## STEEL NDUSTRY SPEAKS

# Making a green statement



Tata BlueScope Steel has developed sustainable and innovative building materials and products that will help reduce adverse impact on the environment.

Riten Choudhury, Managing Director, Tata BlueScope Steel

ata BlueScope Steel, a joint venture between Tata Steel and BlueScope Steel, is one of the leading players in the field of coated steel, steel building solutions and related building products. In an exclusive interview with B2B Purchase, the company's Managing Director Riten Choudhury explains the advantages of coated steel for construction-related activities. He also highlights the impact of MIP on steel roofing and wall cladding market. Edited excerpts:

#### Could you brief us on the steel roofing and wall cladding market in India?

Indian roofing and wall cladding market has registered a noticeable growth in the past years. Growth in the infrastructure and industrial segment has been a major demand driver for roof and wall cladding industry. Coated steel market for roofing and walling is estimated at around 2 million tonnes for FY'17. In the market Zn-Al coated steel has witnessed growth due to inter and intra material conversion (galvanised, asbestos, clay etc.). Zn-Al coated steel is gaining acceptance by virtue of its excellent atmospheric resistance in extreme environments and diverse conditions. The thermal efficiency, aesthetics, superior technology and thermal efficiency are other differentiating factors for Zn-Al coated steel. In a performance comparison, a Zn-Al coated material has four times longer life than 275GSM Zn coated material.

#### How do you see the future and the impact of MIP on steel roofing and wall cladding market?

Roofing and cladding are critical elements of a building. They have undergone a notable transformation in India and are set to experience

the next generation of ambitious projects. India is expecting an annual GDP growth of above 7.5 per cent till FY'21. India should soon be witnessing a stable and normal economic situation. By virtue of the same warehousing, industrial and infra sectors are expected to grow and consume a lot of steel. Roofing and wall cladding industry is expected to grow at around 8 per cent.

Government of India has implemented minimum import price (MIP) for safeguarding the steel industry. It has helped in restricting cheap imports to the country, majorly from china and thus has increased the demand for the domestic mills. The curb on imports has also helped in restricting the inflow of inferior quality material. This cumulatively has increased the steel prices in the domestic market.

The challenges which the industry is bound to experience include the capability for adapting with the changing needs of the market and demand for quick execution of projects. The everincreasing knowledge base of buyer's is resulting in increased demand for quality products with longer lifespan and innovative solutions. Zn-Al based coated steel is expected to replace the galvanised steel and asbestos in the market on account of corrosion protection, durability and longer life span.

#### What are the advantages of using coated steel for construction-related activities?

Steel has become a universally preferred building material due to its strength, versatility, durability and economic value. The use of coated steel for structures, roofing & wall cladding is growing rapidly because it offers a variety of benefits like aesthetic appeal and longer life span. As a result of the metallic coating (zinc / aluminium / zincaluminium alloy) on the base steel, today's bare or pre-painted metal roof and wall panels resist corrosion and provide longer service life and trouble-free performance, the life span of coated product is subjected to type of metallic coating and its coating mass both the surfaces.

For large projects such as industrial, infrastructure, warehousing, power stations etc, Tata BlueScope Steel's products like ZINCALUME steel (Al-Zn alloy coated steel) and COLORBOND steel (pre46



Tata BlueScope Steel Jamshedpur Plant

painted Al-Zn alloy coated steel) are preferred materials for cladding applications, when compared to conventional bare and painted galvanised steel. It is due to its longer life span, durability, aesthetic and better thermal comfort due to Thermatech technology having higher solar reflectance value in COLORBOND paint system.

Al-Zn coated steel finds application in Light Gauge Framing system (LGFS) for both ground floor and high-rise buildings, owing to its properties like design flexibility, strength, light weight and corrosion resistance. LGFS structures are strong enough to last for generations. These buildings look like any other and are erected in a much shorter time span. Al-Zn coated steel is also used in rolling shutter, wall partitions, false ceilings, solar structures etc. due to its ease of usage, durability, and long term aesthetics.

For retail market Tata BlueScope Steel's product Durashine steel (pre-painted Al-Zn alloy coated profiled sheets) is a suitable solution, especially for applications such as residential, institutional, Small Medium Enterprises etc. It offers roof and wall sheet, tile, liner and long line crimp. Benefits like longer life, aesthetics, corrosion resistance etc. come hand in hand with Durashine steel.

#### Why coated steel is considered as environment-friendly? Are Tata BlueScope steel products environment friendly?

Coated steel (metal coated and pre-painted steel) products boast of several environment-friendly features including: Recyclability: The base steel of coated steel has recycled steel. It can be further recycled after every life. While the greater part can be recycled, if not recycled it becomes natural part of earth as iron oxide.

Resilience: Coated steel is long lasting and durable. 55 per cent Al- Zn alloy coated steel provide up to four times the life of comparable zinc coated or pre-painted zinc coated steel in similar applications and environments thus reducing the frequency of replacement of materials.

Reusability: Coated steel has great reusability. Undamaged components made of this steel can easily be reused at other locations in same original shape or modified shape. Also demolition or removal processes involved in replacement and reuse of steel material is without air pollution or dust.

Reduced material requirement: Longer life span of coated steel reduces material consumption and thereby saves resources. It ensures reduction in material consumption by usage of thinner, high strength material of 550 MPa minimum yield strength instead of typical 250 or 300 MPa yield strength material. Being lighter in weight, it also provides an opportunity to reduce supporting structural material requirements

Water harvesting: Because of usage of heavy metal (Pb/Cr/ Cd) free paints, runoff water from COLORBOND steel can be harvested for reuse.

Thermal efficiency: Innovative product such as COLORBOND steel with THERMATECH solar reflectance technology in its paint system, offers better thermal efficiency. THERMATECH technology reduces the amount of heat transferred inside the building, which results in better thermal performance and cooler comfort. In hot weather, COLORBOND steel can reduce peak roof temperature up to 6 C. It can also reduce annual cooling energy consumption by up to 15 per cent depending on the level of insulation, colour, building shape, orientation and function. Bare ZINCALUME steel, due to its specific surface coatings, retains its bright surface for longer. The surface reflects more heat thus transferring lesser heat inside, ensuring better thermal performance and comfort for longer duration.

Tata BlueScope Steel is working towards creating sustainable and innovative building materials and products that will help reduce adverse impact on the environment.

### Apart from your ZINCALUME steel and COLORBOND steel, are you going to introduce any other range?

Thermatech technology has been recently incorporated with COLORBOND steel and it's one of the innovative products available in the market that offers cool comfort to building occupants or industry workforce. We have a wide range of products in COLORBOND steel family which are - COLORBOND XRW steel, COLORBOND XRW Spectrum Series, and COLORBOND ULTRA steel, COLORBOND XPD steel, and COLORBOND Metallic steel. These products are used as per the project requirements. We also assure after-sales assistance for all our customers. Our endeavour is to promote this wide range of products and educate our customers about its right use.

#### You also have significant presence in terms of export. What are efforts in going beyond SAARC?

Tata BlueScope steel is a joint venture between Tata Steel and BlueScope Steel with a focus on SAARC region. Regions other than SAARC are directly covered by BlueScope.