

Steel Mont



**BUILT ON
STEEL**

Products & Services
Catalogue

DISCLAIMER

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Steel Mont

INTRODUCTION

Steel Mont is a global trading and logistics group of companies having its core activities as international trading, trade-finance and project finance of various products and industries.

Steel Mont has its global presence through its appointed agents in the UK, Germany, Ukraine, UAE, India, Italy, Turkey and Russia. This enables us to have first-hand information of the global markets on a real time basis.

We are experienced in the trading business with primary interest in steel, ferroalloys, construction materials, coal, coke, coking coal, chemicals, mineral ores, fertilizers, mining and metallurgical equipment.

We are a global sourcing company having an annual turnover of around 1.2 M tons.

We collaborate with many countries across the globe and deal with production mills in Ukraine, Russia, Turkey, Czech Republic, Bulgaria, India, Korea, China and other countries.

Our international experience and professionalism in trading, coupled with a wide range of additional services such as financing, sourcing, marketing, logistic and shipping, enables us to provide the most cost-efficient solutions to our customers.

Steel Mont is continuously striving to achieve excellency in supplying highest standard of quality grade materials across the globe to various manufacturer and end users employing the best of supply chain management to achieve the best transaction cost to all its stake holders in the supply chain.

SERVICES

MARKETING

Our worldwide network provides marketing services to steel mills and sourcing services to steel buyers. With a highly experienced and qualified staff who are well-versed in local languages and customs, Steel Mont group provides quality services to each of our clients, specially formulated to suit their specific needs. We ensure that all orders are executed smoothly and give equal importance to after-sales services. When acting as the principal in the business we confirm to the contract, take the logistics and credit risks on behalf of our clients.

LOGISTICS

Efficient logistical support is one of the key factors for determining the competitive pricing in Trade. We offer innovative solutions to complex logistical and transportation problems. Our in-house chartering department organizes and monitors the shipments for all cargoes traded and ensures deliveries, strictly follow deadlines and time-schedules through a wide network of vessel owners and brokers. We can handle shipments from virtually any location in the world map.

WE OFFER THE FOLLOWING FACILITIES:

- Transportation to anywhere in Europe by rail, tracks
- Shipments starting from Black Sea to countries along the Danube River by barges
- Chartering of vessels to any sea port of South Europe, North Europe, North America, Latin America, Middle East and South East Asia

SOURCING

We source and supply raw materials globally for the production of steel, finished steel, metal and carbon products. We currently source raw materials including iron ore, coal, coke, pig iron and ferroalloys worldwide.

TRADE FINANCING

We provide financial solutions in specialized areas of trading. We understand the needs of our clients and combine this knowledge with our proven financial expertise and excellent credit rating to provide tailor-made financial solutions. We maximize the advantages for our customers and suppliers by designing credit, foreign exchange and other financial services to meet their needs.

SUPPLY CHAIN FINANCING

Steel Mont group provides set of solutions available for financing goods and services as they move from origin to destination to meet customer's expectations and improve satisfaction level. Using a quickly growing hybrid financial services and financial business practices allows Steel Mont group to deliver goods and services with best financial benefits for customers.

PERFORMANCE GUARANTEES

Being more than 2 decades in global market Steel Mont can guarantee smooth performance of all undertaken responsibilities and obligations.

LC FACILITIES / CASH & CARRY / CMA MODEL

Using World's First-Class Banks for issuance Letters of credit is guarantee for the clients for safe goods receipt and financial settlement.



PRODUCTS

RAW MATERIALS

BASIC IRON

Basic Pig Iron, PL1, PL2, according to GOST 805-95.

Chemical composition according to GOST 805-95

In pigs weighing not more than 18 kg

Mass basis - actual

Packing: in bulk, without packing

FOUNDRY IRON

Foundry Iron (available in limited quantities) L1 – L6, LR1 – LR7 according GOST 4832-95.

In pigs weighing not more than 18 kg

Mass basis - actual.

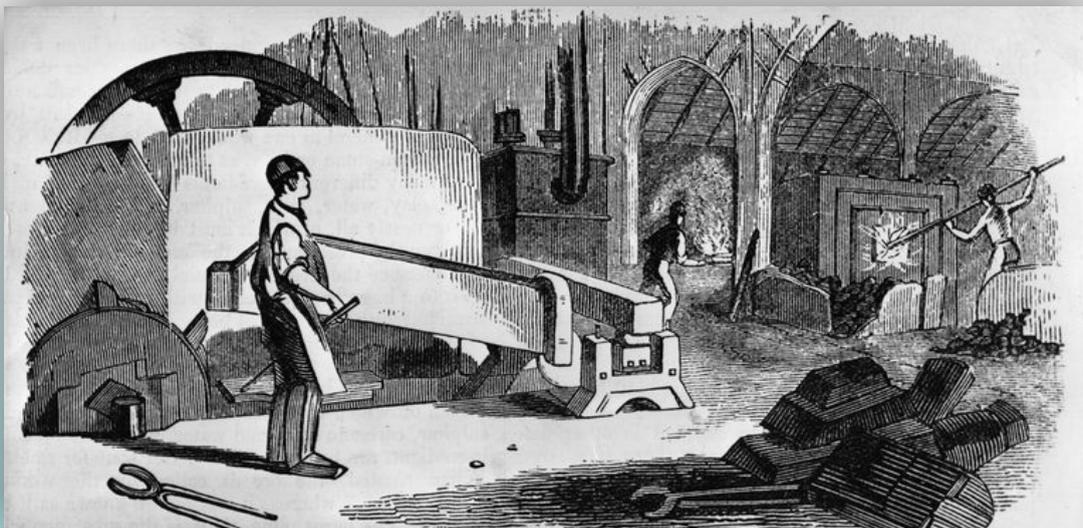
Packing: in bulk, without packing



We are very interested in production of various foundry grades of pig iron with restricted silicon, manganese, sulfur, phosphorus contents.

Our pig iron ingots are very clean, uniform, and contain fewer impurities if compared to other producers. The generation of fines, chips, dust is also less if compared to others.

Therefore, our products are sold at a premium price compared to others.



PRODUCTS

FERROALLOYS

Ferrosilicon

Silicon ferroalloy consumption is driven by cast iron and steel production, where silicon alloys are used as deoxidizers. Some silicon metal was also used as an alloying agent with iron.

Ferromanganese

Two manganese ferroalloys, ferromanganese and silicomanganese, are key ingredients for steelmaking.



1. SiMn (10-50 mm, 10-100 mm)

Mn	65,00 % min
Si	15,00-19,00 %
C	2,00 % max
S	0,03 % max
P	0,30 % max
Packaging:	big-bags, containers

2. HCFeMn (10-50 mm, 10-100 mm)

Mn	75,00 % min
Si	2,00 % max
C	2,00-8,00 % max
S	0,03 % max
P	0,30 % max
Packaging:	big-bags, containers

3. FeSi65 (10-50 mm, 10-100 mm)

Si	65,00 % min
Al	2,00 % max
C	0,20 % max
P	0,04 % max
S	0,03 % max
Packaging:	big-bags, containers

4. FeSi75 (10-50 mm, 10-100 mm)

Si	75,00 % min
Al	2,00 % max
C	0,20 % max
P	0,04 % max
S	0,03 % max
Packaging:	big-bags, containers

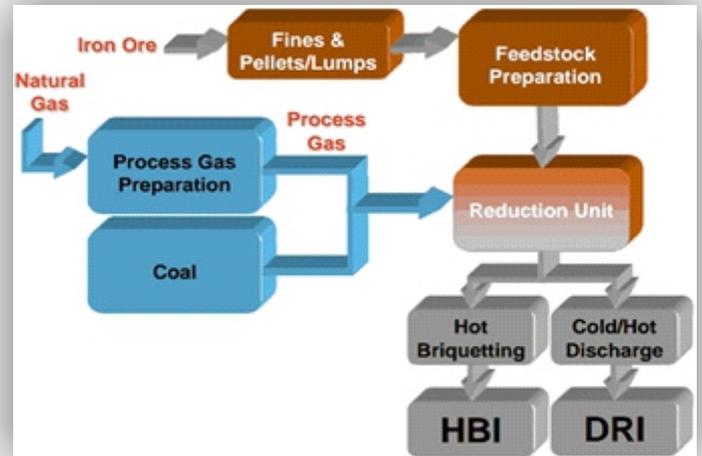
PRODUCTS

HOT BRIQUETTED IRON (HBI)

Hot Briquetted Iron is a premium form of DRI (Direct Reduced Iron) that has been compacted at a temperature greater than 650° C at time of compaction and has a density greater than 5,000 kilograms per cubic metre (5,000 kg/m³).

HBI was developed as a product in order to overcome the problems associated with shipping and handling of DRI - due to the process of compaction it is very much less porous and therefore very much less reactive than DRI and does not suffer from the risk of self-heating associated with DRI.

The principle market for HBI is electric arc furnace (EAF) steelmaking, but HBI also finds application as a trim coolant in basic oxygen furnace (BOF) steelmaking and as blast furnace feedstock.



General characteristics for HBI (% by weight)

Based on 65.5 — 68% Fe Iron Ore

Metallization	94.0%
Fe (Total)	88.3 - 94.0%
Fe (Metallic)	83.0 - 88.4%
C	0.5 - 1.6
S	0.001 - 0.03%
P ₂ O ₅	0.005 - 0.09%
Gangue*	3.9 - 8.6%
Mn, Cu, Ni, Cr, Mo, Sn, Pb, Zn	Traces
Size (typical)	(90 - 140) x (48 - 58) x (32 - 34) mm
Fines & chips	≤ 5.0%
Apparent Density	> 5.0 t/m ³
Bulk Density	2.5 - 3.3 t/m ³

* residual unreduced oxides, mainly SiO₂ and Al₂O₃, but also CaO, MgO, MnO, etc.

PRODUCTS

ANTHRACITE COAL

Anthracite can be used as an effective and low-cost substitute of expensive Coke. Anthracite by its nature and by technical parameters is identical with Metallurgical Coke and depending on application can be used as a partial or full substitute of expensive Coke. Anthracite is a coal of the highest rank having a metallic lustre and low volatile matter.

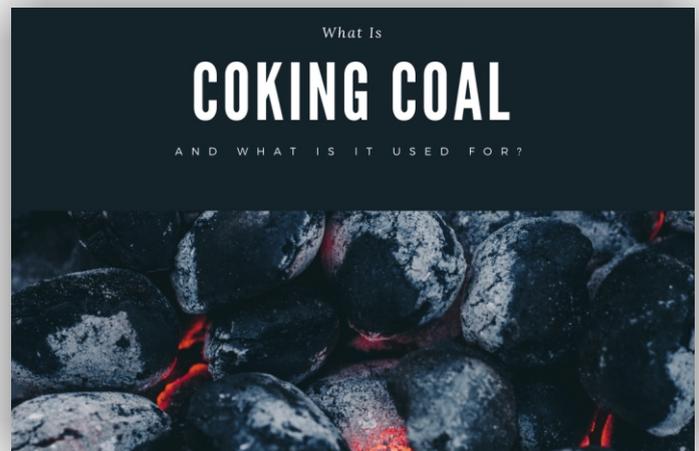


Anthracite 0-13 mm

Moisture ar	10,00-12,00 %
Ash db	10,00-13,00 %
Vm db	2,00-3,50 %
S db	0,4 % max
0-1 mm	20,00 %
+13 mm	5,00-7,00 %

COKING COAL

A coal that can be usefully converted into coke. It gives coke which is strong enough to resist pressure and breakage. Coking coal is also known as metallurgical coal and is mainly used in steel production. It is of a higher purity than thermal or steam coal which is used in energy generation.

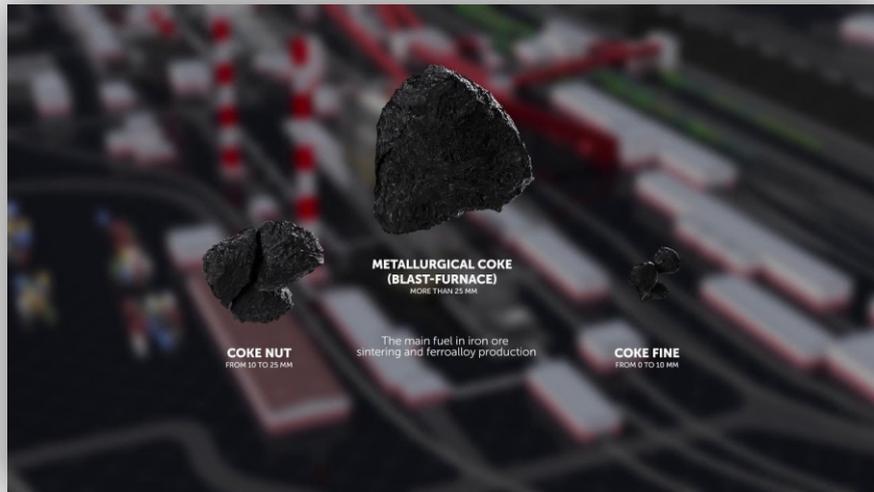


Moisture, %	10,00 max
Ash db, %	9,00 max
Vm db, %	30,00-35,00
S, db, %	0,80 max
FSI	7,50-8,00
Y	18,00
Max Fluidity, ddpm	12000
MMR	0.94 min
Size, mm	0-50,00

PRODUCTS

METALLURGICAL COKE

Metallurgical Coke is used in products where a high quality, tough, resilient carbon is required. Met coke, limestone, and iron ore are mixed together in high temperature furnaces where extreme heat causes the chemical properties to bond, forming iron and steel. More than 95 percent of the met coke produced is used in the iron and steel industries. Apart from steel industry, applications for metallurgical coke are many and diverse including sugar, soda, cement, mineral wool and the smelting industries.



Metallurgical coke (Typical Specifications)

Total Moisture (as received basis)	5,00 % max
Ash (dry basis)	12,00 % max
Volatile Matter (dry basis)	1,00 % max
Total Sulphur (dry basis)	0,60 % max
Phosphorus (in coke, dry basis)	0,045 % max
Fixed Carbon (dry basis)	86,00 % min
M10	7 % max
M40	80 % min
CRI	26,00 % max
CSR	62,00 % min
Size 25-80 mm	90,00 % min
Size 0-25 mm	5,00 % max



PRODUCTS

BLAST FURNACE COKE 25-80 MM

Blast furnace coke is used mainly as an oxidising-reducing agent in blast furnaces. It creates a supporting structure within a blast furnace, which ensures counter flows of gas and liquid products of the blast furnace process in the production of pig iron.

Moisture, %	4,00 max
Ash db, %	11,50 max
Vm	0,80 max
S, db, %	0,60 max
P in ash, %	0,045 max
CSR	62,00% min
CRI	27,00% max
M10	7,00% max
M40	82,00% min
0-25 mm	5,00% max
80+mm	5,00% max



COKE BREEZE 0-10 MM

Coke Breeze is used in metallurgy in the sinter production (input raw material for a blast furnace), as a carburizing agent in the steel industry, for forgery purposes or as a sorbent.



Moisture, %	15,00 max
Ash db, %	13,00 max
Vm, %	1,50 max
S, db, %	0,60 max
P in ash, %	0,045 max
0-1 mm	25,00% max

PRODUCTS

COKE NUT 10-25 MM

Coke nut is often called heating coke with respect to its prevailing purpose of use, i.e. as cheap and ecological fuel for heat production and water heating in households, companies and heating plants, particularly there where remote distribution of heat and gas is not possible. Due to its low content of ballast and sulphur in the ratio to the calorific value it is an ecological fuel complying with the strict limits for the content of pollutants, the so-called air emissions.

In addition, Coke nut is used as additional fuel in the blast furnace process and in a number of chemical and technological processes (production of lime, carbide, sugar, gas, etc.).

Moisture, %	15,00 max
Ash db, %	13,00 max
Vm, %	1,00 max
S, db, %	0,60 max
P in ash, %	0,045 max
0-10 mm	5,00% max
25+ mm	5,00% max



PULVERISED COAL INJECTION (PCI COAL)

Steel mills, pig iron producers and pellet plants are the main consumers of PCI coal. Pulverised Coal injection into the blast furnace provides the operator with an option of reducing consumption of the more expensive variant of carbon – metallurgical coke. But metallurgical coke has other useful mechanical duties to perform in the furnace therefore, PCI can't replace coke consumption completely. Therefore, in a way, Coke & PCI complement each other in the Blast Furnace operations.



Parameter	Mid. VM	Low VM
Moisture, %	10,00 max	10,00 max
Ash db, %	10,00 max	10,00 max
Vm	19,00-21,00 max	14,00 max
S, db, %	0,50 max	0,50 max
P in ash, %	0,035 max	0,050 max
HGI	65,00 min	65,00-80,00
AFT (FT in oxidizing)	1400 Deg. C Min.	1400 Deg. C Min.
Sizing 0-50 mm	90,00% min	7,00% max

PRODUCTS

CONTINUOUS CAST ROUND STEEL BILLETS

Continuous cast round steel billets are used to produce seamless pipes for industrial applications and in machinery manufacturing. Round Billets can be supplied as per any international standards due to defined customers' requirements.

Diameter, mm:	Length, m:	Grades
140; 150; 156; 160; 170; 180; 196; 200; 210; 220; 228; 240; 250; 260; 270; 280; 290; 300; 305; 320; 340; 350; 360; 380; 385; 400; 410; 430; 450; 455; 470; 600	4-12	St3sp; St5sp; 42CrMo4; C35; C45; C60; S355J2; S235JR; S275JR; 16MnCr5; 20MnCr5; 17MnV7; 25CrMo4; 18MnNb6 and others as per customer's request.



HOT ROLLED ROUND BARS

Hot rolled round bars are produced by hot rolling continuous cast steel billets. Hot rolled round bar is a tough strong steel material that is used in hot die pressing/forging and is characterized by its unique radius corners. It also provides a rougher surface and can be easily shaped and formed.



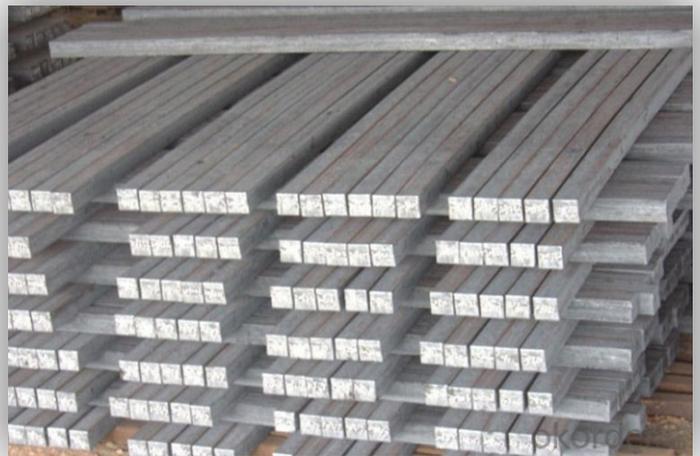
Diameter, mm:	Length, m:	Grades
6-30; 32-63; 65-78; 80-320	4-12	ASTM A105, ASTM A350, LF2; 42CrMo4; S235JR; S355J2; C10E; C15E; C35E; C45E; C55; C60; 20MnVS6; 20MnCrS5; 25CrMoS4; 42CrMoS4; 38MnVS6 and others as per customer's request.

PRODUCTS

CONTINUOUS CAST STEEL SQUARE BILLETS

Steel square billet is a semi-finished product with various cross-sections and length. It is used for further rerolling and manufacture of long steel products.

Square side, mm	Length, m:	Grades
90x90; 100x100; 120x120; 125x125; 130x130; 135x135; 140x140; 150x150; 160x160; 180x180; 200x200; 220x220; 250x250	6-14	3sp/ps, 4sp/ps, 5sp/ps, SAE1006, SAE 1008, SAE 1010, Grade 40, Grade 60, ect (as per customer request)



REINFORCING BARS

Rebar is a type of long steel product, being produced in rods and coils. It is used in manufacture of concrete products to improve the overall strength of concrete. The main areas of application are the construction of walls, foundations, and flooring, the manufacture of prefabricated structures, such as wells, columns, curbs, and wall panels.

Diameter, mm	Bundle weight, MT	Grades
8; 10; 12; 14; 16; 20; 25; 28; 32; 36; 40	Up to 4-5	DIN4449-2009, B500B; ASTM A615/615M, Grade 60



PRODUCTS

WIRE RODS IN COILS

Wire rod is a rolled steel of a circular cross section in coils. Wire rod is a base product in all steel wire, rope, in manufacture of screws, bolts, nails, mesh. Size, chemical composition and mechanical properties differ depending on the application of the finished products. We offer typically low-carbon wire rods in coils of mesh and drawing qualities.

Diameter, mm	Coil weight, MT	Tensile Strength, Mpa	Grades
5,5; 6,0; 6,5; 7,0; 7,5; 8,0; 8,5; 9,0; 9,5; 10,0; 10,5; 11,0; 11,5; 12,0; 12,5; 13,0; 13,5; 14,0; 14,5; 15,0; 15,5; 16,0; 16,5; 17,0; 17,5; 18,0; 18,5; 19,0; 19,5; 20,0	Up to 2.5	Up to 550	ASTM A510/A510M: SAE1006, SAE 1008; SAE 1010; SAE 1012; SAE 1015; SAE 1018; SAE 1010, SAE 1045; SAE 1065; SAE 1080, ect (as per customer request)



HOT ROLLED COILS

Hot rolled coil is a kind of sheet product similar to a wound steel strip. It is used for construction, automobiles, machine industry, electrical appliances, production of steel pipes, and is a feedstock for further production of cold rolled and coated products.

Cold rolling is used to make thinner coils than hot rolling can be (less than 0.8-1.0 mm). Galvanized steel is represented by cold- and hot rolled coils with a zinc coating that helps to protect the steel against atmospheric corrosion.

Pickled and Oiled coil is a hot rolled material that has been descaled of oxide film by both mechanical and chemical methods and then oiled to help retard corrosion during storage and after descaling.

Pre-painted Galvanized coils are used in construction sandwich panels, roofing, building material.



PRODUCTS

HOT ROLLED COILS

Product Specification

Grades	Re-rolling Grades, Drawing & Press Forming Grades includes HSLA grades, Tube and Pipe / Forming Grades, Structural General Engineering / Tube / Forming Grades and Chequered Grade, High Tensile General Engineering / Tube / Forming Grades, LPG / Low Pressure Vessel Grades, Medium Carbon Grades, Weather Resistance Grades & Line Pipe Grades	Auto, Line pipe (Oil & Gas), Cold Rolled, Pipes & Tubes, Projects & Construction, LPG, Machinery
Thickness (mm)	1.4 – 25.4	1.2 – 25
Width (mm)	900 – 2100	900 – 1550
YS / UTS (Mpa)	As per standards / Customized (Approx Max 620 Mpa)	As per standards / Customized
Coil ID	762 (+/- 40) mm	762 (+/- 20) mm
Coil OD	2100 mm Max	1800 mm Max
Edge	Mill Edge	Mill Edge

Tolerances

Width Tolerance	Width up to 1500 mm: -0/+20 mm for 95% of coil length (for balance 5% in Head end and +25 mm max). Width >1500 mm:-0/+25 mm for 95% of coil length (for balance 5% in Head end and +30 mm max)	+15/-0 mm
Thickness Tolerance	Up to 6 mm thickness 3/4th EN for 95% coil length (balance coil length is full EN 10051) and for >6 mm thickness 6% of thickness for 95% of coil length (balance coil length is full EN 10051)	1.2 - 1.3 mm = +/- 0.030 mm, 1.31 - 1.40 mm = +/- 0.050 mm, 1.41 - 4.00 mm = +/- 0.075 mm, > 4 - 10 mm = +/- 0.10 mm, > 10 mm +/- 1 % thk
Tongue / Fish tail	80% of coils 500 mm max each end and 20% coils 1000 mm max or as agreed	800 mm max (500 mm Head end, 500 mm Tail end)
Packing	1 - 2 Circumferential and 2 to 4 bands through the eye or as agreed	As agreed

PRODUCTS

HOT ROLLED PICKLED & OILED (HRPO) AND HOT ROLLED SKIN PASS PICKLED & OILED (HRSP0)

Product	Thickness (mm)	Width (mm)	Grades
HRPO	1.6 - 6.0	1650	Steel for Stamping and Cold Forming (DD11, DD12, DD13, DD14) High Strength Steel for Cold Forming (S315MC, S355MC, S420MC, S460MC, S500MC, S550MC, S700MC) Structural Steel (S185JR, S235JR, S275JR, S355JR)
HRSP0	1.6 - 2.6	1650	

With Tolerance

Width (mm)	As Rolled edge		As Trimmed edge	
	(+)	(-)	(+)	(-)
< 1200	20	0	2	0
>1200, < 1500	20	0	2	0
> 1500	20	0	2	0



PRODUCTS

HOT ROLLED SHEETS & PLATES

Hot rolled sheet is a type of flat rolled metal received by cross cutting of hot rolled coils. It is used in construction, engineering, automotive industry and to make consumer goods.

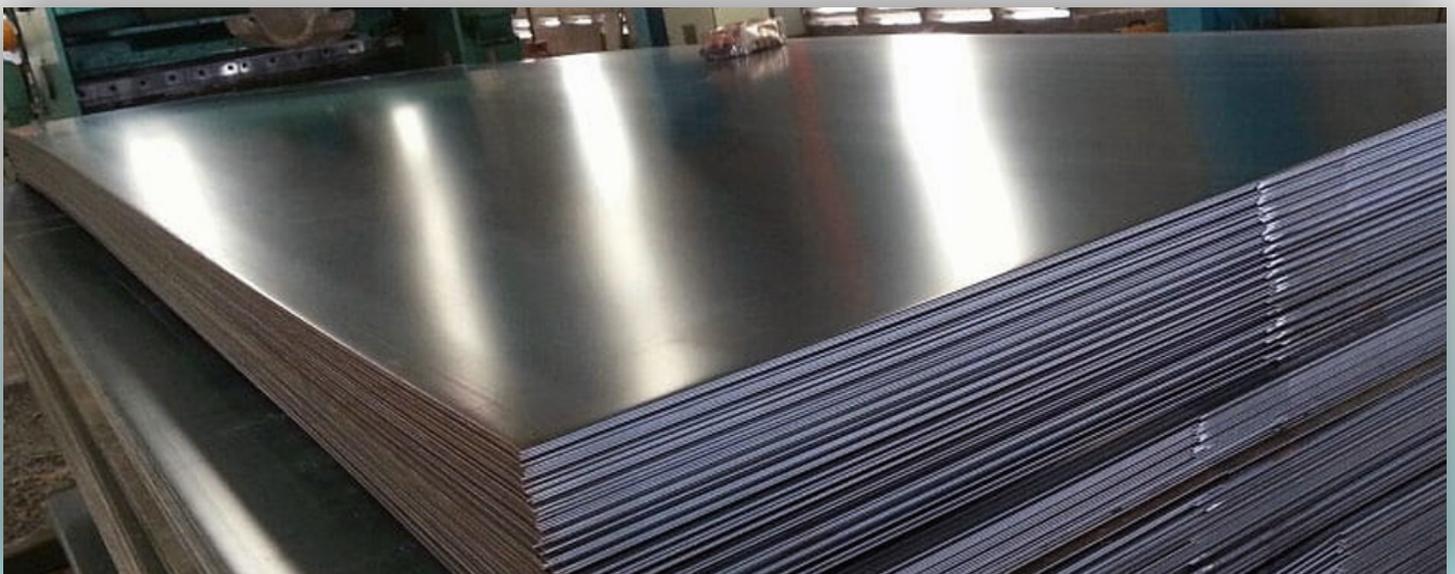
Cold rolled sheets are popular in machine building, automotive, construction, white goods and consumer goods. They have more precise dimensional tolerance, better surface quality and improved mechanical properties than hot rolled sheets.

Galvanized sheets are used in applications where good resistance to atmospheric corrosion is required, like A/C ducts and fridge insulation coils.

Hot Rolled Plates are used for shipbuilding, creating of storage tanks, pressure equipment and boilers and in construction.

Product Specification

Range	Min	Max	Min	Max	Min	Max
Thickness (mm)	8	25.4	1.2	6	2.5	10
Width (mm)	900	2050	900	1600	900	2050
Length (mm)	1500	12000	1000	13000	1000	13000
Bundle Weight (tons)		6		15		15
Capacity (tons / annum)	350000		170000		250000	
Yield Strength (Mpa) Max	1. YS: ≤ 450 Mpa & TS: ≤ 590 Mpa (8.0 - 25.4 mm) x (900 - 2050 mm)		900		550	
Tensile Strength (Mpa) Max	2. YS: 450-600 Mpa & TS: 590-800 Mpa (8.0 - 20.0 mm) x (1000 - 2050 mm) (8.0 - 22.0 mm) x (1000 - 1600 mm)		1100		900	
Packing	in bundles up to 3 mt, as per customer request					



PRODUCTS

HEAVY PLATES (as per EN and ASTM Standards)

Thickness, mm	Width, mm	Length, mm	
		min	max
6.0 - 8.9	1500, 3400	6000	13000
9.0 - 11.9	1500, 3400, 3600	5000	14000
12.0 - 19.9	1500, 3400, 3600, 3800	5000	15000
20.0 - 40.0	1500, 3400, 3600, 3800, 4000	4000	15000
40.1 - 120	1500, 3400, 3600, 3800, 4000	2000	15000

COLD ROLLED COILS & SHEETS

Thickness, mm	Width, mm	Grades	Length, mm (for Sheets)
0.25 - 3.00	600 - 1530	Cold Forming Steel (DC01, DC03, Dc04, Dc05, Dc06, DC04-C590) Enameling Steel (DC01EK, DC04EK)	up to 3000

HOT DIPPED GALVANIZED COILS

Products	Gauges	Grade	Length, mm (for sheets)
Hot dip galvanized steels for structural uses UNI EN 10326	0.25 mm - 4.00 mm	S 220 GD+Z, S 250 GD+Z, S 280 GD+Z, S 320 GD+Z, S 350 GD+Z	up to 3000
Hot dip galvanized steels for cold forming UNI EN 10327	0.25 mm - 4.00 mm	DX 51 D+Z DX 52 D+Z	up to 3000

PREPAINTED GALVANIZED COILS (PPGP)

Thickness, mm	Width, mm	Coil Weight, MT
0.25 - 1.20	800 - 1500	5 - 32

Types of Paint: Polyester, PvdF, Polyurethane, Plastisol and others.

PRODUCTS

HOLLOW SECTIONS

Hollow section is a type of steel profile with a hollow cross section. It can be round, square and rectangular.

Available Size Range		Dimensions (mm - size)									
Size (mm)		Wall thickness (mm)									
Square	Rectangular	4.0	4.5	5.0	6.0	8.0	10.0	12.5	14.2	16.0	
100x100	120x80	✓	✓	✓	✓	✓	✓	✓			
110x110	140x80	✓	✓	✓	✓	✓	✓	✓			
120x120	150x100	✓	✓	✓	✓	✓	✓	✓			
	160x80	✓	✓	✓	✓	✓	✓	✓			
140x140	180x100	✓	✓	✓	✓	✓	✓	✓			
	200x80	✓	✓	✓	✓	✓	✓	✓			
150x150	200x100	✓	✓	✓	✓	✓	✓	✓			
160x160	200x120	✓	✓	✓	✓	✓	✓	✓	✓		
180x180	200x150	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	250x100	✓	✓	✓	✓	✓	✓	✓	✓	✓	
200x200	250x150	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	300x100	✓	✓	✓	✓	✓	✓	✓	✓	✓	
250x250	300x150			✓	✓	✓	✓	✓	✓	✓	
	300x200			✓	✓	✓	✓	✓	✓	✓	
300x300	400x200			✓	✓	✓	✓	✓	✓	✓	



PROJECTS

GRAPHITE ELECTRODES

Leveraging our global network, reach, we offer turnkey solutions in complex projects in the field of ferrous metallurgy. We partner with Azovmash, one of the world's leading manufacturer of iron making, steel making equipment and carriage/lifting equipment.

We have delivered complex projects across various geographies, like supply and commissioning of Graphite Electrodes from major Chinese manufacturers to Azovmash and Dneprospetsstal in Ukraine.



Graphite electrodes are widely used in steel, smelting non-ferrous smelting and silicon, phosphorus, etc. We can offer various grades and specifications of the graphite electrode with low resistance, high density, strong antioxidant properties, high processing precision, etc, satisfying the needs of different users. The offered products all meet international quality standards.

Physico-Chemical Specifications of HP Graphite Electrode

Item		Unit	Nominal Diameter (mm)					
			Ø200 ~ Ø400	Typical Value	Ø450 ~ Ø500	Typical Value	Ø550 ~ Ø600	Typical Value
Specific Resistance ✧	Electrode	$\mu\Omega \cdot m$	6.5	6.0	6.5	6.0	6.5	6.0
	Nipple		5.0	4.5	5.0	4.5	5.0	4.5
Bending Strength ✧	Electrode	Mpa	10.5		10.0		10.0	
	Nipple		19.0		19.0		19.0	
Young's Modulus ✧	Electrode	Gpa	12.0		12.0		12.0	
	Nipple		16.0		16.0		16.0	
Bulk Density ✧	Electrode	g/cm^3	1.65	1.68	1.65	1.68	1.66	1.68
	Nipple		1.75	1.78	1.75	1.78	1.75	1.78
CTE ✧ (100-600°C)	Electrode	$\times 10^{-6}/^{\circ}C$	2.40		2.40		2.40	
	Nipple		2.20		2.20		2.20	
Ash Content (for reference only)		%	0.30		0.30		0.30	

PROJECTS

Physico-Chemical Specifications of UHP Graphite Electrode

Item		Unit	Nominal Diameter (mm)					
			Ø200 ~ Ø400	Typical Value	Ø450 ~ Ø500	Typical Value	Ø550 ~ Ø600	Typical Value
Specific Resistance ✧	Electrode	$\mu\Omega \cdot m$	5.5	5.0	5.5	5.0	5.5	4.8
	Nipple		4.0	3.5	4.0	3.5	4.0	3.5
Bending Strength ✧	Electrode	Mpa	11.0		11.0		12.0	
	Nipple		20.0		20.0		22.0	
Young's Modulus ✧	Electrode	Gpa	14.0		14.0		14.0	
	Nipple		18.0		18.0		22.0	
Bulk Density ✧	Electrode	g/cm^3	1.68	1.72	1.68	1.72	1.68	1.72
	Nipple		1.78	1.80	1.78	1.80	1.80	1.82
CTE ✧ (100-600°C)	Electrode	$\times 10^{-6}/^{\circ}C$	1.50		1.50		1.40	
	Nipple		1.40		1.40		1.20	
Ash Content (for reference only)		%	0.30		0.30		0.30	

Specification and Allowance of Graphite Electrode

Nominal Diameter		Actual Diameter		Nominal Length		Allowance
mm	Inch	Max	Min	mm	Inch	mm
200	8	205	201	1600/1800	60	±100
250	10	256	252	1600/1800	60/72	±100
300	12	307	303	1800	72	±100
350	14	357	353	1800	72	±100
400	16	409	404	1800/2100	72/84	±100
450	18	460	455	1800/2100	72/84	±100
500	20	511	506	1800/2100	72/84	±100
550	22	562	556	2100/2400	84/96	±100
600	24	613	607	2100/2400	84/96	±100

PROJECTS

Graphite electrode is packaged by wooden cages and nipple is packaged by wooden boxes. Graphite electrode and nipple can be packaged together according to the requirements of the customers. The products are protected by waterproof and dustproof plastic inside and fixed by steel bands which fits for land and sea transportation.



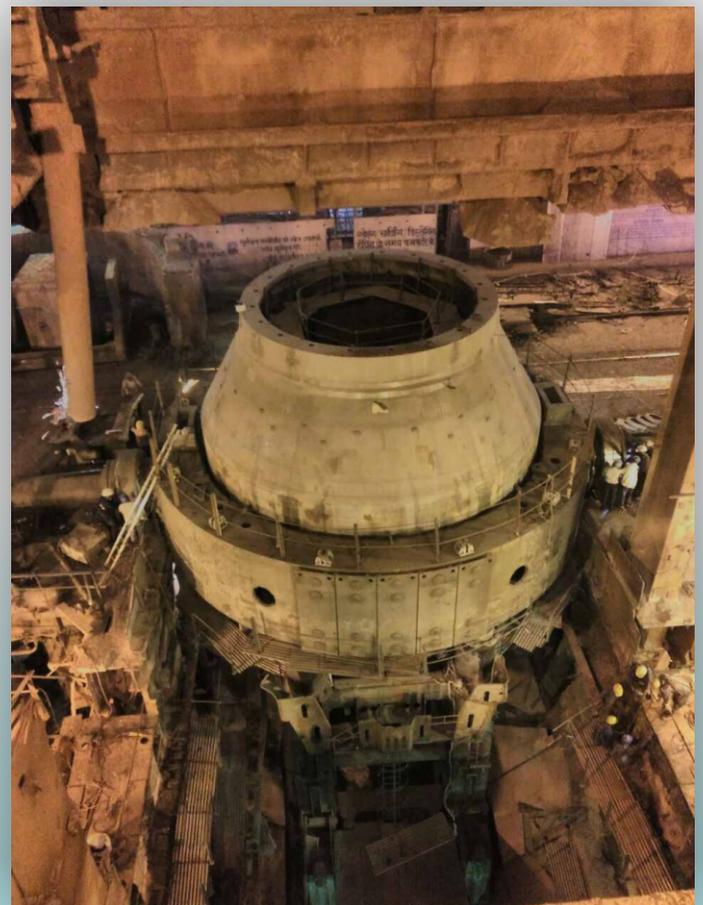
STEEL MAKING EQUIPMENT

Supply of Special Reducer, Mechanical Holding Devices and other equipment related to converter steel making for Bokaro Steel Plant (SAIL) in India.

Generally, the group is currently involved in the execution of converter revamp project at SAIL.

This project is one of a kind in terms of the complexity and logistics involved.

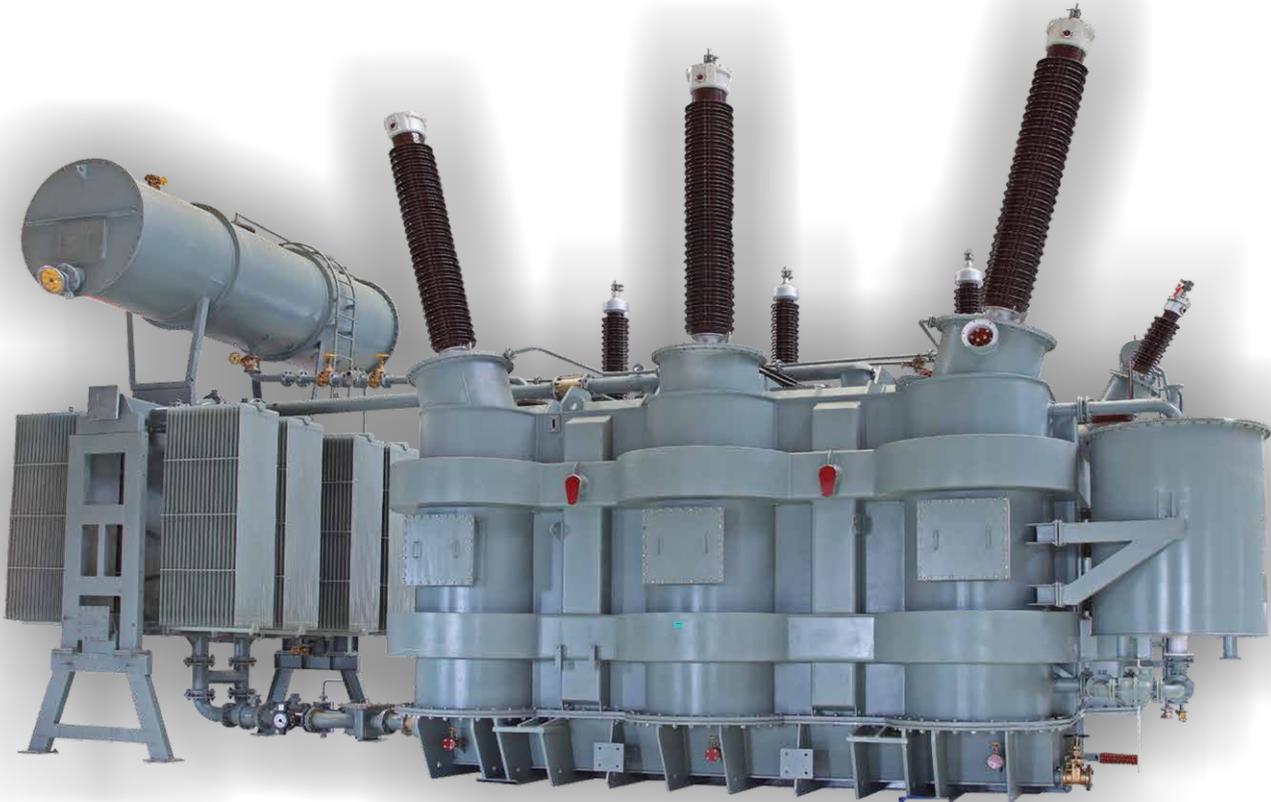
Among other spare parts for converter, the equipment shipped includes Mesh Holding Device, Driving Sprockets and Chains, Special Reducer, Gear Box etc.



PROJECTS

TRANSFORMERS

Transformers are one of the primary components for the transmission and distribution of electrical energy. Their design results mainly from the range of application, the construction, the rated power and the voltage level. There are also various special purpose transformers such as furnace transformers, which are basically in the range of power transformers as far as rated power and rated voltage are concerned. Furnace transformers are characterized by very high secondary currents and wide secondary voltage regulation in order to cope with the furnace needs, depending on the particular kind of cycle requested.

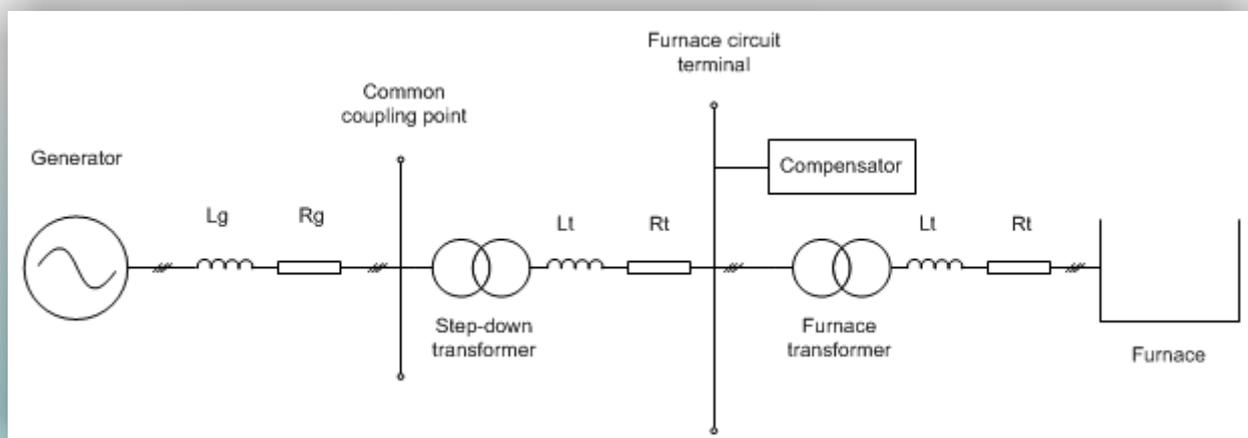


For many years, Electrical Arc Furnace (EAF) power transformers have been meeting very high supply needs of the steel industry's arc furnaces around the world. EAF transformers are suitable for steel furnaces, ladle furnaces (LF) and ferroalloy furnaces.

They work under critical and severe conditions caused by overcurrents and overvoltages generated by short circuits in the furnaces.

Arc furnace transformers are used for melting scrap metal. Usually when there is an EAF there is also an LF that is used to refine the metal melted by the arc furnace.

Such kind of transformers are three phases.



PROJECTS

Furnace transformers deliver high currents over a wide range of voltages. Power ratings between 10 to 200 MVA are quite common.

We have experience in supplying the following types of transformers:

Three phase (EAF) transformer	90 MVA
Three phase (LF) transformer	18 MVA
Three phase (LF) transformer	13 MVA
Three phase (POWER) transformer	63 MVA
Three phase (EAF) transformer	45 MVA
Three phase (EAF) transformer	85 MVA
Three phase (EAF) transformer	130 MVA
Three phase (POWER) transformer	160 MVA
Three phase (LF) transformer	24 MVA

Also we can supply any type of transformers on Customer's request.

The quality and performance of offered EAF power transformers are field-tested every day at steel production sites around the world.



Steel Mont