



Steel **SCENARIO**

A JOURNAL ON FERROUS AND ALLIED SECTORS

SEPTEMBER 2021

EVERYTHING YOU NEED TO KNOW ABOUT: **TUBES & PIPES**

**Delivered 600+tons Production from 14.5MW system.
95% load factor guaranteed with L.F.M technology**



GREEN FURNACE

A design competition to shape India's tomorrow



Tata Structura, the leading hollow sections brand in the country, had organised a design competition "Notions of India - Shaping a Billion Dreams" for the Architecture and Engineering community.

An international competition, which spanned for a period of over six months, saw participation from over 12 countries. The objective was to create an iconic symbol based on the theme that articulates the idea of a 'New India' for today and tomorrow. A symbol that will create an inspiring visual landmark, regardless of the era, and that which will remain true to its purpose with changing times.

The 'Notions of India' competition was launched on March 3, 2021, on Founder's Day of Tata Steel, marking the birth anniversary of Jamsetji Nusserwanji Tata.

The competition got an overwhelming response of more than 5200+ registrations with close to 600 submissions. After four rounds of the selection process carried out by a high-profile Jury, 12 finalists were chosen and announced on August 15, 2021, India's 75 Independence day.

The finalists' video garnered more than 2 lakh views on social media. The 12 finalists went through another round of Chairman's Jury which resulted in the winner of the competition.

The winning entry, "Billion Impressions", designed by architects Namdev Talluru & JK Jayakanth would be installed in the city of Ranchi. The design of the sculpture features two 'impressions' balancing each other, which was created out of figurative attempts to represent the past impressions (left side) supporting the future impressions and endeavours (right side).

The winners were felicitated at a virtual event on October 2, 2021. A keynote address was presented by the eminent Indian designer & art curator Mr Rajeev Sethi. The award ceremony was attended by senior dignitaries of Tata Steel, & members of the Architecture, Engineering & Consultant Fraternity.

BILLION IMPRESSIONS



Namdev Talluru
Architect



JK Jayakanth
Architect

NOTIONS
of **INDIA**
SHAPING A BILLION DREAMS

Toll Free No. : 1800 108 8282

tubesupport@tatasteel.com | www.facebook.com/tatastructura



CONTENTS



VOL 31/M02

Registration No. 53085 / 92

EDITOR'S NOTE 2

SECTION : ARTICLE

The Worst seems to be Over, when it comes to the Steel Pipe and Tube Industry in India 4

By Ritwik Mukherjee

Metal pipes industry shows its mettle in pandemic: Demand pipeline strong 13

By CARE Ratings

Speciality Pipe and Tube For Boiler and Petrochemical Plant 18

By JEE Steel Corporation

Expectations With New Foreign Trade Policy 2021-26 39

By IBEF

SECTION : REPORT

Tata Structura : A Vision that Shapes Tomorrow 10

SECTION : INTERVIEW

Mr. Manish Beriwal 32

Director, Shyam Steel Industries Limited

Mr. Sudipta Mukherjee 35

Director, Titagarh Wagons Limited

SECTION : NEWS

Crude steel production - August 2021 41

World Steel News

DATA BANK

Steel Market Price 43

INDUSTRY SCENARIO

VOL 01/M02

SECTION: FOREWARD

Future of Tanneries in India 46

SECTION : ARTICLE

Leather Industry in India 47

Source: Make in India

India's Footwear Industry expected to grow 8 times by 2030 52

By PBNS

SECTION : INTERVIEW

Mr. Prithijit Das 51

Director, Das Style Private Limited

SECTION : REPORT

Basumitra Ghosh Mukherjee 53

HOD - Leather Goods and Accessories Design, FDDI- Kolkata

Spark Economy Research Centre

71/3B, Purnadas Road, Kolkata -700 029, India, Tel: +91 9831474142

Email: info@steelscenario.com / editor@steelscenario.com | Web: steelscenario.com

Founder Chief Editor

Late Dr. Monoj Chatterjee

Editor & Publisher

Sakuntala Chatterjee Chanda

Content & Marketing Executives

Joyanta Mani

Tanumay De

Accounts & Admin

Gobinda Roy

Design & Layout

Prime Serviq

Representative in Bangladesh

Rifat Mohammad

+88-01911394324

serc.events@gmail.com

EDITORIAL ADVISORY BOARD

- ▲ Dr. Narendra Kumar Nanda, M.Tech, Ph.D
- ▲ Sushim Banerjee, Ex-Director General - Institute of Steel Development & Growth
- ▲ Nirmal Chand Mathur, Stainless Steel Expert
- ▲ Dr. Shueb Ahmed, Ex-Director Commercial - Steel Authority of India Limited
- ▲ Pritish Kumar Sen, Ex-Tata Steel
- ▲ Debashish Dutta, Ex-General Manager - Institute of Steel Development & Growth
- ▲ Ishwar Chandra Sahu, Ex-Executive Director I/c SAIL, IISCO Burnpur
- ▲ Rakesh Kumar Singhal, Consultant - Steel Research Technology Mission of India
- ▲ Abhijeet Sinha, National Program Director- ASSAR
- ▲ Divya Kush, President of The Indian Institute of Architects Member (Alt.), Council of Union of International Architects
- ▲ Rajesh Nath, Managing Director, VDMA India
- ▲ Nikunj Turakhia- President, Steel Users Federation of India
- ▲ Sanat Bhaumik, Director - Sales & Marketing, Steel Plantech India Private Ltd.

ATTENTION SUBSCRIBERS

Any complain of non-receipt of journal should reach 'Steel Scenario' office at Kolkata latest within a month of publication.

- Publisher

Printed and Published by Ms. Sakuntala C. Chanda on behalf of Spark Economy Research Centre at Prime Serviq.
The views and data given by the authors are their own and Steel Scenario Journal is not responsible for their authenticity



Sakuntala, Editor & Publisher

What's in the Pipe (line)?

India has emerged as the top 3 manufacturing hubs of steel pipes in the world after Europe and Japan. We have lower costs of production and quality+geographical advantages. The iron and steel pipe industry is one of the key sectors in the infrastructure development of our country. From the extension of pipelines for river interlinking to providing drinking water to every household, the industry plays a critical role in the development of the nation. The overall industry size has grown double-digit over the last four years and is currently estimated to be around Rs.60,000 crore. The major growth drivers for the industry include demand emanating from domestic water infrastructure, oil exploration and transportation, construction, irrigation, infrastructure, and expansion of gas pipelines such as the national gas grid and city gas distribution. While the covid-19 pandemic has caused certain disruptions, the industry witnessed a V-shape recovery post the removal of restrictions and surpassed pre-covid

levels as evident by 16.61% growth in steel tube and pipe consumption.

Due to the first wave of pandemic during 2020, the global steel pipes industry recorded a slump of 10.60% implying destruction of 7.3 million tonnes in consumption. The Global Stainless-Steel Pipes and Tubes Market was valued at USD 28.98 billion in the year 2020. The demand for steel pipes plunged as the construction activities halted with the rising number of infections; however, as the first wave retracted, the governments responded with hefty spending on infrastructure to boost the economies. When the markets were just witnessing glimpses of normalcy, it got caught up in the second wave of the pandemic. India's iron and steel pipe and tubes industry, valued at nearly Rs.60,000 crore, accounts for around 8% of the global steel pipe market. The production has grown at a CAGR of 7.69% from 4.97 million tonnes in FY17 to 6.68 million tonnes in FY20 attributable to incremental demand emanating from growth in domestic water infrastructure mainly driven by Jal Jeevan Mission, oil exploration, construction, infrastructure, and expansion of gas pipelines such as national gas grid and city gas distribution. As a result, the consumption growth outpaced the production growth and expanded with a CAGR of 11.03% over the period FY17 to FY20.

“The steel pipe industry may face headwinds in the near future. In the oil & gas sector, investments depend on the price and demand-supply equation of crude prices.”

ERW has been the fastest-growing segment in the carbon steel pipe space. India is the leading ERW manufacturing hub, the domestic market for ERW pipes is 8-10 million tonnes. ERW pipe market has grown by 4-5% over the last 5 years clocking a growth of 8-10% over the next few years. In the ERW market Galvanized (GI), Pre Galvanized pipes (GP) and Hollow sections enjoy high margins, whereas black pipes have EBITDA margins of only 4-6%.

The ERW segment has the lowest EBITDA margins amongst all the segments in the steel pipe market. APL Apollo's average EBITDA margin over the last 6 years is 7%. Lower margins act as a deterrent for new players to enter this market. APL thrives in this market because it has scale, its procurement cost of steel is 1-1.5% lower than others in the market. It has continuously innovated, has a strong distribution network and continuously spends on branding.

The global copper pipes and tubes market reached a volume of 4.5 Million Tons in 2020. Looking forward, IMARC Group expects the market to reach a volume of 5.5 Million Tons by 2026. Copper pipes and tubes are widely used in the construction sector owing to the electrical and thermally conductive properties of copper. Although overall copper plumbing is expensive as compared to its plastic counterpart, it still is a convenient option in terms of cost-benefits because of its long-term reliability. Furthermore, copper pipes have extensive industrial utilization owing to their non-corrosive and non-reactive nature. These pipes and tubes are also used for the transportation of gases since copper is non-permeable to air and gas and offers reduced chances of leakage and contamination caused by oxygen, ultraviolet (UV) rays and temperature from the external environment.

In India, PVC pipe has the largest share used in the agriculture sector. CPVC pipes are emerging as the best substitute for the PFR pipes and DWC HDPE pipes developed application in Infrastructure is booming the Plastic pipe market due to growth in big infrastructure projects like clean river mission, drainage solution in rural and urban areas, telecommunication and electricity network for 5G network, electric railways, and energy transmission.

Indian Plastic recycles sector can recycle 99% of rigid PVC pipes which can be further used in product applications like chemical storage, shampoo bottles, and other application. Plastic pipe manufacturers face the biggest challenge of volatile raw material prices and availability. Approximately half of the raw materials are supplied by import material where China and Korea are the biggest suppliers. To regulate the global trade supplies government of India put an additional dumping duty on the CPVC resin. According to research in 2018 there are 6960 machines are installed for the production of RPVC pipes and 1960 machines are installed for the production of PO pipes which are growing at a CAGR of 13%. The rising machine capacity of pipe processing and raw material manufacturing show the healthy growth of the Plastic pipe market.

The steel pipe industry may face headwinds in the near future. In the oil & gas sector, investments depend on the price and demand-supply equation of crude prices. If crude prices fall as we had seen recently, investments in the sector are delayed. In the case of ERW pipes, where the majority of pipes are used in construction, the slowdown in real estate will impact this segment. However, with the investments lined up and the government taking up projects, spending can be delayed but not put off completely. Companies do not have to worry of CAPEX as utilization levels are not at the peak and CAPEX has been continuously incurred over the last 5 years. Steel consumption and demand for steel tubes and pipes are expected to improve in FY22 with higher levels of economic activities amid optimism that the vaccination program would facilitate normalization and stimulate economic recovery.

There is a diverse requirement for steel pipes and tubes across several industries including, but not limited to, oil and gas, petrochemicals, power and energy, construction, water supply, and sanitation, etc. The government's thrust to improve infrastructure is expected to augur well for industry players. India is expected to become a preferred location for global manufacturing in the medium and long term led by initiatives such as Make in India, vocal for local, performance-linked incentives schemes and China plus one strategy being adopted by consumption-driven economies across the globe.

The global steel pipe and tubes market is valued at USD 90 billion and is projected to grow at a CAGR of 4% in the next three years to which the domestic market will contribute to around 9%-10% of the global consumption. The demand will largely be driven by water transportation, oil and gas, firefighting, construction, and infrastructure segments, among others. The decreasing share of unorganized and small players and increasing dominance of larger players is expected to result in better pricing power and margins for the larger players especially in ERW segment which has been the most fragmented segment historically, while other segments such as SAW, ductile and seamless pipes segments are traditionally dominated by few large players.

The integration in the PVC pipe market is expected to accelerate. With limited supply and rising PVC resin costs, the regional and unorganized players are expected to face significant sourcing and working capital challenges in the coming years. While leading market players are expected to enjoy expansion as the market is moving towards organized segment wherein small players are getting merged with large players to recover the losses and financial crunches caused by slow demand and supply after the virus hit the country. The government has also taken steps that will drive PVC pipe demand with its initiatives such as the Jal Jeevan Mission Urban scheme, which aims to provide a uniform water supply in all 4378 urban local bodies with 2.86 crore household tap connections, as well as liquid waste management in 500 AMRUT cities.

New technology must be deployed at a blistering pace, with new infrastructure to boot. While a smooth transition to larger shares of scrap-based production is possible as economies start to mature and scrap availability increases a rapid roll-out of technologies that are currently at the early stages of development will need to accompany this shift. Deep emission reductions are not achievable without innovation in technologies for near-zero emissions steelmaking. Of the cumulative emission reductions to 2050 in the Sustainable Development Scenario.



Sakuntala Chanda

Please subscribe to continue reading.....