphite Electrode Capacity (in thousand tonnes / Year)

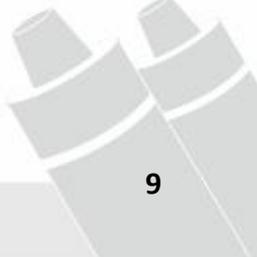


GIL Exports¹

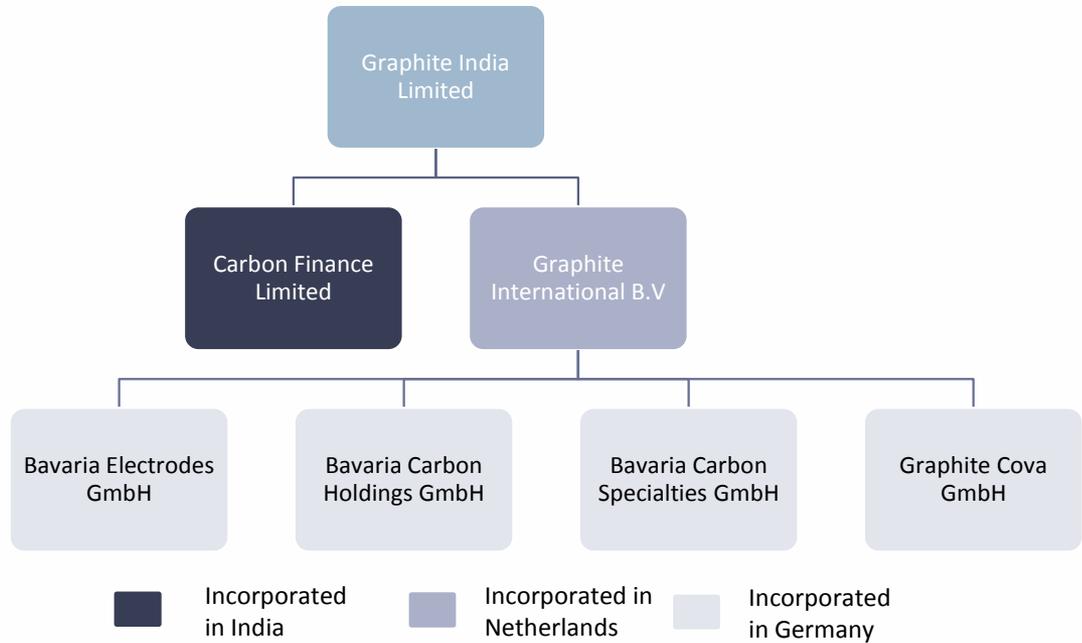


- ❖ Graphite India is one of the largest graphite electrode manufacturers globally and the largest in India
- ❖ Average capacity utilization was 74% in FY2017 as compared to 62% in FY2016
- ❖ Operating margins remain one of the highest amongst the leading electrode manufacturers

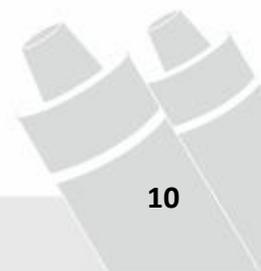
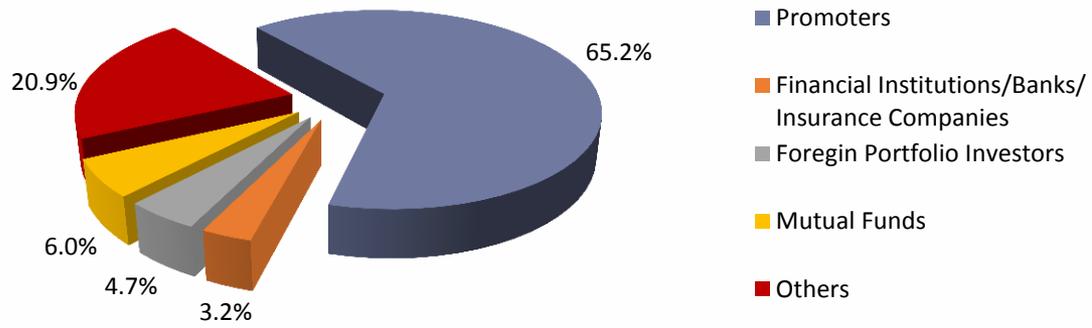
Note:
 1. Fiscal years; Consolidated Gross Sales
 2. Show denko capacity is post acquisition of SGL Carbon business and after divesting SGL Carbon US business to Tokai Carbon
 3. Accounts for FY2016 and FY2017 have been prepared in accordance with IND AS



Group Organizational Structure



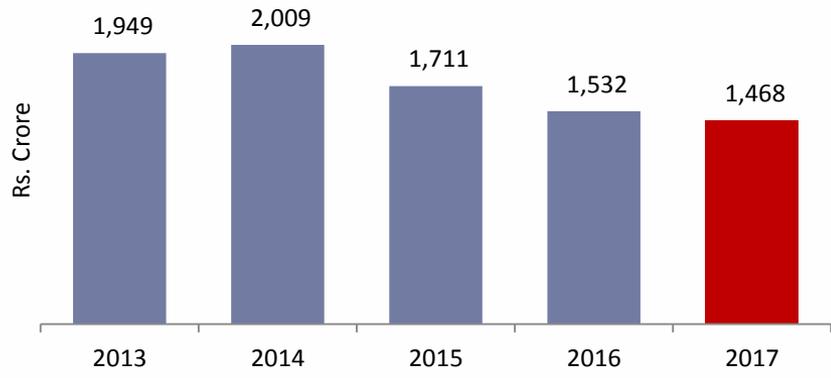
Shareholding Pattern (Sep-17)



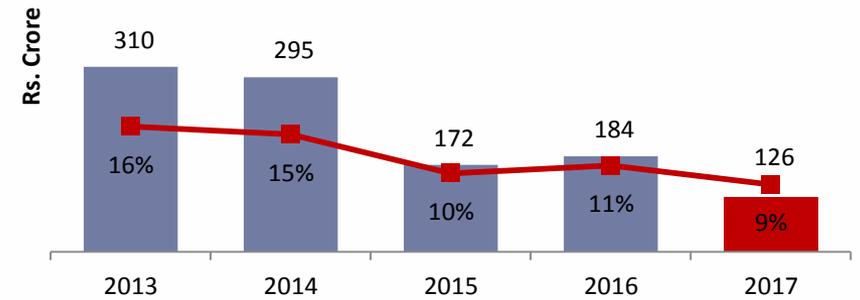
Senior Management Team

Key Executives	Background
<p>K.K. Bangur <i>Chairman</i></p>	<ul style="list-style-type: none"> • Over 30 years of experience in managing the affairs of companies and its business activities • Has been a Director of Graphite India since July 1988 and Chairman since July 1993 • Chairman of the Shareholders/Investors Grievance Committee and Committee for Borrowings • Past President of Indian Chamber of Commerce, Kolkata, Executive Committee member of FICCI, New Delhi and the past President of All India Employers Organization, New Delhi
<p>M. B. Gadgil <i>Executive Director</i></p>	<ul style="list-style-type: none"> • Mechanical Engineer with a Management Degree and has been with the Company for over 38 years • Responsible for the management of Company affairs and is actively involved in strategic/ investment decisions
<p>B.Shiva <i>Senior VP, Legal & Company Secretary</i></p>	<ul style="list-style-type: none"> • Mr. B Shiva, SVP (Legal) & Co Secretary, is a Law graduate and Fellow member of The Institute of Company Secretaries of India. He has been with the Company for more than 23 years now
<p>A. K. Dutta <i>Senior VP, Marketing</i></p>	<ul style="list-style-type: none"> • Mr. A. K. Dutta is an Electrical Engineer with post graduation in management from IIM Calcutta and has about 33 years of experience in marketing. He joined GIL in 2006
<p>S.W. Parnerkar <i>Senior VP, Finance</i></p>	<ul style="list-style-type: none"> • Mr. S.W Parnerkar, M.Com, L.L.B , FCMA , FCS, is the head of Finance of the Company • Associated with the company for the last 22 years, he is responsible for all accounts and financial aspects of the Company

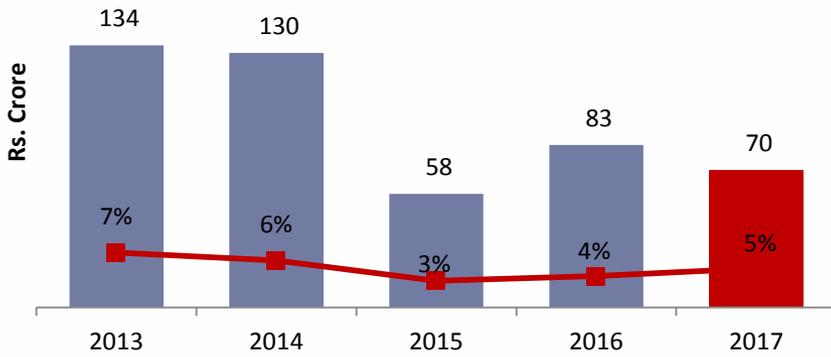
Net Sales (in Crore)



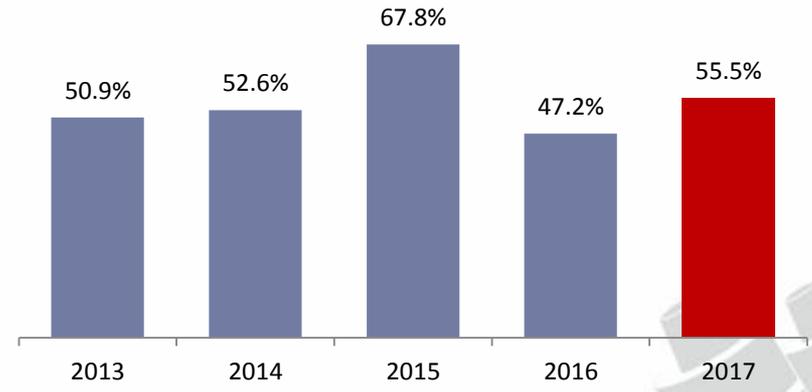
EBITDA (in Crore) and Margins (%)



Net Profit (in Crore) and Margins (%)



Dividend Payout Ratio (%)



■ 2013 ■ 2014 ■ 2015 ■ 2016 ■ 2017

Notes:
 1. Dividend payout ratio: Dividend per share / Earnings per share
 2. Above figures are consolidated
 3. Accounts for FY2016 and FY2017 have been prepared in accordance with IND AS

Segment Performance

Standalone

(Rs. Crore)	Full Year Ended		y-o-y
	FY2017	FY2016	Growth (%)
Segment Revenue	1,391.8	1,424.6	(2.3)%
Graphite and Carbon	1,257.4	1,290.8	(2.6)%
GRP Pipe	63.3	59.8	5.8%
Unallocated	71.5	74.3	(3.8)%
Less: Inter Segment Sales	(0.4)	(0.2)	

(Rs. Crore)	FY2017	FY2016	Growth (%)
Profit before tax	111.4	144.5	(22.9)%
Graphite and Carbon	53.3	139.7	(61.9)%
GRP Pipe	21.2	5.6	281.1%
Others	(0.4)	1.0	(135.6)%
Unallocated	43.8	6.1	nm
Interest	(6.5)	(7.8)	

Consolidated

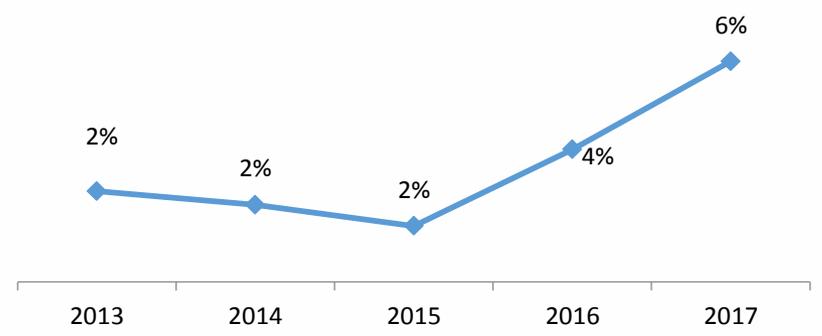
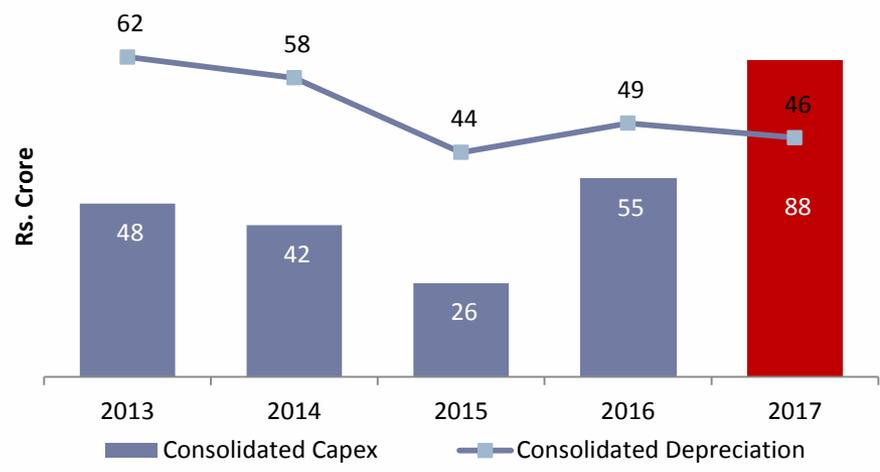
(Rs. Crore)	Full Year Ended		y-o-y
	FY2017	FY2016	Growth (%)
Segment Revenue	1,553.7	1,610.2	(3.5)%
Graphite and Carbon	1,415.6	1,473.3	(3.9)%
GRP Pipe	63.3	59.8	5.8%
Unallocated	75.3	77.4	(2.7)%
Less: Inter Segment Sales	(0.4)	(0.2)	

(Rs. Crore)	FY2017	FY2016	Growth (%)
Profit before tax	71.8	129.8	(42.8)%
Graphite and Carbon	13.0	120.7	(89.2)%
GRP Pipe	21.2	5.6	281.1%
Others	2.8	3.6	(22.5)%
Unallocated	42.7	5.0	nm
Interest	(7.9)	(9.4)	

Capex and Depreciation Trends

Capex and Depreciation Trend

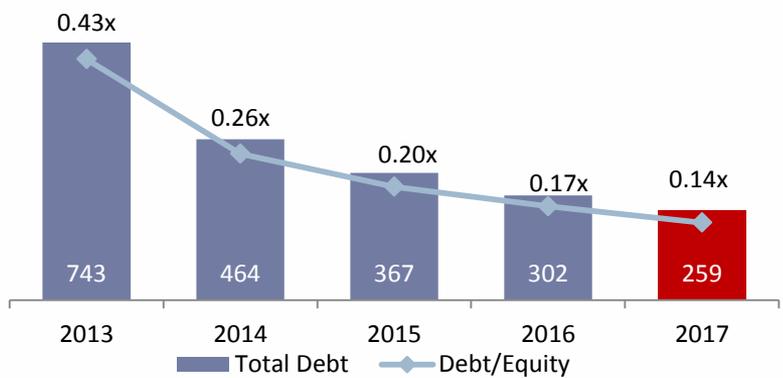
Capex to Sales Ratio



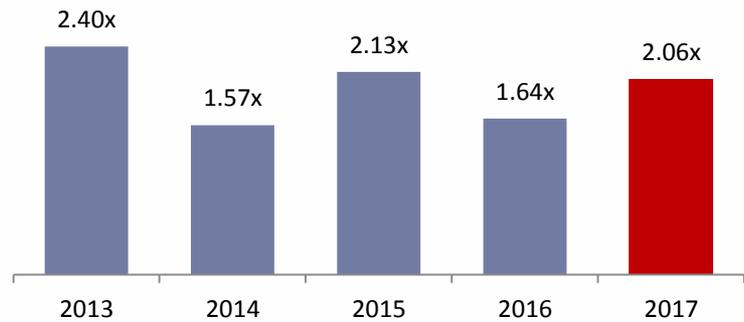
- ❖ Timely and efficient investments primarily in brownfield projects
- ❖ Increased capex in FY 2017 is primarily due to upgradation of facilities
- ❖ Annual maintenance capex estimated at approximately Rs. 25-30 Crore
- ❖ In 2012, Company expanded the durgapur facility by 20K MT at a capital cost of Rs. 275 Crore, funded through internal accruals and borrowings

Conservative Leverage Profile

Total Debt and Debt/Equity



Debt/EBITDA



Agency	Instrument	Rating	Comment
ICRA	Short-Term Funds	A1+	Indicates highest-credit-quality rating to short term debt instruments. Instruments rated in this category carry the lowest credit risk in short term
ICRA	Long-Term Funds	AA+	Indicates high-credit-quality rating. The rated instrument carries low credit risk

- ❖ Decrease in Debt/Equity from 0.43x in FY2013 to 0.14x in FY2017 was due to strong cash flow generation and repayment of debt
- ❖ As on March 31, 2017, total debt of Rs. 259 Crore, cash & cash equivalent of Rs. 679 Crore and net cash of Rs. 420 Crore on a consolidated basis
- ❖ Consistent cash flows to support and provide operational flexibility

Notes:
 1. Above financials are consolidated
 2. Accounts for FY2016 and FY2017 have been prepared in accordance with IND AS

Standalone Financial Performance

(Rs. Crore)	Q2		y-o-y Growth (%)	Q1 FY2018	q-o-q Growth (%)	Half Year		y-o-y Growth (%)
	FY2018	FY2017				FY2018	FY2017	
Gross Sales ¹ (Excluding Other Income)	461.9	340.2	35.8%	376.3	22.8%	838.2	635.6	31.9%
Net Sales ² (Excluding Other Income)	461.9	319.6	44.5%	351.0	31.6%	812.9	594.8	36.7%
Operating Profit (EBITDA) ³	149.2	36.1	313.6%	56.6	163.3%	205.8	64.4	219.5%
Margin (%) ⁴	32.3%	11.3%		16.1%		25.3%	10.8%	
Interest	1.5	1.8	(15.9)%	1.0	61.1%	2.5	3.3	(23.9)%
Depreciation	12.0	9.7	24.4%	12.0	(0.3)%	24.0	19.4	24.1%
Profit Before Tax	135.6	24.6	451.6%	43.7	210.7%	179.3	41.8	329.1%
Net Profit	89.9	15.9	464.2%	29.5	205.4%	119.4	26.9	343.3%
Margin (%) ⁴	19.5%	5.0%		8.4%		14.7%	4.5%	
Earnings Per Share	4.60	0.82	464.2%	1.51	205.4%	6.1	1.38	343.3%

Notes:

1. From Q2 FY2018 onwards gross sales is net of GST
2. Net Sales in Q2 FY2018 is same as gross sales because there is no excise duty due to levy of GST, previous quarter net sales is net of excise duty
3. Operating Profit includes Other Income
4. All margins calculated as a percentage of Net Sales (excluding Other Income)

Quarterly segment comparison

(Rs. Crore)	Q2		y-o-y	Q1	q-o-q	Half Year		y-o-y
	FY2018	FY2017	Growth (%)	FY2018	Growth (%)	FY2018	FY2017	Growth (%)
Segment Revenue	461.9	340.2	35.8%	376.3	22.8%	838.2	635.6	31.9%
Graphite and Carbon	439.5	298.7	47.1%	351.6	25.0%	791.2	561.9	40.8%
GRP Pipes	3.0	21.5	(86.0)%	8.3	(63.9)%	11.3	36.0	(68.5)%
Others	19.4	19.9	(2.7)%	16.4	18.6%	35.7	37.9	(5.6)%
Less: Inter Segment Sales	(0.04)	(0.0)		(0.0)		(0.1)	(0.2)	

(Rs. Crore)	Q2		y-o-y	Q1	q-o-q	Half Year		y-o-y
	FY2018	FY2017	Growth (%)	FY2018	Growth (%)	FY2018	FY2017	Growth (%)
Segment Profit before tax	135.6	24.6	451.6%	43.7	210.7%	179.3	41.8	329.1%
Graphite and Carbon	130.5	7.3	nm	37.8	245.0%	168.4	13.3	nm
GRP Pipes	0.9	3.7	(76.3)%	(0.4)	(300.0)%	0.4	7.6	(94.2)%
Others	(0.0)	0.1	(125.0)%	(1.5)	(98.6)%	(1.5)	0.1	nm
Unallocated	5.8	15.3	(62.1)%	8.7	(33.3)%	14.4	24.0	(40.0)%
Interest	(1.5)	(1.8)		(1.0)	50.0%	(2.5)	(3.2)	

Near Term Strategic Plan

Graphite and Carbon

Strategically established new eco-friendly facilities with **advanced technology** and **greater energy efficiency**

Recent capacity shutdown in China and decreased exports to other EAF producing countries is expected to provide impetus to electrode demand and price. We are **well positioned to benefit from the growing demand for graphite electrode** in the medium term globally.

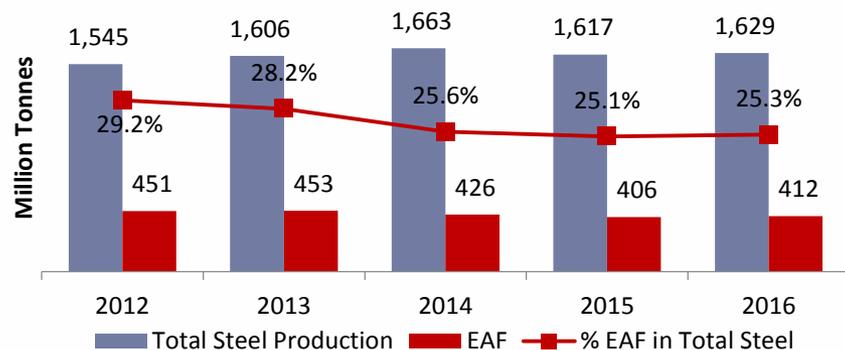
Use **low cost base** and **high product quality** to expand global reach and customer base at competitive prices

Enhance presence in value added graphite products and grow impervious graphite equipment business

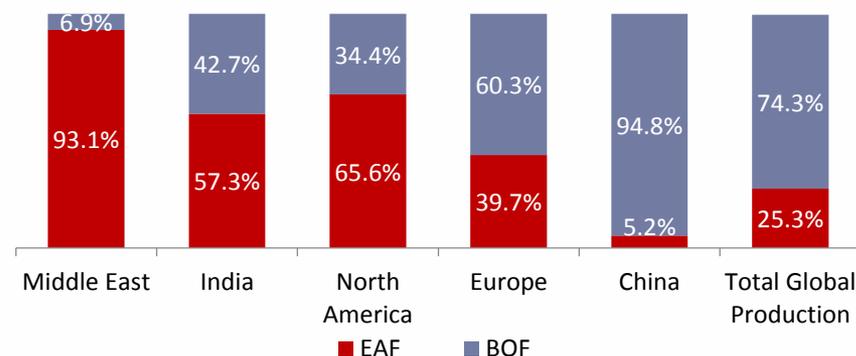
Focus on **improving margins** through proactively managing production schedules and **resource optimization** across facilities

Global Steel and Graphite Electrode Industry

Global Steel Production



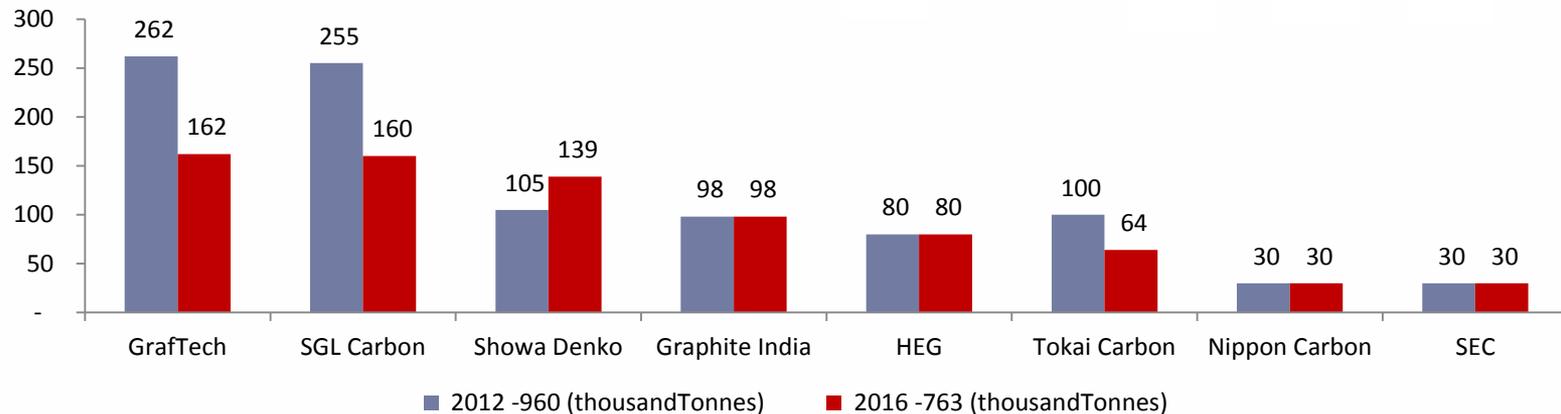
Process Wise Steel Production 2016



- ❖ EAF route of manufacturing enjoys several advantages over traditional BOF route:
 - Lower capital investment
 - Lower break-even tonnage
 - Flexibility in locating plants closer to consumption
 - Less polluting than integrated steel plants
- ❖ India has been increasing its market share of graphite electrode production steadily over the past few years due to relatively low cost of operations
- ❖ China shutting down selected steel capacities to curb pollution resulting in decreased exports from China and increased production in EAF producing countries

Graphite electrode industry consolidation in recent years has led to improved demand and supply balance

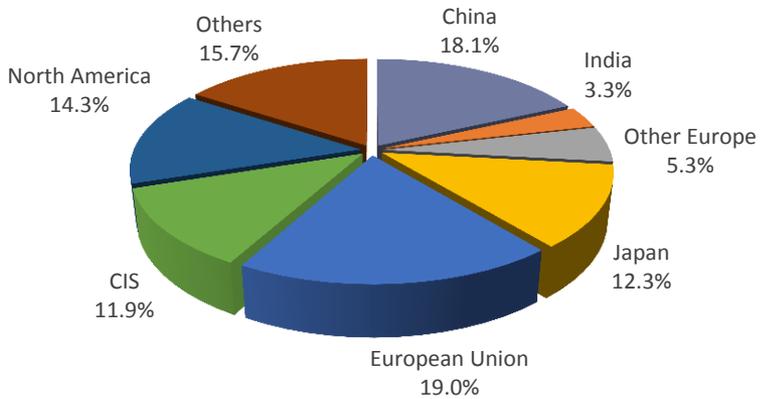
~ 200,000 tonnes of capacity was shut down over the last five years



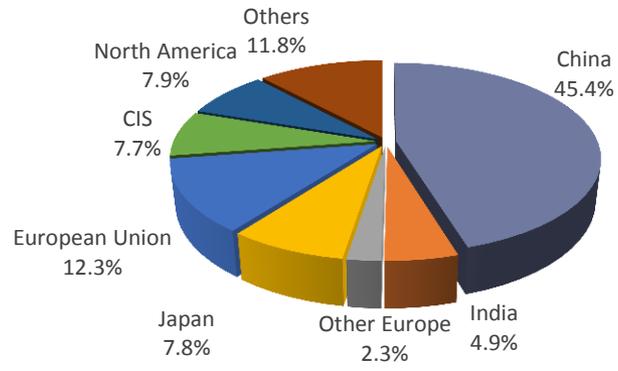
- ❖ Due to weakness in demand and lower pricing of graphite electrode, the industry was going through tough market conditions in last few years, which has led to ~ 200,000 tonnes of capacity shut down
- ❖ Industry also witnessed consolidation, in 2015 GrafTech was acquired by Brookfield Asset Management and recently Showa Denko acquired SGL Carbon's graphite electrode business after divesting SGL Carbon's US business to Tokai Carbon
- ❖ These developments bodes well for the industry and have led to improved demand and supply balance, along with strong capacity utilization
- ❖ Recent electrodes capacity shut down in China has also resulted in increased demand for electrodes and price recovery from a low base

Over the years, China became the biggest crude steel producer with a 50.4% share in 2016 vs 45.4% in 2010 & 18.1% in 2001

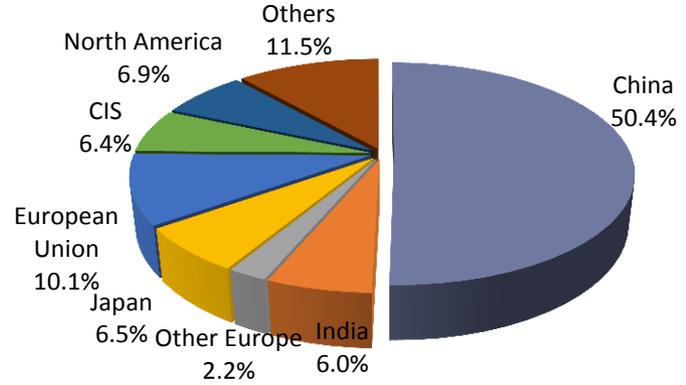
Global Steel Production 2001



Global Steel Production 2010

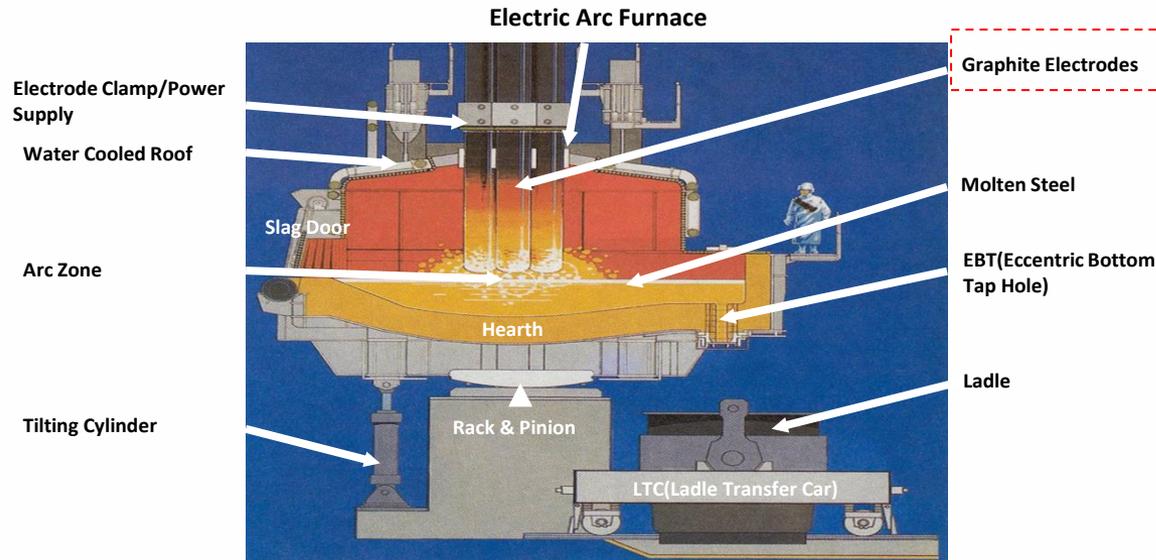


Global Steel Production 2016



Overcapacities in China led to subsidized exports however the trend has changed in 2017 with China shutting down selected steel capacities to curb pollution resulting in decreased exports and increased production in EAF producing countries

EAF Steel Production Process



- ❖ An electric arc furnace (EAF) is a furnace that heats charged material by means of an electric arc
- ❖ Arc furnaces range in size from small units of approximately one tonne capacity (used in foundries for producing cast iron products) up to about 400 tonne units used for secondary steelmaking
- ❖ Electric arc furnace temperatures can be up to 1,800 degrees Celsius and the electrode tip & arc temperatures can go as high as 3,000-4,000 degrees Celsius
- ❖ Graphite Electrodes are consumed in an electric arc furnace
 - An electrode typically lasts for 22-30 heats /batches or 10 hours
 - A single graphite electrode can weigh over 2 tonnes
 - Electrode demand is driven by the production of steel through the EAF method

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