



Global Refractories Market Expected to Surge by 2020

Global Refractories market is currently valued at \$40.9 billion in 2014 and is expected to reach \$54.8 billion by 2020, showing a Compound Annual Growth Rate (CAGR) of 5%. In terms of tonnage, the global market was at 39.8 million metric tons in 2014 and is expected to reach 48.6 million metric tons by 2020. China will maintain its top position among countries, with a market share of more than 50%, in the refractories market.

The gains registered in recent years because of a moderation in raw material costs and refractories prices were not as strong. The iron and steel market will reportedly continue to dominate global refractories sales, accounting for more than three-fifths of all 2020 product-demand in volume terms.

The volume of refractories consumed is



projected to rise in the U.S., Western Europe, and Japan following an extended period of decline, as economic conditions strengthen in these areas and output of ferrous metals and other refractories using products rebounds. Output gains in these areas are more likely to result in higher refractories demand because the manufacturing techniques used are already so efficient that it will be much difficult to reduce refractories consumption on a per unit output basis than in less developed countries. Due to their greater use of more costly, high-quality products, the

U.S., Western Europe, and Japan will account for a larger share of the world refractories market in dollar terms in 2020 than they will in tonnage.

The world average consumption of refractories per tonne crude steel was 15kg/t in 2014, while China's average was 20kg/t. The growing demand for refractories in the Asia-Pacific region is the major driving factor of the market.

Twenty years ago, glass consumed 11-13kg/tonne of refractories, a figure that has dropped to 4.5-5.5kg/tonne today. Steel, on the other hand, has reduced consumption from 30kg/tonne in 1980 to 10kg/tonne today. Companies profiled in the refractories market report include Vesuvius, RHI, Morgan, ANH, Magnezit, Shinagawa, Krosaki and Imerys among others.

Tata Steel Expands New Welded Product Range



Tata Steel has expanded its new range of welded linepipe, ahead of the Offshore Europe, where it will celebrate 21 years and one million tonnes of steel in the North Sea.

The Offshore Europe Exhibition and Conference runs from September 8 to 11 at the Aberdeen Exhibition and Conference Centre.

Earlier this summer Tata Steel became the first to successfully deliver double submerged arc welded longitudinal (DSAWL) pipe through reeling method in the North Sea, said a statement.

The size range extension has expanded the range further, with the company successfully producing a range of new X65

sizes, with a wall thickness of up to 38.1 mm and a diameter up to 559 mm, it said,

The company can now, therefore, offer traditionally seamless pipe sizes in a welded form, the benefits of which include a decreased lead time in customer orders and improved fit up and weldability which therefore

reduces time and project costs

The new products have already been successfully deployed in the North Sea and in deep water projects in the Gulf of Mexico.

Martin Connelly, technical manager, Tata Steel, said "This development marks another huge success for Tata Steel and for our customers. Our team has worked extremely hard to develop this new generation of welded pipe which will contribute to a lower cost of operation and ownership of assets for our customers."

"We have invested heavily in research, development and innovation and with the aid of our state of the art finite element (FE) modelling and tooling programme this project has come to fruition.

"A recent installation of 140km of 457mm Outside Dimension x 28.6mm Wall Thickness within deep water off the Gulf of Mexico was produced in such a way that it was able to meet the manufactured requirements of DN OS-F101 should a reel installation been considered."

Tata Steel recently invested in welding control technologies within its 42-inch UOE mill, including weld condition monitoring and digital front-end control of the SAWL welding process, said the statement.

Investment was also made to ensure the ovality of the pipe is as perfect as possible to the expander, with the business reviewing the full forming process including tooling design and a fully validated FE model, it said.

"Tata Steel will continue to develop its understanding of the reaction to reeling of its small diameter/thick wall SAWL pipe and we are planning to conduct a number of full scale simulations over the next few years as part of our research and development programme," said Connelly.

"This achievement is the culmination of a number of key technologies deployed by Tata Steel. The result is SAWL capability able to support the market which is seeing increasing demand for the small diameter and thick wall size ranges," he added.

This section is a compilation from various company press releases, business dailies & trade publications.