

Graphite India (CAREVE)

₹ 997

Performs well on all parameters...

- For Q2FY19, Graphite India reported an outperformance on all fronts. The company reported a consolidated topline of ₹ 2345 crore (up 344% YoY, 19.3% QoQ) higher than our estimate of ₹ 1990 crore
- Consolidated EBITDA for the quarter was at ₹ 1640 crore (our estimate: ₹ 1249 crore). EBITDA margin was at 69.9% (vs. Q2FY18: 27.3%, Q1FY19: 73.1%, our estimate: 62.8%). On a QoQ basis, raw material cost (as percentage of sales) increased to 18.1% from 14.8% in Q1FY19 leading to a moderation in EBITDA margin from Q1FY19
- Consolidated PAT was a robust at ₹ 1113 crore higher than our estimate of ₹ 857 crore

Demand prospects healthy amid growing EAF steel production...

Chinese steel exports in January-September 2018 totalled ~53.5 million tonne (MT). Monthly average of exports during the period was down 5.8% YoY to 5.94 MT/month from 6.3 MT/month in the previous year. This decline aided in increase of steel production and higher utilisation in other electric arc furnace (EAF) steel producing geographies. Furthermore, according to industry sources, globally ~52 MT of gross steel capacity addition is currently under way. This is likely to come on stream in CY18-20. On the back of stringent pollution control norms, China is also aiming to increase the share of EAF route of steelmaking in its total steel production to 20% by 2020 (from 9% in CY17). In its effort to shift towards more environmental friendly steel production China is likely to commission ~60-70 MT of EAF capacity in CY18.

Supply constraints to keep graphite electrode prices elevated...

Prices of graphite electrodes fell to unsustainable levels in 2014-17 on account of subdued demand from EAF producers, which led to permanent shutdown of ~200000 tonne globally (ex-China). Furthermore, ~300000 tonne graphite electrode capacity was shut in China citing environmental concerns. The decline in graphite electrode exports from China coupled with a shutdown of global graphite electrodes capacity vacated a substantial part of the global electrode market, tilting the graphite electrode demand-supply dynamics in favour of domestic players like Graphite India. Demand for graphite electrodes remained healthy, on account of increasing steel production through EAF. Even in China, steel produced through the EAF route increased sharply from ~6% in CY16 to ~9% in CY17. In the absence of any new capacity additions owing to limited supply of needle coke (a key raw material), we believe this demand-supply imbalance (in favour of demand) is likely to sustain in the near to medium term keeping the graphite electrode prices elevated.

Healthy H1FY19; maintain BUY!

For H1FY19, Graphite India reported a strong performance on the back of healthy realisations. For H1FY19, the company reported revenue growth of 369.5% YoY to ₹ 4310 crore. EBITDA grew 1590% YoY to ₹ 3076 crore. The corresponding EBITDA margin came in at 71.4% (vs. 19.8% in H1FY18). The company reported PAT growth of 1456% to ₹ 2070 crore. As the production process of graphite electrode is fairly long (three to six months), we expect the full impact of higher cost needle coke to come in with a lag from H2FY19 onwards, which would remain a key monitorable. Thus, EBITDA margins are likely to moderate to 61.5% for FY19E (from 71.4% in H1FY19) and further to 49.9% in FY20E. We continue to remain positive on the graphite electrode space and value the stock at 10x FY20E EPS of ₹ 140 implying a target price of ₹ 1400. We maintain **BUY** rating.

Rating matrix	
Rating	: Buy
Target	: ₹ 1400
Target Period	: 12 months
Potential Upside	: 40%

What's Changed?	
Target	Unchanged
EPS FY19E	Changed from ₹ 138 to ₹ 180.0
EPS FY20E	Unchanged
Rating	Unchanged

Quarterly Performance (Consolidated)					
	Q2FY19	Q2FY18	YoY (%)	Q1FY19	QoQ (%)
Revenue	2,345.0	528.0	344.1	1,965.0	19.3
EBITDA	1640.0	144.0	1038.9	1436	14.2
EBITDA (%)	69.9	27.3	4266 bps	73.1	-314 bps
PAT	1113.0	103.1	979.5	957.0	16.3

Key Financials				
(₹ Crore)	FY17	FY18	FY19E	FY20E
Total Operating Income	1467.8	3266.0	8412.1	8046.2
EBITDA	39.6	1444.2	5175.3	4018.2
Net Profit	70.5	1032.0	3517.1	2735.8
EPS	3.6	52.8	180.0	140.0

Valuation summary				
	FY17	FY18	FY19E	FY20E
PE (x)	276.5	18.9	5.5	7.1
Target PE (x)	388.3	26.5	7.8	10.0
EV/EBITDA (x)	481.9	12.8	3.5	4.1
P/BV (x)	10.5	7.1	4.6	3.4
RoNW (%)	3.8	37.8	82.4	47.8
RoCE (%)	-0.3	47.1	116.7	69.2

Stock data	
Particular	Amount
Market Capitalisation (₹ crore)	₹ 19481
Debt (FY18) (₹ crore)	₹ 272
Cash & Cash Equivalent (FY18) (₹ crore)	₹ 1263
EV (₹ crore)	₹ 18490
52 week H/L	1126 / 531
Equity capital (₹ crore)	₹ 39.1
Face value	₹ 2

Price performance (%)				
Return %	1M	3M	6M	12M
HEG	29.3	5.6	43.6	110.5
Graphite India	23.9	(1.5)	36.9	61.9

Research Analyst

Dewang Sanghavi
dewang.sanghavi@icicisecurities.com

Akshay Kadam
akshay.kadam@icicisecurities.com

Variance analysis

Consolidated Performance	Q2FY19	Q2FY19E	Q2FY18	YoY (%)	Q1FY19	QoQ (%)	
Revenue	2345.0	1989.7	528.0	344.1	1965.0	19.3	Topline came in above our estimates
Other Income	44.0	44.0	20.0	120.0	30.0	46.7	
Employee Expense	83.0	89.5	63.0	31.7	69.0	20.3	
Raw Material Expense	425.0	437.7	179.0	137.4	290.0	46.6	
Power & Fuel Expense	95.0	89.5	80.0	18.8	91.0	4.4	
Other operating expenses	102.0	123.9	62.0	64.5	79.0	29.1	
EBITDA	1,640.0	1,249.0	144.0	1,038.9	1,436.0	14.2	EBITDA came in above our estimates
EBITDA Margin (%)	69.9	62.8	27.3	4266 bps	73.1	-314 bps	EBITDA margin came in above our estimates
Depreciation	13.0	13.7	13.0	0.0	13.0	0.0	
Interest	3.0	3.2	2.0	50.0	2.0	50.0	
Exceptional Items							
PBT	1668.0	1276.2	149.1	1018.7	1451.0	15.0	
Tax Outgo	555.0	419.0	46.0	1,106.5	494.0	12.3	
PAT	1113.0	857.2	103.1	979.5	957.0	16.3	
Key Metrics							
Consolidated Capacity Utilisation Level (%)	93%	88%	81%		88%		Capacity utilisation came in higher than our estimates

Source: Company, ICICI Direct Research

Change in estimates

(₹ Crore)	FY19E			FY20E			Comments
	Old	New	% Change	Old	New	% Change	
Revenue	7347.2	8,412	14.5	7620.6	8046.2	5.6	Upward revised topline estimates for both years
EBITDA	3,966.1	5,175	30.5	3,980.8	4,018.2	0.9	Upward revised EBITDA estimates for both years
EBITDA Margin (%)	54.0	61.5	754 bps	52.2	49.9	-230 bps	
PAT	2,736.1	3,517	28.5	2,736.1	2,735.8	0.0	Upward revised PAT estimates for FY19E, maintained for FY20E
EPS (₹)	138.0	180.0	30.4	140.0	140.0	0.0	

Source: Company, ICICI Direct Research

Assumptions

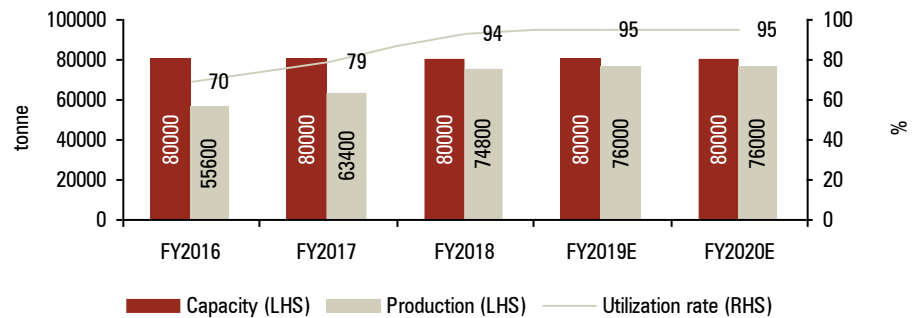
	Current		Earlier		Comments
	FY19E	FY20E	FY19E	FY20E	
Domestic capacity utilisation (%)	95	95	95	85	Maintained estimates
Consolidated capacity utilisation (%)	88	90	88	88	Upward revised capacity utilisation levels for FY20E

Source: Company, ICICI Direct Research

Company Analysis

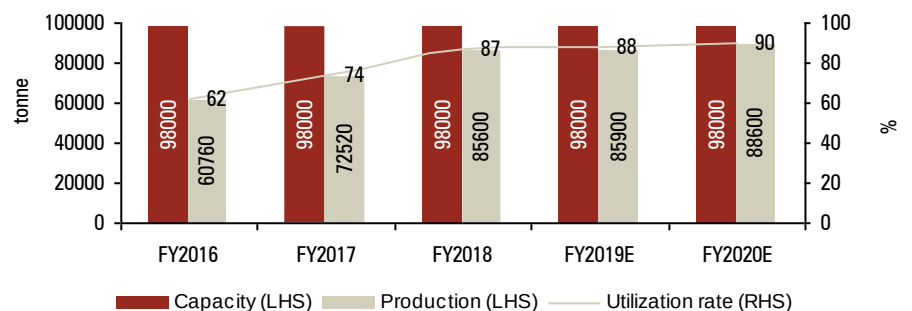
The company is a leading manufacturer of graphite electrode with an installed capacity of 98,000 tonne per annum (TPA). The installed capacity in India is 80,000 tonne of which 54,000 tonne is in Durgapur, 13000 tonne in Nashik and 13000 tonne in Bangalore. GIL also owns a plant in Nuremberg (Germany) with an installed capacity of 18,000 tonne. The company commissioned its last capacity expansion in Q1FY14 wherein it installed a capacity of 20,000 tonne at its Durgapur plant while incurring a capex of ₹ 255 crore.

Exhibit 1: Graphite electrode capacity production & utilisation rate (standalone basis)



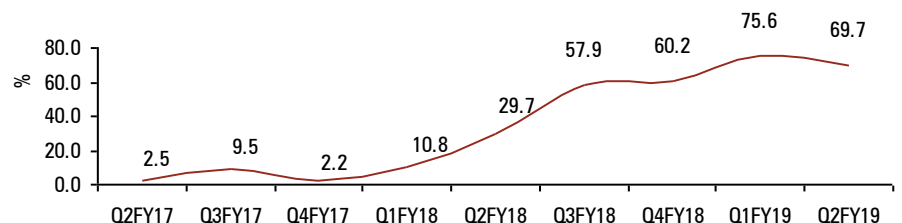
Source: Company, ICICI Direct Research

Exhibit 2: Capacity & utilisation rates (Consolidated basis)



Source: Company, ICICI Direct Research

Exhibit 3: Graphite electrode segment EBIT performance



Source: Company, ICICI Direct Research

Key takeaways from Q2FY19 presentation

- World crude steel production during Q3CY18 was at 458 MT, up 4.3% YoY. Indian crude steel production continued its strong growth momentum and registered growth of 4.6% YoY during the period
- Indian steel demand is expected to return to higher growth track supported by improving investment and infrastructure programmes. Further, a favourable outcome of NCLT has led to consolidation in steel industry and is expected to drive higher capacity utilisation across steel manufacturing units and provide further scope for growth
- Globally, ~52 MT of gross capacity addition is currently under way and could come on stream during CY18-20
- Chinese steel exports during January-September 2018 totalled 53.5 million tonne (MT) or 5.94 MT/month. The monthly average declined 5.8% from that of 6.3 MT/month. This has allowed an increase in steel production and higher utilisation in other EAF steel producing geographies
- Closure of inefficient induction furnaces and highly polluting blast furnaces in China are being replaced by environment friendly electric arc furnaces, which is supported by increased availability of scrap
- Around 56 new EAF furnaces are expected to come online in 2018 with an aggregate capacity of 60-80 MT. The share of steel produced through EAF has already increased to 9% in 2017 from 6% in the previous year. The Chinese government is targeting 20% steel production through EAF by 2020. Additionally, recent closure of ~200000-300000 tonnes of electrode capacity led to shortage of electrodes. These factors have resulted in an increased demand of graphite electrodes
- India removed anti-dumping duties on graphite electrodes imported from China in September
- The needle coke industry is highly concentrated and petroleum needle coke demand is increasing due to its use in lithium-ion batteries used in electric vehicles. Hence, the timely availability of adequate needle coke at a reasonable price shall determine the effective/profitable utilisation of any meaningful addition to electrode capacity across the industry
- During the quarter, the impact of higher needle coke cost partially impacted the EBITDA margin

Outlook and valuation

Graphite India for H1FY19 reported a strong performance on the back of healthy realisations. For H1FY19, the company reported revenue growth of 369.5% YoY to ₹ 4310 crore. EBITDA grew 1590% YoY to ₹ 3076 crore. The corresponding EBITDA margin came in at 71.4% (vs. 19.8% in H1FY18). The company reported PAT growth of 1456% to ₹ 2070 crore. As the production process of graphite electrode is fairly long (three to six months), we expect the full impact of higher cost needle coke to come in with a lag from H2FY19 onwards. This would remain a key monitorable. EBITDA margins are, thus, likely to moderate to 61.5% for FY19E (from 71.4% in H1FY19) and further to 49.9% in FY20E.

We expect the topline, EBITDA and PAT to register a CAGR of 57%, 67% and 63%, respectively, during FY18-20E.

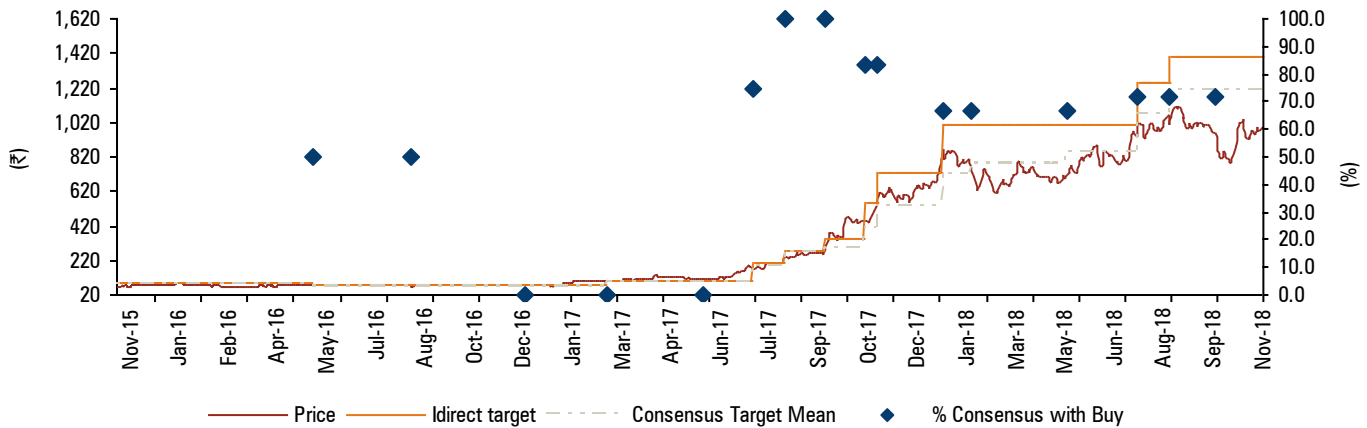
We continue to remain positive on the graphite electrode space and value the stock at 10x FY20E EPS of ₹ 140 implying a target price of ₹ 1400. We maintain our **BUY** rating.

Exhibit 4: Valuation matrix

	Revenue (₹ Cr)	Growth (%)	EPS (₹)	Growth (%)	PE (x)	EV/EBITDA (x)	RoNW(%)	RoCE(%)
FY15	1710.7	-14.9	2.9	-55.7	346.1	145.5	3.3	4.4
FY16	1532.3	-10.4	4.2	43.8	240.7	147.1	4.7	4.2
FY17	1467.8	-4.2	3.6	-14.9	282.9	493.2	3.8	-0.3
FY18E	3266.0	122.5	52.8	1364.7	19.3	13.1	37.8	47.1
FY19E	7347.2	125.0	138.0	161.4	7.4	4.7	70.4	98.8
FY20E	7620.6	3.7	140.0	1.4	7.3	4.4	51.8	74.2

Source: Company, ICICI Direct Research

Recommendation history vs. consensus estimate



Source: Bloomberg, Company, ICICI Direct Research

Key events

Date	Event
Mar-10	Converts bonds into shares. Sets bond conversion price at ₹ 55.3
Dec-10	European Union renews tariffs on graphite electrodes from India (tariff at 9.4%)
Mar-11	GIL declares lockout at Titlagarh unit post labour unrest at its plant site
Jun-11	Titlagarh unit resumes production post settlement with labour unions including increase in wages & other benefits
Mar-12	GIL sells its entire stake in its subsidiary Carbon International (engaged in trading activities only) for €4.6 million (₹ 30 crore)
Jul-12	Karnataka State Pollution Control Board orders the company to shut operations in its Bangalore plant till further orders, citing environmental pollution
Aug-12	GIL resumes operations at its Bangalore plant after obtaining stay on the pollution control board order for closure of its plant at Bangalore
Sep-12	The company's international peer Graftech expected to hike electrode prices for 2013 contracts
Nov-13	Global players announce production cuts to support graphite electrode prices
Feb-15	Gol imposes antidumping duty on graphite electrodes (all diameters) originating in or exported from China. The amount of anti-dumping duty ranges from US\$278.19 per MT to US\$922.03 per MT, depending on the Chinese producer/exporter
Mar-16	Board declares interim dividend of ₹ 2.0/share
Jun-17	Board declares dividend of ₹ 2.0/share for FY17

Source: Company, ICICI Direct Research

Top 10 Shareholders

Rank	Name	Latest Filing Date	% O/S	Position	Change
1	Emerald Co., Ltd.	30-Sep-2018	61.2	119.6M	0
2	L&T Investment Management Limited	30-Sep-2018	4.6	8.9M	-0.5M
3	GKN Ltd	30-Sep-2018	2.0	4.0M	0
4	Life Insurance Corporation of India	30-Sep-2018	1.9	3.7M	0
5	Societe Generale SA	30-Jun-2018	1.3	2.6M	2.6M
6	The New India Assurance Co. Ltd.	30-Sep-2018	1.0	2.0M	-0.1M
7	Bangur (Krishna Kumar)	30-Sep-2018	0.8	1.7M	0
8	The Vanguard Group, Inc.	30-Sep-2018	0.8	1.5M	0.0M
9	Goldman Sachs Asset Management International	30-Sep-2018	0.6	1.2M	0.0M
10	IDFC Asset Management Company Private Limited	30-Sep-2018	0.3	0.7M	0.1M

Source: Reuters, ICICI Direct Research

Shareholding Pattern

(in %)	Sep-17	Dec-17	Mar-18	Jun-18	Sep-18
Promoter	65.2	65.2	65.2	65.2	65.2
FII	4.7	5.9	4.6	6.0	8.3
DII	9.1	8.8	8.5	8.8	8.1
Others	21.0	20.1	21.7	20.1	18.4

Recent Activity

Buys			Sells		
Investor name	Value	Shares	Investor name	Value	Shares
Societe Generale SA	31.6M	2.6M	L&T Investment Management Limited	-5.6M	-0.5M
Causeway Capital Management LLC	7.4M	0.6M	APG Asset Management	-3.3M	-0.3M
J.P. Morgan Asset Management (Hong Kong) Ltd.	4.9M	0.3M	Pzena Investment Management, LLC	-2.2M	-0.2M
BNY Mellon Asset Management North America Corporation	2.6M	0.2M	The New India Assurance Co. Ltd.	-1.5M	-0.1M
Nuveen LLC	1.8M	0.2M	Fisher Investments	-1.5M	-0.1M

Source: Reuters, ICICI Direct Research

Financial summary

Profit and loss statement (₹ crore)				
(Year-end March)	FY17	FY18	FY19E	FY20E
Total Operating Income	1467.8	3266.0	8412.1	8046.2
Growth (%)	-4.2	122.5	157.6	-4.3
Raw Material Expenses	585.1	771.9	2,035.1	2,540.8
Employee Expenses	222.5	252.1	309.9	338.8
Other expenses	620.6	797.8	891.7	1,148.4
Total Operating Expenditure	1,428.2	1,821.8	3,236.8	4,028.0
EBITDA	39.6	1444.2	5175.3	4018.2
Growth (%)	-70.6	3,551.5	258.4	-22.4
Depreciation	46.4	51.6	53.2	58.6
Interest	7.9	8.1	5.9	1.8
Other Income	86.5	88.5	138.7	129.7
PBT	71.8	1,473.0	5,254.9	4,087.5
Exceptional Item	0.0	0.0	0.0	0.0
Total Tax	1.3	441.0	1,737.8	1,351.7
PAT	70.5	1032.0	3517.1	2735.8
Growth (%)	-14.9	1,364.7	240.8	-22.2
EPS (₹)	3.6	52.8	180.0	140.0

Source: Company, ICICI Direct Research

Cash flow statement (₹ crore)				
(Year-end March)	FY17	FY18	FY19E	FY20E
Profit after Tax	70.5	1,032.0	3,517.1	2,735.8
Add: Depreciation	46.4	51.6	53.2	58.6
(Inc)/dec in Current Asset	204.0	-599.1	-2,196.5	-30.0
Inc/(dec) in CL & Provision	11.6	340.1	1,175.9	-20.2
Others	9.3	-37.0	49.4	0.0
CF from operating activities	341.7	787.6	2,599.1	2,744.2
(Inc)/dec in Investments	-215.1	-576.8	-100.0	-800.0
(Inc)/dec in Fixed Assets	-89.1	-61.9	-75.0	-100.0
Others	0.0	0.0	0.0	0.0
CF from investing activities	-304.2	-638.7	-175.0	-900.0
Issue/(Buy back) of Equity	0.0	0.0	0.0	0.0
Inc/(dec) in loan funds	-43.1	13.0	-150.0	-122.2
Dividend paid & div. tax	-47.0	-388.7	-1,646.0	-1,280.3
Inc/(dec) in Share Cap	83.0	230.9	-335.5	-1.7
Others	0.0	0.0	0.0	0.0
CF from financing activities	-7.1	-144.8	-2,131.5	-1,404.3
Net Cash flow	30.4	4.1	292.6	439.9
Opening Cash	21.0	51.5	55.6	348.2
Closing Cash	51.5	55.6	348.2	788.1

Source: Company, ICICI Direct Research

Balance sheet (₹ crore)				
(Year-end March)	FY17	FY18	FY19E	FY20E
Liabilities				
Equity Capital	39.1	39.1	39.1	39.1
Reserve and Surplus	1,818.5	2,692.7	4,228.3	5,682.0
Total Shareholders funds	1,857.6	2,731.8	4,267.4	5,721.1
Total Debt	259.2	272.2	122.2	0.0
Deferred Tax Liability	85.0	94.5	94.5	94.5
Minority Interest / Others	0.0	0.0	0.0	0.0
Total Liabilities	2,201.8	3,098.5	4,484.1	5,815.6
Assets				
Gross Block	1,539.1	1,624.9	1,699.9	1,799.9
Less: Acc Depreciation	871.7	923.3	976.5	1,035.1
Net Block	667.4	701.6	723.4	764.8
Capital WIP	32.1	8.1	8.1	8.1
Total Fixed Assets	699.5	709.7	731.5	772.9
Investments	631.0	1,207.8	1,307.8	2,107.8
Inventory	602.1	786.4	1,843.7	1,873.8
Debtors	441.5	823.5	1,959.0	1,984.0
Loans and Advances	11.7	22.1	50.8	50.8
Other Current Assets	103.5	125.8	100.8	75.8
Cash	51.5	55.6	348.2	788.1
Total Current Assets	1,210.1	1,813.4	4,302.5	4,772.4
Current Liabilities	316.0	647.8	1,728.5	1,653.3
Provisions	25.7	34.0	129.2	184.2
Current Liabilities & Prov	341.7	681.8	1,857.7	1,837.6
Net Current Assets	868.4	1,131.6	2,444.7	2,934.9
Others Assets	2.9	49.4	0.0	0.0
Application of Funds	2,201.8	3,098.5	4,484.1	5,815.6

Source: Company, ICICI Direct Research

Key ratios				
(Year-end March)	FY17	FY18	FY19E	FY20E
Per share data (₹)				
EPS	3.6	52.8	180.0	140.0
Cash EPS	6.0	55.5	182.7	143.0
BV	95.1	139.8	218.4	292.8
DPS	2.0	17.0	72.0	56.0
Cash Per Share	34.9	64.7	84.7	148.2
Operating Ratios (%)				
EBITDA Margin	2.7	44.2	61.5	49.9
PBT / Total Operating income	4.9	45.1	62.5	50.8
PAT Margin	4.8	31.6	41.8	34.0
Inventory days	150	88	80	85
Debtor days	110	92	85	90
Creditor days	79	72	75	75
Return Ratios (%)				
RoE	3.8	37.8	82.4	47.8
RoCE	-0.3	47.1	116.7	69.2
RoIC	-0.3	47.2	126.7	80.3
Valuation Ratios (x)				
P/E	276.5	18.9	5.5	7.1
EV / EBITDA	481.9	12.8	3.5	4.1
EV / Net Sales	13.0	5.7	2.1	2.1
Market Cap / Sales	13.3	6.0	2.3	2.4
Price to Book Value	10.5	7.1	4.6	3.4
Solvency Ratios				
Debt/EBITDA	6.6	0.2	0.0	0.0
Debt / Equity	0.1	0.1	0.0	0.0
Current Ratio	3.5	2.7	2.3	2.6
Quick Ratio	1.8	1.5	1.3	1.6

Source: Company, ICICI Direct Research

ICICI Direct Research coverage universe (Graphite Electrodes)

Company	CMP			M Cap (₹ Cr)	EPS (₹)			P/E (x)			EV/EBITDA (x)			ROCE(%)			ROE(%)		
	(₹)	TP (₹)	Rating		FY18	FY19E	FY20E	FY18	FY19E	FY20E	FY18	FY19E	FY20E	FY18	FY19E	FY20E	FY18	FY19E	FY20E
Graphite India	1,020	1,400	Buy	19,931	52.8	138.0	140.0	19.3	7.4	7.3	13.1	4.7	4.4	47.1	98.8	74.2	37.8	70.4	51.8
HEG	4400	5000	Buy	17,600	270.6	485.1	500.0	16.3	9.1	8.8	10.4	5.9	5.6	78.9	94.4	68.4	59.8	63.2	45.8

Source: Company, ICICI Direct Research

RATING RATIONALE

ICICI Direct Research endeavours to provide objective opinions and recommendations. ICICI Direct Research assigns ratings to its stocks according to their notional target price vs. current market price and then categorises them as Strong Buy, Buy, Hold and Sell. The performance horizon is two years unless specified and the notional target price is defined as the analysts' valuation for a stock.

Strong Buy: > 15%/20% for large caps/midcaps, respectively, with high conviction;

Buy: > 10%/15% for large caps/midcaps, respectively;

Hold: Up to +/-10%;

Sell: -10% or more;



Pankaj Pandey

Head – Research

pankaj.pandey@icicisecurities.com

ICICI Direct Research Desk,
ICICI Securities Limited,
1st Floor, Akruti Trade Centre,
Road No 7, MIDC,
Andheri (East)
Mumbai – 400 093
research@icicidirect.com

ANALYST CERTIFICATION

We /I, Dewang Sanghavi MBA (FIN) and Akshay Kadam MBA (FIN), Research Analysts, authors and the names subscribed to this report, hereby certify that all of the views expressed in this research report accurately reflect our views about the subject issuer(s) or securities. We also certify that no part of our compensation was, is, or will be directly or indirectly related to the specific recommendation(s) or view(s) in this report.

Terms & conditions and other disclosures:

ICICI Securities Limited (ICICI Securities) is a full-service, integrated investment banking and is, inter alia, engaged in the business of stock brokering and distribution of financial products. ICICI Securities Limited is a Sebi registered Research Analyst with Sebi Registration Number – INH000000990. ICICI Securities Limited Sebi Registration is INZ000183631 for stock broker. ICICI Securities is a wholly-owned subsidiary of ICICI Bank which is India's largest private sector bank and has its various subsidiaries engaged in businesses of housing finance, asset management, life insurance, general insurance, venture capital fund management, etc. ("associates"), the details in respect of which are available on www.icicibank.com.

ICICI Securities is one of the leading merchant bankers/ underwriters of securities and participate in virtually all securities trading markets in India. We and our associates might have investment banking and other business relationship with a significant percentage of companies covered by our Investment Research Department. ICICI Securities generally prohibits its analysts, persons reporting to analysts and their relatives from maintaining a financial interest in the securities or derivatives of any companies that the analysts cover.

The information and opinions in this report have been prepared by ICICI Securities and are subject to change without any notice. The report and information contained herein is strictly confidential and meant solely for the selected recipient and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent of ICICI Securities. While we would endeavour to update the information herein on a reasonable basis, ICICI Securities is under no obligation to update or keep the information current. Also, there may be regulatory, compliance or other reasons that may prevent ICICI Securities from doing so. Non-rated securities indicate that rating on a particular security has been suspended temporarily and such suspension is in compliance with applicable regulations and/or ICICI Securities policies, in circumstances where ICICI Securities might be acting in an advisory capacity to this company, or in certain other circumstances.

This report is based on information obtained from public sources and sources believed to be reliable, but no independent verification has been made nor is its accuracy or completeness guaranteed. This report and information herein is solely for informational purpose and shall not be used or considered as an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments. Though disseminated to all the customers simultaneously, not all customers may receive this report at the same time. ICICI Securities will not treat recipients as customers by virtue of their receiving this report. Nothing in this report constitutes investment, legal, accounting and tax advice or a representation that any investment or strategy is suitable or appropriate to your specific circumstances. The securities discussed and opinions expressed in this report may not be suitable for all investors, who must make their own investment decisions, based on their own investment objectives, financial positions and needs of specific recipient. This may not be taken in substitution for the exercise of independent judgment by any recipient. The recipient should independently evaluate the investment risks. The value and return on investment may vary because of changes in interest rates, foreign exchange rates or any other reason. ICICI Securities accepts no liabilities whatsoever for any loss or damage of any kind arising out of the use of this report. Past performance is not necessarily a guide to future performance. Investors are advised to see Risk Disclosure Document to understand the risks associated before investing in the securities markets. Actual results may differ materially from those set forth in projections. Forward-looking statements are not predictions and may be subject to change without notice.

ICICI Securities or its associates might have managed or co-managed public offering of securities for the subject company or might have been mandated by the subject company for any other assignment in the past twelve months.

ICICI Securities or its associates might have received any compensation from the companies mentioned in the report during the period preceding twelve months from the date of this report for services in respect of managing or co-managing public offerings, corporate finance, investment banking or merchant banking brokerage services or other advisory service in a merger or specific transaction.

ICICI Securities or its associates might have received any compensation for products or services other than investment banking or merchant banking or brokerage services from the companies mentioned in the report in the past twelve months.

ICICI Securities encourages independence in research report preparation and strives to minimize conflict in preparation of research report. ICICI Securities or its associates or its analysts did not receive any compensation or other benefits from the companies mentioned in the report or third party in connection with preparation of the research report. Accordingly, neither ICICI Securities nor Research Analysts and their relatives have any material conflict of interest at the time of publication of this report.

It is confirmed that Dewang Sanghavi MBA (FIN) and Akshay Kadam MBA (FIN), Research Analysts of this report have not received any compensation from the companies mentioned in the report in the preceding twelve months.

Compensation of our Research Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions.

ICICI Securities or its subsidiaries collectively or Research Analysts or their relatives do not own 1% or more of the equity securities of the Company mentioned in the report as of the last day of the month preceding the publication of the research report.

Since associates of ICICI Securities are engaged in various financial service businesses, they might have financial interests or beneficial ownership in various companies including the subject company/companies mentioned in this report.

It is confirmed that Dewang Sanghavi MBA (FIN) and Akshay Kadam MBA (FIN), Research Analysts do not serve as an officer, director or employee of the companies mentioned in the report.

ICICI Securities may have issued other reports that are inconsistent with and reach different conclusion from the information presented in this report.

Neither the Research Analysts nor ICICI Securities have been engaged in market making activity for the companies mentioned in the report.

We submit that no material disciplinary action has been taken on ICICI Securities by any Regulatory Authority impacting Equity Research Analysis activities.

This report is not directed or intended for distribution to, or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject ICICI Securities and affiliates to any registration or licensing requirement within such jurisdiction. The securities described herein may or may not be eligible for sale in all jurisdictions or to certain category of investors. Persons in whose possession this document may come are required to inform themselves of and to observe such restriction.