JCR-VIS
SECTOR UPDATE

Steel Pipes

AUGUST 2017

INDUSTRY STRUCTURE

The tubular industry in Pakistan comprises 50 manufacturing units out of which 40 are based in Lahore. Tubular products include pipes, railings, tubes etc. where each segment has its own feed stock, rolling process, and finished goods that may take a number of shapes and forms. Overall domestic steel pipe market is estimated to be around 500,000MT with demand comprising of black pipe & Hollow Structural Sections (HSS), Cold Rolled (CR) pipe (low and prime quality), Galvanized Iron (GI) pipes and American Petroleum Institute (API) pipes.

Around 60% of the total demand comprises of CR pipes; low quality CR pipes represent around 35% of total pipe capacity followed by prime CR pipes which comprise almost one-fourth of total demand. GI and black pipes represent around 15% of total demand each while API pipes represent almost one-tenth of total demand. In terms of growth over the last two years, CR tubes and pipes represent the fastest pace of growth due to strong demand from the automotive and housing sector. Demand for GI pipes has remained stagnant/declined slightly over time due to shift in consumption towards plastic pipes. Listed players of the industry are Crescent Steel & Allied Products (CSAPL), International Industries Limited (INIL) and Huffaz Seamless Pipes Industries Limited (HSPI).

Type of Pipes	Black Pipe and Hollow Structural Steel	Low Quality CR	Prime CR	GI	API
Market Leader	Bashir Pipe and BBJ Pipes	Bashir Pipe	INIL	INIL	CSAPL, BBJ Pipes
Other players	Jamal Pipe, INIL	Jamal Pipe	Insha, Asia Metals	Bashir Pipe	Data Steel, Jamal Pipe & BBJ Pipes

INSTALLED CAPACITY OF LISTED PLAYERS

Company	Plants	Capacity
Crescent Steel and Allied Products (FY17) – Triple Shift	Pipes (MT)	200,000
	Coating (Mtr)	600,000
International Industries (FY17)	Pipes (MT)	500,000
	Galvanizing (MT)	150,000
	CRC (MT)	70,000
	Polyethylene pipe (MT)	25,000
Huffaz Seamless (FY16)	Seamless pipes (MT)	100,000
	Coating (MT)	50,000

PRODUCT RANGE OF LISTED PLAYERS

As discussed above, the following are the dynamics and products range of the top tier and listed players in the industry:

1. Data extracted from Pakistan Steel Line Pipe Industry Association

Company	Product Rant	Size Range	Recent Developments
Crescent Steel and Allied Products	Large Diameter spiral arc welded steel line pipes, multi-layer polyolefin and polypropylene and tape coatings	Diameter range 8" – 120" wall thickness 4mm-20mm	CSAPL recently increased its capacity from 90,00MT / annum to 200,00MT / annum
Data Steel Pipes Industries Limited	Spiral seam welded steel pipes and multi-later polyolefin / single layer fusion bonded epoxy coatings	Diameter range 6"-14"	BMR plan to hold to increase capacity from 10,000MT / month to 15,00MT / month
International Industries Limited	Hollow Structural sections, Galvanized pipes, Plastic pipes, stainless steel pipes	Small diameter pipes with varying thickness ranges	Increased pipes capacity to 500,00MT / annum in FY16 from previous 340,000MT / annum
Huffaz Seamless Pipes Industries Limited	Boiler tubes, Heat exchanger tubes, Mechanical tubes, Casting and tubing, 3 layer Polyethylene / Polypropylene & Fusion bonded Epoxy coating	Outer Diameter (6mm-273mm), Wall thickness (0.75mm-25mm), Length (1-19mtr)	Finalized Joint Venture with Jiangsu PuYuan Steel Pipe Industries Company, China for the provision of polyethylene and other coating services in with Huffaz Seamless will have a shareholding of 55%

APPLICATIONS OF DIFFERENT TYPES OF PIPES

Type	Usage
Steel Pipes	Potable Water Transmission
	Fluid Transmission
	Oil Transmission
	Natural gas Distribution
	Fencing
	Shelters/ Housing
	General Fabrication
Plastic Pipes	Plumbing – residential, commercial & industrial settings.
	Potable water transmission - residential, commercial & industrial settings.
	Industries with high pressure water and compressed air circuits.
	Rain drainage and collection systems.
	Indoor and outdoor swimming pools, gyms and their water filtration systems.
	Piping networks for all types of irrigation networks.
Stainless Steel Tubes	Handrails
	Furniture
	Fences
	Staircases
	Bathroom accessories
	Fire escapes
	Gardens

DEMAND DRIVERS

Current low per capita steel consumption, expansion of natural gas distribution and transmission network and favorable demand outlook from industries (autos, construction and pipelines) catered to by steel tube and pipe industry is expected to keep demand growth healthy.

Going forward, primary demand catalysts shall arise from the gas pipeline projects, main beneficiaries of which shall be large diameter pipes manufacturers. Demand for small diameter pipe manufacturers are expected to increase on account of growth in construction activities and housing schemes- DHA City, Bahria Town etc.

Volumes in this industry have increased since the past two years on account of higher demand of large diameter steel line pipes by gas transmission and distribution companies- Sui Northern Gas Pipelines Limited (SNGPL) and Sui Southern Gas Company Limited (SSGC) for supply of RLNG. GoP has planned a total of seven LNG terminals out of which 5 have been approved. The announced LNG based terminals are as follows:

ELENGY TERMINAL PAKISTAN LIMITED (OPERATIONAL SINCE AUG'2016)

- RLNG 2 (Being established by Pakistan Gas Port Consortium Limited which will reduce gas deficit by 30% and provide fuel for 3,600MW for new power. It is expected to come online in the 1st quarter of 2018)
- RLNG 3 is targeted to be completed by Oct'2018; however, the same is considered challenging given that financial close of the same is yet to be achieved. Completion of RLNG3 will take total RLNG supply capacity to 2,000mmcfd. This terminal is being constructed by a Turkish company and steel pipes requirement for onward transmission is as follows:

Company	Diameter	Km	MT	Value (Rs.)
SSGC	48"	350km	200,000	30b
SNGPL	48"	750km	400,000	55b
Total		1,100	600,000	85b

PROJECTS OTHER THAN LNG TERMINALS ARE AS FOLLOWS:

- TAPI Pipeline Project
- 2,775km Iran-Pakistan Gas pipeline
- 700km Gwadar-Nawabshah Gas Pipeline
- Karachi Bulk water supply (k4) project, Thar coal power, Islamabad water supply project

CAPACITY UTILIZATION

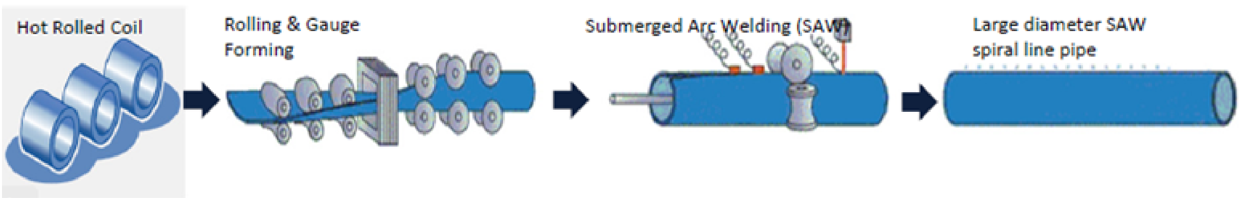
Company	Plants	Annual Capacity (Triple Shift)	Annual Production (FY15)	Utilization (FY15)	Annual Production (FY16)	Utilization (FY16)
Crescent Steel and Allied Products	Pipes (MT)	200,000	13,500	15%	66,811	33%
	Coating (Mtr)	600,000	90,600	15%	590,738	98%
Huffaz Seamless	Seamless pipes (MT)	100,000	12,196	12%	8,652	9%
	Coating (MT)	50,000	5,329	11%	4,512	9%
Company	**Plants**	**Annual Capacity**	**Annual Production (FY16)**	**Utilization (FY16)**	**Annual Production (FY17)**	**Utilization (FY17)**
International Industries	Pipes (MT)	500,000	185,460	37%	184,682	37%
	Galvanizing (MT)	150,000	87,641	58%	84,588	56%
	CRC (MT)	70,000	6,027	9%	-	0%
	Polyethylene pipe (MT)	25,000	7,525	30%	7,427	30%

PROCESS FLOW

There are two types of steel pipe, one is seamless pipe and another has a single welded seam along its length. Seamless tubes are typically more light weight and have thinner walls. They (Seamless tubes) are used for bicycles and transporting liquids. Seamed tubes are heavier and more rigid. The have a better consistency and are typically straighter. They are used for things such as gas transportation, electrical conduit and plumbing. Typically, they are used in instances when the pipe is not put under a high degree of stress.

More than 90% of the raw material cost to manufacture pipes comprises HRC procurement costs. HRC is imported from various parts in the world and transformed into pipes through the following process:

- HRC is imported
- Pipe is formed on a continuous or semi continuous production line
- Pipe is then cut and modified as per customer's needs.



TARIFF STRUCTURE

Local producers of pipes have a duty advantage of 5% vis-à-vis importers. In addition to this advantage they are also ahead in terms of cost management as freight expense to import pipes is exceptionally higher than importing coils on account of higher vacuum created by pipes.

Product	Import Tariff
Coil (HRC)	5%
Pipes	10%

Business Risk Factors

CYCLICALITY

Cyclicality in sales is a significant risk particularly for large diameter pipe manufacturers. Given the reliance of large diameter pipe manufacturers on public sector and pipeline augmentation projects of SNGP and SSGCL. However, in the backdrop of planned pipeline infrastructure projects, pipeline sales orders are expected to remain healthy over the medium term. Major project announced and for which tendering is expected over the next one year include 1100km North-South gas pipeline and SNGP and SSGC augmentation projects for existing pipelines. Sales of small diameter pipe players are projected to grow at a normal growth rate; however growth rates may vary for different types of pipes.

COMPETITION FROM IMPORTS

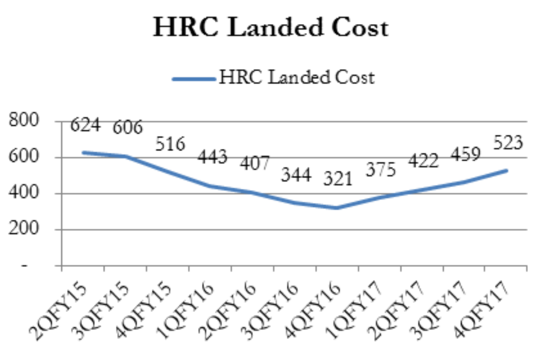
While threat of dumping particularly from China remains a significant risk, duties on pipe imports and high transportation cost has facilitated in partly mitigating competition from imports. Moreover, small diameter pipe manufacturers in general have historically kept margins at competitive levels in order to mitigate competition from imports. Local large diameter pipe manufacturers also enjoy the advantage of SRO 827 through which a price preference is provided to them against imports. Price preference shall be allowed under the following conditions:

- Having minimum 20% of value addition, price preference shall be 15%;
- Having 20-30% value addition, price preference shall be 20%; and
- Having over 30% value addition, price preference shall be 25%.

Apart from this benefit, imports of large diameters pipes are expensive due to higher transportation cost. Freight expense to import pipes stand around $100/MT vis-à-vis $20/MT which is the transportation cost to import HR coils.

VOLATILITY IN HRC PRICES

HRC and CRC prices comprise the major raw material cost component for pipe manufacturers. Industry margins face significant variation on account of volatility in HRC and CRC prices. For large diameter pipe manufacturers who are dependent on government orders, a key risk is increase in HRC prices post bid submission. This is due to bids being made based on current or expected HRC prices at the time of the contract while contact award and procurement of HRC is done with a time lag.



USDPKR DEPRECIATION

Large diameter pipe manufacturers are hedged against any exchange rate movements on contract based sales. However, any significant rupee depreciation beyond levels that can be passed on to customers may impact imported raw material prices and margins. Players like INIL who have sizeable exports based revenues will be better hedged against rupee depreciation as compared to players with only local sales.

FINANCIAL PROFILE

Growing demand for steel pipes is visible from the rise in sales in FY17 for most listed companies. Sales outlook remains healthy particularly for large diameter pipe manufacturers and CR tube and pipes. Gross margins (GMs) of the industry are highly reliant on HRC procurement, which is the most critical aspect of the business. With significant increase in HRC prices particularly during the latter of FY17, gross margins for large diameter players witnessed a noticeable decline since HRC was procured at higher rates than the cost estimated in the tenders submitted to SNGPL and SSGC. Margins for INIL remained steady backed by inventory gains, variety of product offering and established export market (United States, Canada and Australia). In line with decline in gross margins, CSAPL's net margins declined while net margins of INIL increased on account of dividend income from a subsidiary.

With repayment of debt and increase in equity base, gearing and leverage indicators have declined on a timeline basis for most of the players. However, gearing levels for INIL have increased on account of rise in short term debt to finance higher inventory levels in anticipation of increase in raw material prices. FFO in relation to outstanding obligations is adequate for all the three listed players.

Crescent Steel and Allied Products				
Amounts in Rs.m	**FY14**	**FY15**	**FY16**	**FY17**
Sales	4,030	2,102	7,412	12,286
Gross Margin	6%	2%	29%	14%
Net Margin	14%	5%	13%	10%
RAO	12%	2%	10%	11%
ROE	14%	3%	17%	18%
International Industries Limited				
Amounts in Rs.m	**FY14**	**FY15**	**FY16**	**FY17**
Sales	16,341	17,674	14,821	16,707
Gross Margin	13%	11%	17%	17%
Net Margin	3%	4%	5%	11%
RAO	3%	6%	6%	10%
ROE	11%	15%	15%	32%
Huffaz Seamless Pipes				
Amounts in Rs.m	**FY14**	**FY15**	**FY16**	**FY17**
Sales	1,518	1,974	1,002	701
Gross Margin	2%	9%	7%	10%
Net Margin	-2.4%	-0.6%	2.0%	0.8%
RAO	-0.5%	-0.2%	0.3%	0.1%
ROE	-2.9%	-0.9%	1.4%	0.4%

Crescent Steel and Allied Products				
Amounts in Rs.m	**FY14**	**FY15**	**FY16**	**FY17**
Total Debt	331	689	2,723	2,096
Total Equity	4,007	4,051	5,808	6,568
Gearing Ratio	0.08	0.17	0.47	0.32
FFO	226	(188)	512	594
FFO Total Debt	68%	-27%	19%	28%
International Industries Limited				
Amounts in Rs.m	**FY14**	**FY15**	**FY16**	**FY17**
Total Debt	6,677	5,057	4,439	7,187
Total Equity	4,423	4,782	5,202	5,841
Gearing Ratio	1.51	1.06	0.85	1.23
FFO	527	792	1,190	1,685
FFO Total Debt	8%	16%	27%	23%
Huffaz Seamless Pipes				
Amounts in Rs.m	**FY14**	**FY15**	**FY16**	**FY17**
Total Debt	30.64	4.03	3.39	3.51
Total Equity	1,243	1,343	1,478	1,561
Gearing Ratio	0.02	0.00	0.00	0.00
FFO	157	209	184	112
FFO Total Debt	512%	5176%	5408%	3179%

Crescent Steel and Allied Products				
Amounts in Rs.m	**FY14**	**FY15**	**FY16**	**FY17**
Stock in Trade	407	453	2,267	1,712
Short term debt	269	404	2,252	1,697
Trade debts	89	88	323	827
Payables	372	638	850	1,680
International Industries Limited				
Amounts in Rs.m	**FY14**	**FY15**	**FY16**	**FY17**
Stock in Trade	6,671	3,653	4,058	8,165
Short term debt	6,377	4,814	3,401	6,009
Trade debts	2,268	2,314	1,625	1,982
Payables	3,160	1,375	1,859	2,996
Huffaz Seamless Pipes				
Amounts in Rs.m	**FY14**	**FY15**	**FY16**	**FY17**
Stock in Trade	902	901	1,258	1,315
Short term debt	30.64	0.73	0.86	0.98
Trade debts	103	421	89	81
Payables	939	1,090	1,095	1,016

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