



# STRUCTURAL STEEL

**ANGLE = CHANNEL = BEAM** 





#### **GROWTH STORY OF INFRASTRUCTURE IN INDIA**

India being one of the most promising countries in the world is continuously coming up with different plans and innovations. Unlike the conventional 'slow and steady' approach, the Indian Policy makers now have opted for a big bang approach, which in turn has paid India rich dividends in the recent past. Being in the middle of expansion, it might lead as one of the three largest economies in the world. India has traditionally been one of the major producers of steel in the world. To be at par with the changing situation, we have set a vision to make the country economically developed. With high potential and stringent quality of products, we aim to set an example in the new developing India. We are focusing on technological improvements and product developments through our continuous R & D. With the growth in economy and industrial development we have helped immensely to serve the increasing steel demand in the country.



**Shyam Metalics** has a history intertwined with stories of efforts, achievements, business acumen, growth and committed employees who have helped shape Shyam Metalics from a solemn entrant to vibrant business conglomerate with more than Rs.3500 Crore turnover providing employment to more than 7000 people within a short span.

The inner strength of the company lies in its philosophy of growth through excellence. The pursuit for superiority at every level and stages has not only enabled Shyam Metalics to win in the market places but also to expand and diversify creating a niche for itself in the core sector

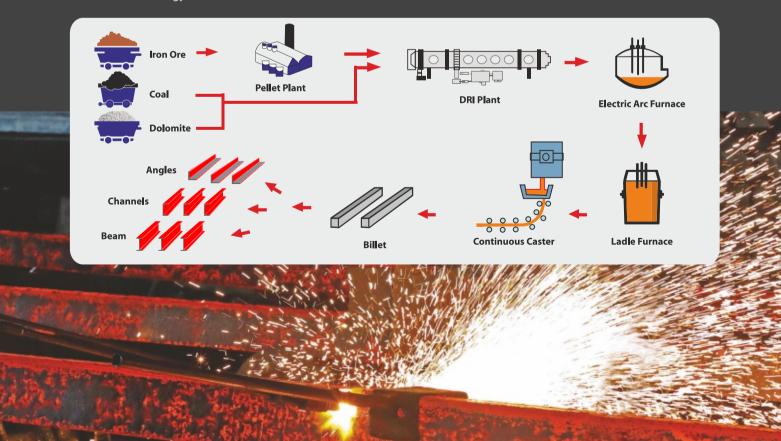
that includes Ferro Alloys, Pellet Sponge Iron, TMT & Wire Rod, Structure, Billet, and Captive Power Plant.

Empowered by technology, supported by a strong team, connected through robust distribution network and inspired by its ceaseless enterprising zeal for indomitable progress, Shyam Metalics has evolved into a future corporation for providing solutions that support global sustainability.

With more aggressive growth plan Shyam Metalics presently stands at a threshold of creating new industry benchmarks, bigger milestones and meeting the global needs from ORE TO METAL.

## Primary Process of **SEL** Structural

SEL Structural is manufactured from 100% primary steel making process i.e. from Iron Ore, Coal and Dolomite by advanced Technology.



#### Advantage of SEL Structural Steel

Wide Range: Widest product range available in 'SEL STRUCTURALS', lending more flexibility to designers and a more cost-effective option for project owners.

Exceptional Sectional Properties: Better sectional properties of conventional tapered large beams leading to efficient design and lower steel usage. Availability of high-tensile steel grades enables designers / users to further cut on steel tonnage.

Higher Load Carrying Capacity: Exhibits higher load-carrying capacity in sections under direct compression (when used as columns) owning to their higher radius of gyration values about 'y-y' axis and reduced slenderness ratio of beams, thus increasing stress-bearing limits.

Faster Constructions: Simpler direct bolting of connections of flanges possible, with tapper washer.

**Ease to Design:** Enables complex design and fabrication in high volumes because of the inherent functional advantages of sections.

Structural steel beams and channels are the building blocks for various structural steel frameworks.



# SIHYAM METALICS

#### **SEL STRUCTURALS**

Structurals describe hot rolled steel products such as angles , channels and beams. An integral part of infrastructural building , they give shape and strength to buildings, bridges , transmission line towers , industrial sheets and other structures. Apart from standard dimensions , customized products can also be rolled for specific applications, economically and quickly . Our forte lies in rolling customer specific products at low costs. To ensure quality , samples are tested , for chemical and mechanical properties before a batch is cleared for dispatch . Most stringent manual inspection, testing process and building is done to suit the user's requirements and enable ease of erection at site.

Availability of raw materials from in house production enables economies that eventually benefit the customer.

Shyam SEL offers an array of products meeting the requirements of the customers. Through our world class products and services we aim to be one of the best steel manufacturers in the country.

### **SEL**™ Structural

Structural describe hot rolled steel products such as angles, channels and beams. An integral part of infrastructure building, they give shape and strength to buildings, bridges, transmission line towers, industrial sheds and other structures. We not only make structurals of standard dimensions, but also customized products for specific applications, economically and quickly. Our forte lies in rolling customer-specific products at low cost. To ensure quality, each batch in thoroughly tested for chemical and mechanical properties before clearing for dispatch. After piece-by-piece manual inspection, nesting and building is done to suit the user's requirement and ease of erection at site. Availability of raw materials from in-house production enable production economies that eventually benefit the customer.

With an array of high quality Structural products under the brand 'SEL', backed by world-class service and its other products, Shyam Metalics holds its pride of place among the leading steel manufacturers of the country.

## **Product Range**

	DIMENSION (mm)	SECTIONAL Wt (Kg / Mtr)
ANGLES	50 x 50 x 6	4.5
	65 x 65 x 5 / 6 / 8	4.9 / 5.8 / 7.7
	75 x 75 x 6 / 8	6.8 / 8.9
	90 x 90 x 6 / 8 / 10	8.2 / 10.8 / 13.4
	100 x 100 x 6 / 8 / 10	9.2 / 12.1 / 14.9
M	75 x 40	07.140
CHANNELS	100 x 50	09.560
	125 x 65	13.100
44	150 x 75	16.800
t	200 x 75	22.300
	125 x 70 x 5	13.5
BEAM		
	150 x 75 x 5	15.0
	200 x 100 x 5.7	24.2
	225 x 110 x 6.5	31.1
	250 x 125 x 6.9	37.3







■ Common grades: As per IS 2062 : 2011 ■ Dimensional Tolerance: As per IS 808 : 1999

■ Rolling and Cutting Tolerance: As per IS 1852: 1998

## **SEL** Structural Applications











#### **Product Range for Jamuria**

#### ANGLES

DIMENSION (mm)	SECTIONAL Wt (Kg / Mtr)
90 x 90 x 6 / 8 / 10 / 12	8.2 / 10.8 / 13.4 / 15.8
100 x 100 x 6 / 8 / 10 / 12	9.2 / 12.1 / 14.9 / 17.7

#### **CHANNELS**

DIMENSION (mm)	SECTIONAL Wt (Kg / Mtr)
100 x 50	09.560
125 x 65	13.100
150 x 75	16.800
200 x 75	22.300
250 x 82	34.200

#### **BEAM**

DIMENSION (mm)	SECTIONAL Wt (Kg / Mtr)
125 x 70 x 5	13.5
150 x 75 x 5	15.0
200 x 100 x 5.7	24.2
250 x 125 x 6.9	37.3

#### **Product Range for Sambalpur**

#### ANGLES

DIMENSION (mm)	SECTIONAL Wt (Kg / Mtr)
50 x 50 x 3 / 4 / 5 / 6	2.3 / 3.0 / 3.8 / 4.5
65 x 65 x 4 / 5 / 6 / 8	4.0 / 4.9 / 5.8 / 7.7
75 x 75 x 5 / 6 / 8 / 10	5.7 / 6.8 / 8.9 / 11.0
90 x 90 x 6 / 8 / 10 / 12	8.2 / 10.8 / 13.4 / 15.8

#### CHANNELS

DIMENSION (mm)	SECTIONAL Wt (Kg / Mtr)
75 x 40	07.140
100 x 50	09.560
125 x 65	13.100
150 x 75	16.800
200 x 75	22.300
250 x 82	34.200

#### **BEAM**

DIMENSION (mm)	SECTIONAL Wt (Kg / Mtr)
150 x 75 x 5	15.0
200 x 100 x 5.7	24.2
250 x 125 x 6.9	37.3

## **STRUCTURALS**

Apart from standard dimension, customized products can also be rolled out economically and quickly.

• Common grades : As per IS 2062 : 2011

• Dimensional Tolerance: As per IS 808: 1989

• Rolling and cutting tolerance:

As per IS 1852: 1985

 Medium & lighter structurals are also being produced at our other units. Kindly refer our website for the entire range.





#### **Shyam Sel & Power Limited**

An ISO 9001:2015 & ISO 14001:2015 Co.

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Plants: Jamuria
(Dist: Paschim Bardhaman,West Bengal)

#### **Shyam Metalics & Energy Limited**

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> Plants: Rengali (Dist: Sambalpur, Odisha)

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