

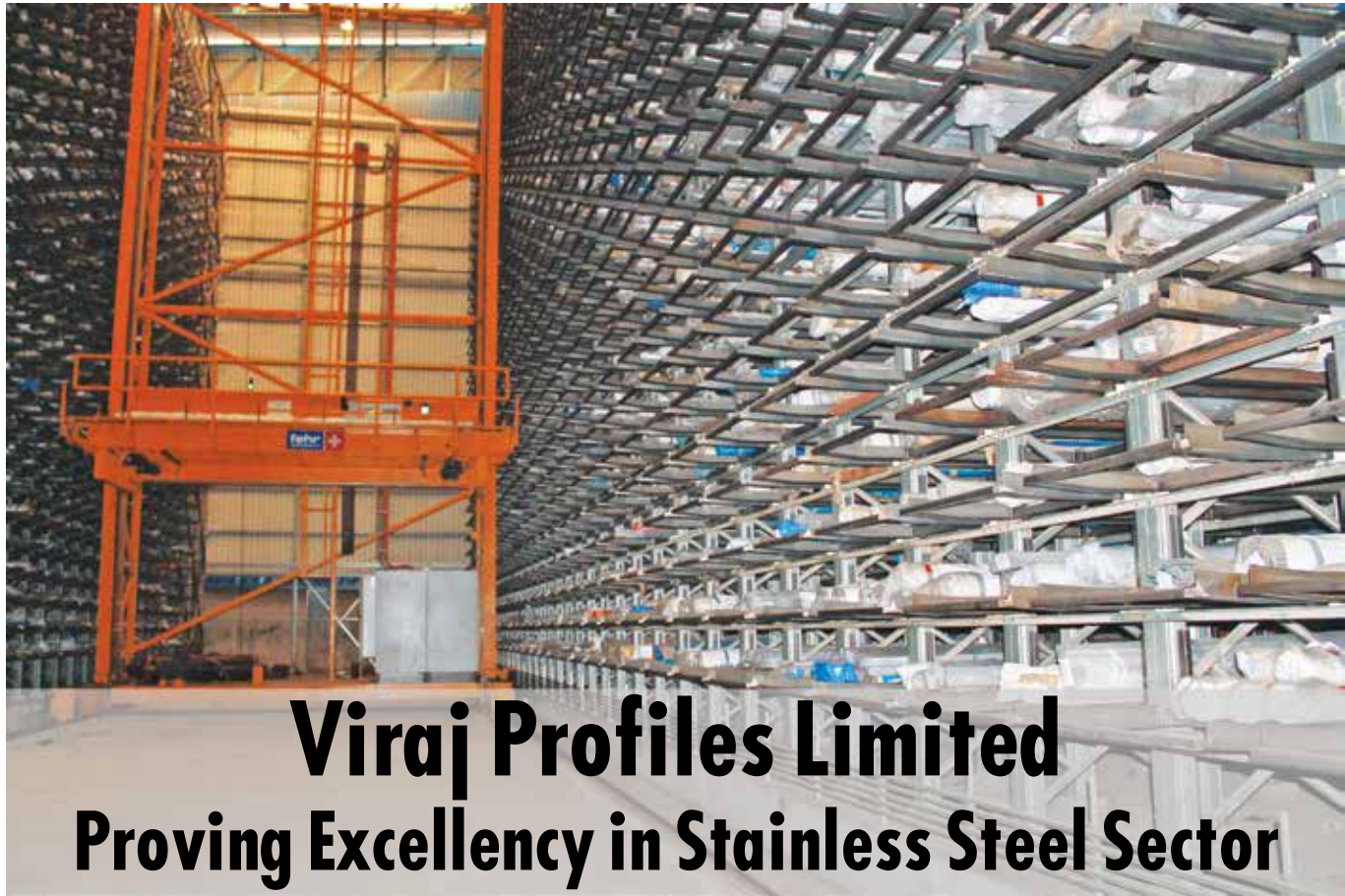
IRON & STEEL REVIEW

A GLOBAL PUBLICATION ON STEEL & HEAVY ENGINEERING

VIRAJ

ONE VISION
MANY WORLDS





Viraj Profiles Limited

Proving Excellency in Stainless Steel Sector



Neeraj Kochhar
Chairman and Managing Director
Viraj Profiles Limited



Renu Kochhar
Managing Director
Viraj Profiles Limited

Viraj Profiles Limited is one of the largest manufacturers and exporters of Stainless Steel engineering products in India, manufacturing over 50,000 items across various product verticals. With over 92 approvals and certifications across various global norms, the company has a keen focus on quality and supplies to some of the world's most demanding applications. Viraj Profiles was founded near Mumbai in 1991. Neeraj Kochhar, Chairman and Managing Director, Viraj Profiles

shares, "Initially the company started manufacturing utensil-grade steel for the domestic market but we always had the vision of expanding operations into the international market. To make international presence a possibility, in 1995, Viraj started increasing its production capacity, diversifying into new grades and product ranges and enhancing its production processes." Neeraj Kochhar further adds, "In the year 1995, we commissioned our Flanges division and Bright Bar division and started exports of Bright Bars. Then after 5 years, in the year 2000, Mrs. Kochhar joined hands with me and we established our Profiles division predominantly catering to overseas clients. Viraj Stainless Steel Wires and Wire Rods divisions were established in the years 2001 and 2006, respectively. One of our biggest achievements came our way in the year 2008 when Viraj was ranked 3rd largest producer of Stainless Steel Long products in the world. And from then on there was no looking back."

Since then, Viraj Profiles has transformed itself into the world's second largest Stainless Steel Long products manufacturer with a capacity of 528,000 tonnes per annum, over 9,000 employees and an annual turnover close to USD 1.5 billion. The company recently completed

20 years of its exports. The organization's highest quality products are well known across the world and are primarily used in defense, construction & structural buildings, power, petrochemical and marine industries. The Stainless Steel Flanges produced by Viraj is one of the most sought after products in oil & gas and marine industries and Viraj is one of the leading manufacturers of SS Flanges in the world with various size options ranging from 0.5" to 40".

Renu Kochhar, Managing Director, Viraj Profiles who also heads the Sales department of the company across all product verticals shares, "Our Wires division is well-equipped to manufacture high quality products having in-house facilities for solution annealing, bright annealing (continuous strand annealing), dry and wet wire drawing, high speed drawing, medium wire pattern laying, fine wire spooling, layer winding, random winding, TIG wire straightening and cutting facilities to name a few. We manufacture Wires in a wide size range from 0.07 to 13.5 mm and Wire rods from 5.5 mm to 39.5 mm." Viraj's Wire Rod division boasts of fully automatic Wire Rod Mill from Siemens Italy and has facilities for solution annealing, soft annealing and pickling plants with high end automation and proven quality standards. Wires manufactured at the plant are mainly used in industries like ship building, medical, agriculture, springs, vineyard, agriculture, chemical, petroleum, automobile, weaving braiding, fastener, food processing, paper mills, welding electrode, house hold applications, etc.



Viraj is continuously developing its range of wire products

Wires, Fasteners, Bright Bars, Profiles and Flanges, etc. till the point of transportation of these products across the world. Viraj Profiles manufactures a wide range of products using austenitic, ferritic, martensitic and duplex Stainless Steel grades. The range of Stainless Steel products being manufactured by the company includes Wire Rods, Wires, Fasteners, Flanges & Fittings, Bright Bars and Sections & Profiles. Explains Renu Kochhar, "Our products have a variety of applications in industries like petrochemical plants, oil pipelines, ship buildings, structural designs, high tensile cables and springs, boilers, pressure vessels, liquid storage terminals, liquid cargos ships and surgical instruments to name a few.



Viraj Profiles has developed special coating wires which are used for springs and nails

The biggest strength of the company lies in its wide range of product offering and its unique ability to do complete backward and forward integration across the product lines starting from sourcing scrap, making billets and using these billets to manufacture other products like



Automatic packaging facilities for profile products



Viraj's Wire Rod division boasts of fully automatic Wire Rod Mill

As part of its ongoing technology upgrades, Viraj Profiles commissioned a Level-2 Automatic Section Rolling Mill in its Tarapur plant. The completely automated plant is the first of its kind with online pickling and labeling, automatic packaging facilities. Automatic packaging and storage facilities enable rapid product dispatch, which is required to meet up the increasing demand for Viraj products. The annual capacity of the plant is 180,000 tonnes per annum. This new facility is equipped to manufacture more than 700 different shapes and designs of Angle, Flats and other Profiles. With the new plant in place, the company has set a new benchmark for quality products globally and it hopes to increase its efficiencies in catering to the global as well as local requirements. Commissioning of this new plant is a bright example of Group's commitment to its strategy of modernization of the facilities and increasing the production volumes. The plant complies with the high environmental standards of modern Stainless Steel manufacturing and has Level-2 Automation processes. The plant is equipped with FeHR cassette rack system which is also known as a honeycomb warehousing system, enabling quick storage and retrieval of Bars, all at the touch of a button.



With the addition of new melting facilities, Viraj will be able to manufacture alloy steels & super alloys



The recent commissioning of a container depot helps ensure products are delivered on time



Section Rolling Mill plant has Level-2 Automation processes



Viraj is one of the leading manufacturers of SS Flanges in the world with various size options ranging from 0.5" to 40"

Other recent additions include a new ring rolling machine, a 2000 tonne forging press and an additional 10 tonne pneumatic hammer. Renu Kochhar further adds, "In addition, 15 new CNC machines and a large diameter Hyundai CNC-VMC for machining Flanges have also been added. These investments allow us to cater to the increasing demand for high quality Stainless Steel Flanges. Finally, a continuous hardening and tempering furnace for Coils and Bars has been commissioned." Viraj is almost self-reliant in terms of transport and logistics. The recent commissioning of a container freight station and inland container depot helps ensure products are delivered on time. Having its own container depot enables the company to complete the customs clearance process near the point of production, saving time at gateway ports.



Automatic packaging and storage facilities enable rapid product dispatch

As part of its future growth plan, Viraj is in the process of setting up new facilities for manufacturing special steels and super alloys for critical applications in aerospace, defense and power projects. "To achieve this we are upgrading with special melting and re-melting furnaces such as Vacuum Induction Melting (VIM), Electro Slag Re-melting (ESR) and Vacuum Arc Re-melting," continues Renu Kochhar. "These special grades will be used in power, aerospace and defense sectors mainly. The aerospace sector is an important market for special steels, with stringent quality requirements necessitating production using special melting and re-melting processes."

As part of its long term business strategy, Viraj Profiles has moved into the production of super duplex Stainless Steels. These grades are especially in demands for the oil & gas industry, marine applications and architecture and construction where high load bearing capacity is desired. In addition to its current range of grades, the company has also developed martensitic grades with hardening and tempering. There have been some important developments in its range of Wire products also, for example soap-coated

fine Spring Wires in size ranges of 0.35 mm–0.65 mm have been developed. Viraj Profiles has also developed special coating Wires which are used for springs and nails. This process leaves a very light lubricant film on the Wire; as a result, guides are not jammed, tool life is increased and epoxy coating on nails is improved during processing at the customers' end. New developments also include in-line drawing with spooling of 1 MT euro coils with precision winding; and approvals from CE, VDTUV and ABS for welding grades TIG and MIG Wires.

Caring for the environment

Viraj is going eco-friendly by focusing on energy efficiency in its factories and production processes. The use of recycled scrap supports waste management, conserves natural resources and reduces its carbon footprint. Other initiatives include:

- New induction furnaces with ash collectors have been installed and induction furnaces are utilized on a rotational basis to ensure they are maintained at optimum levels and minimize the energy consumption.
- Automatic temperature control system is deployed which prevents overheating and reduces energy requirements per cycle.
- All dust generated in the shot blasting process is collected. And these are then recycled into the induction furnace to save cost and reduce wastage.
- During the annealing and pickling processes, water is recycled, passed through a scrubber and absorber system and treated with acid or base for neutralization.
- A new gas conversion plant has been installed which helps to reduce the company's carbon footprint and achieves economy of scale. Gas conversion achieves combustion efficiency and extends the life of the furnace. The use of furnace oil – which emits gases harmful to the environment – is reduced by around 45%.

Focus on Indian market

There is no doubt that the Indian market has grown significantly in the past couple of years. The potential for growth is huge and local Stainless Steel consumption has multiplied in the past two years. Some of the main sectors driving this trend are infrastructure and architectural applications such as the modernization of airports, metro railways, modernized bus shelters, Stainless Steel wall claddings, household applications, furniture, street infrastructure, process industries, etc. Renu Kochhar opines that Government institutions have also started realizing the importance of using Stainless Steels and



recognize the long term benefits. On a broader scale, as the emphasis on protecting the environment grows and companies become more aware of their responsibilities, there is no better option than Stainless Steel which is 100% recyclable, long lasting and very cost-effective considering its low maintenance and longevity.

Renu Kochhar further adds, “With the recent ‘Make in India’ campaign drawing attention from all quarters, we see lot of Indian and overseas companies expanding their footprint in India. This is set to increase the demand for new construction and thus increase demand for this wonder metal called Stainless Steel. Encouragements from the Government such as the single window policy for seeking various permissions, approvals and licenses have also eased the process of setting up new businesses in the country and set a positive tone for new ventures. This will not only provide more employment opportunities, but will also have a positive impact on the country growth. The recent announcement that the Government will build around 100 smart cities is likely to give a strong push to the Stainless Steel industry. This is one of the reasons why we have started focusing on the Indian market also now. Secondly, the rise in discerning customers is also fueling the growth of Stainless Steel in Indian market.”

The Indian market has a huge appetite for Stainless Steel and Viraj Profiles is particularly focusing on coastal regions such as Mumbai, Chennai and Kerala which

require special grades of Stainless Steel with higher levels of corrosion resistance. Viraj’s R&D team is developing new grades of Stainless Steel suitable for these areas. The company is also strongly focused on the automobile sector which is one of the fastest growing industries in the current economy.

Corporate social responsibility

Viraj Profiles has an extensive CSR policy and provides social, economic and environmental benefits to the communities and geographies in which it operates. Its CSR projects focus on key areas such as health, education, environment and women empowerment. This focus enabled Renu Kochhar to realize a lifelong dream when she founded the Viraj Shri Ram Centennial School. Providing education matching international standards at the company premises in Kurgaon, the school was recently awarded ‘One of The Top Emerging Schools’ in Mumbai from the Times of India newspaper.

Renu Kochhar, the Chairperson of the school says, “The prime motto of our school lies in providing wholesome education to its students and providing them with a platform where their hidden talents can be channeled and portrayed. VSRCS has succeeded in doing this because of its strong pillars: curriculum, faculty and methodology. We conform to the ideas of equal opportunities and believe whole heartedly in saying – use what talent you possess.” ■