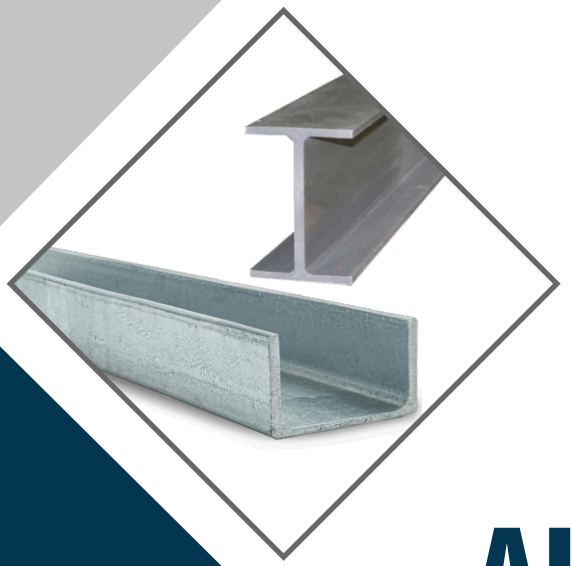
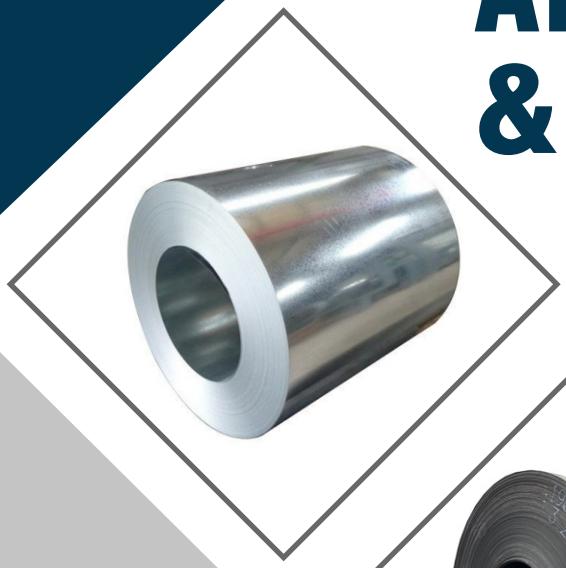
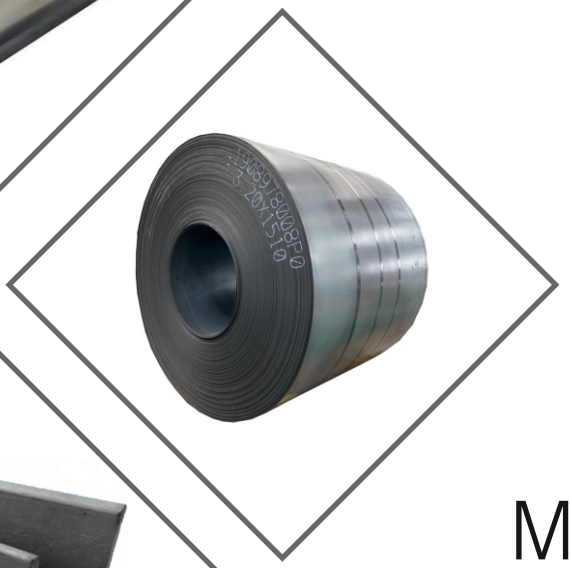
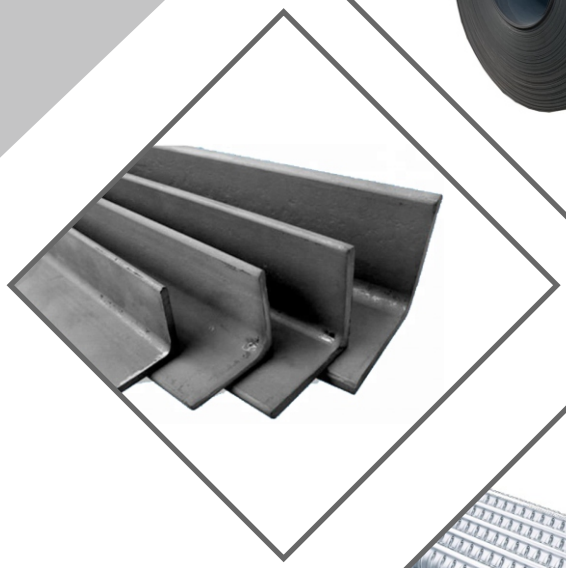


AL RUWAIS METAL & STEEL FACTORY



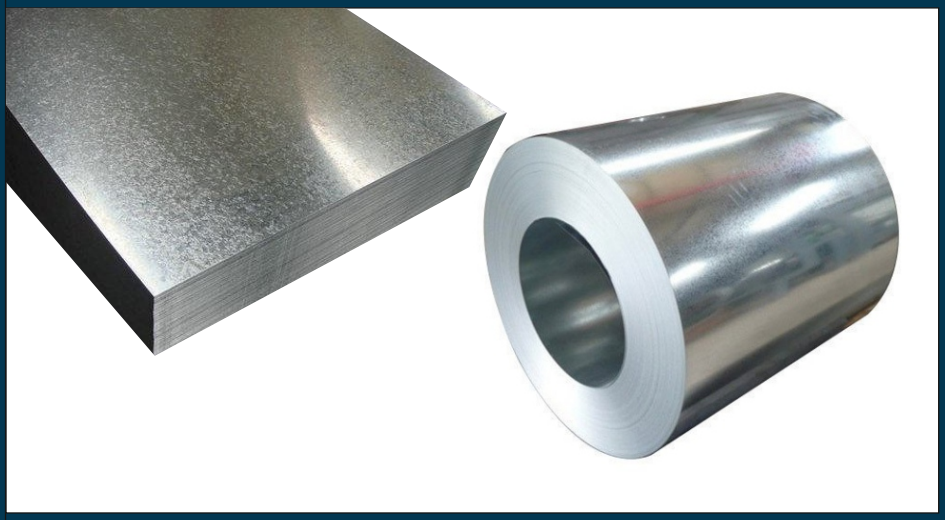




MANUFACTURERS / STOCKISTS OF STRUCTURAL STEEL

GI COILS & SHEETS

Al Ruwais established in 2009, is one of the leading manufacturers, importers, stockists of cable support systems, structural steel, GI coils & HR coils.



30-275g/m2 Galvanized Steel Coil With ASTM A653 / SGCC / DX51D

Galvanized coil, the thin steel plate immersed in the molten zinc bath, so that its surface adheres to a layer of zinc thin steel plate. At present, continuous galvanizing process is mainly used to produce galvanized steel sheet, which is made by continuously immersing coiled steel sheet in galvanized bath and alloying galvanized steel sheet. This kind of steel plate is also made by hot dipping method, but it is heated to about 500 C immediately after the trough is out to form zinc and iron alloy film. The galvanized coil has good adhesion and weldability of the coating.

Product name	Galvanized Steel Coil
Material	CGCC, DX51D
Grade	SGCC,DX51D+Z
Zinc Coating	40-275g/m2
Thickness	0.3-4.0 mm
Width	600-1250 mm
Surface Structure	Mini / Regular / Big Spangle
Surface Treatment	Anti-Finger printing ,Chromated, oiled/ non-oiled
Package	standard export package (Detailed picture is as follows)
Hardness	soft (normal), hard, full hard(G300-G550)
Country of origin	UAE, India, China, Turkey, Japan & Korea
Business type	Supplier and manufacturer

HOT DIP GALVANIZED STEEL

continuously coated on both sides with a zinc coating. The hot dip process, provides a tight metallurgical bond between the steel and the coating. This process results in a material with the strength and formability of steel plus the corrosion protection of zinc. Zinc protects the base metal by providing a barrier to corrosive elements and also by the sacrificial nature of the coating.

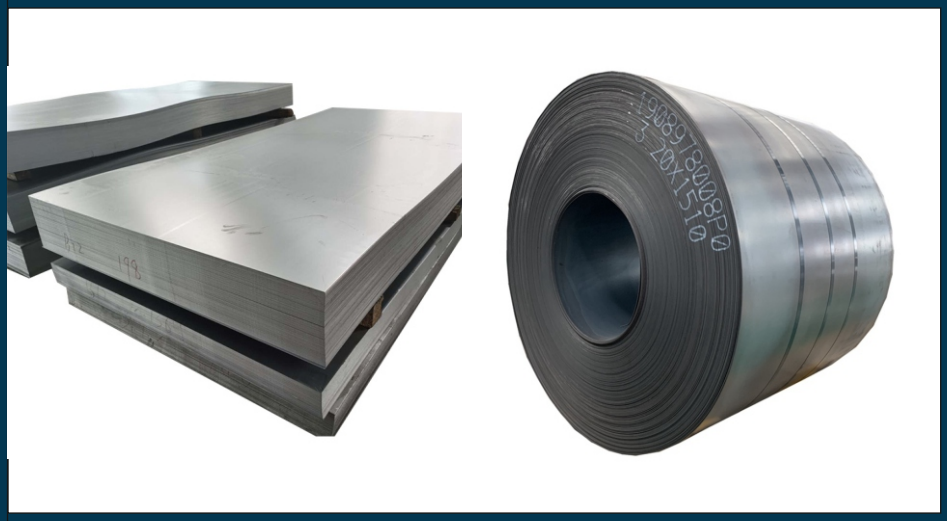
Refrigeration/Freezer PPGI and Prepainted Steel Coils

Washing Machine PPGI and Prepainted Steel Coils

Air Conditioner PPGI and Prepainted Steel Coils

Solar Heater PPGI and Coated Steel Coils

HR COILS & SHEETS



Hot Rolled Coils are made by continuous rolling of steel at high temperature, generally over 1,000 degrees Fahrenheit. The process involves passing metal sheets, produced from billets, through rollers above the metal's (steel) recrystallization temperature. The metal sheets may be passed through the roller many times to achieve the desired dimension. During the cooling process, the hot rolled steel may reconfigure itself resulting in an end product that is more flexible and more loose as compared to the original product. The hot rolled coils are manufactured without much delay in order to avoid the need for reheating the steel during the manufacturing. The entire process of manufacturing HR coils is known as hot rolling. As the steel cools off it automatically shrinks; usually it is not easy to predict the size and shape of the end product of a hot rolling.

Most of the time, the hot rolled coils also undergo a treatment called pickling, which basically helps in removing impurities and inorganic contaminants. The process involves passing the hot rolled steel through an acidic solution which helps in removing the surface oxides, and subsequently oiling the metal surface to make it corrosion-resistant.

The key requirements of this segment to this kind of rolled product include minimum dimension tolerances, heavy coil weight, weldability, high strength and toughness, crack resistance (also at negative temperatures) and, for some specific spheres, exterior resistance. Recently, there has been a trend of cold-rolled steel products being replaced with less expensive, thin hot-rolled products in the construction segment. However, high-strength rolled product types are now widely being used to reduce the product weight.

Hot rolled steel coils		
	JIS	ASTM
Commercial quality	S235JR S235J0 S235J2 S275JR S275J0 S275J2 S355JR S355J0 S355J2 S355N S355M S355ML	A569 A635 A659 A1011 CS Type A,B,C
Weight	8-25 Ton	
Grade	S235JR, S275JR, S355JO, S355J2, Ss400, Grade 50, Q235B, Q345B	
Thickness	1.0mm - 25mm	
Width	600mm-2000mm	
Coil Weight	15-35MT as per your request	
Inner Diameter	508/610mm	

Application

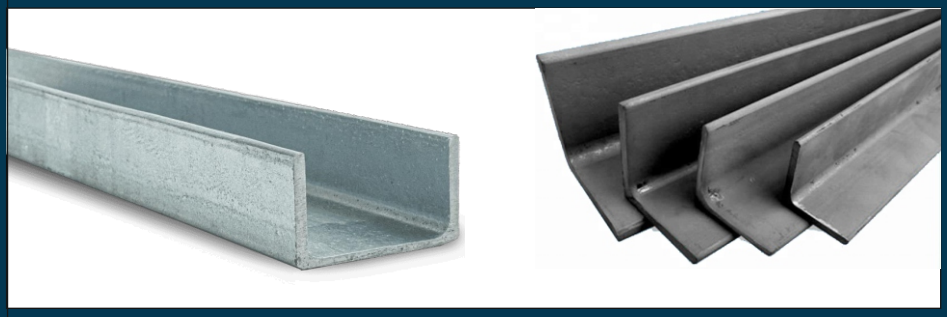
1 It is mainly used in construction, automotive ,metallurgical and electrical industries

2 In the construction industry, mainly used for making roofs and walls, prefabricated keel,pre-cast bulkhead, doors and windows.

3 In automotive industry ,mainly for body shell, chassis ,doors, fuel tanks, etc In metallurgical industry, mainly used as substrate of PPGI.

4 In electrical in industry,mainly for shell of electrical appliance.

C-CHANNEL & ANGLES



C CHANNEL

Material	Carbon steel grade (Q235B, Q345, 45#, ect)
	Stainless steel grade(SUS304, SUS316, ect)
	Aluminium alloy (6061-T6, 6063-T6, ect)
	Glavanized steel(zinc coating can be cu stomized)
Thickness	3mm-12mm
Size	40*20/50*25/60*30/70*35/80*40/90*45/100*50/120*60/130*65/ 140*70/150*75/160*80/180*90/200*100
Length	3m/6m/customized 10ft/19ft/customized
Finished	1. Pre-galvanized steel 2. HDG(Hot dip galvanized) 3. Stainless steel SS304 4. Stainless steel SS316 5. Aluminium 6. Powder Coated

ANGLE STEEL

Standard	ASTM,AISI,SUS,JIS,EN,DIN,BS,GB
Finish(Surface)	No.1/2B/NO.3/NO.4/BA/HL/Mirror
Technique	Cold Rolled / Hot Rolled
Thickness	0.3mm-3mm(cold rolled) 3-120mm (hot rolled)
Width	1000mm-2000mm or custom
Length	1000mm-6000mm or custom

ANGLE

Angle steel, commonly known as angle iron, is a long strip of steel whose two sides are perpendicular to each other and form an angle.

It is mainly divided into two types: equal-sided angle steel and unequal-sided angle steel. Among them, unequal-sided angle steel can be divided into unequal-sided and unequal-thickness and unequal-sided unequal-thickness.

The specifications of angle steel are expressed by the dimensions of side length and side thickness. At present, the domestic angle steel specifications are 2-20, and the number of centimeters on the side length is used as the number. The same horn steel often has 2-7 different side thicknesses. Imported angles indicate the actual size and thickness of both sides and indicate the relevant standards. Generally, those with a side length of 12.5cm or more are large angles, those with a side length between 12.5cm and 5cm are medium-sized angles, and those with a side length of 5cm or less are small angles.

C-CHANNEL

Channel is a long strip of steel with a groove-shaped section. It is a carbon structural steel for construction and machinery. It is a section steel with a complex section and its cross-sectional shape is a groove. Channel steel can be divided into 4 types according to its shape: cold-formed equal-side channel steel, cold-formed unequal-side channel steel, cold-formed inner-coiled channel steel, and cold-formed outer-coiled channel.

At the same height, light channel steel has narrower legs, thinner waist and lighter weight than ordinary channel steel. No. 18-40 is large channel steel, and No. 5-16 channel steel is medium-sized channel steel. Imported channel steel indicates the actual size and relevant standards. The import and export orders of channel steel are generally based on the specifications required in use after the corresponding carbon steel (or low alloy steel) steel grade is determined. Except for the specification number, channel steel has no specific composition and performance series.

I BEAM
&
H BEAM

I Beam

According to the different smelting quality of steel, section steel is divided into ordinary section steel and high-quality section steel. Ordinary section steel is divided into large section steel, medium section steel and small section steel according to the current metal product catalog. Ordinary steel can be divided into I-beam, channel steel, angle steel, round steel, etc. according to its cross-sectional shape.

I-beam, channel steel, and angle steel are widely used in industrial buildings and metal structures, such as factory buildings, bridges, ships, agricultural machinery and vehicle manufacturing, power transmission towers, and transportation machinery. Flat steel is used in construction sites as bridges, house trusses, fences, power transmission ships, vehicles, etc. Round steel and square steel are used as various mechanical parts, agricultural machinery parts, tools, etc.

Medium section steel: medium section steel, groove, corner, round, flat steel, similar to large section steel.

H BEAM

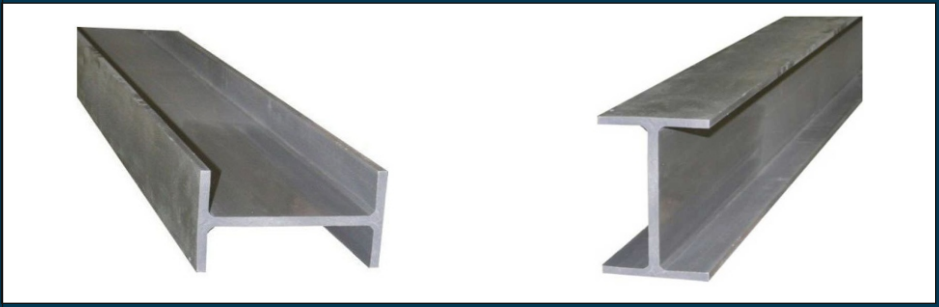
Although the terms beam H and I are often used interchangeably in the construction industry, saying that one is better than the other is quite subjective.

Both are the two most common structural steel beams used in various structural steelmakers, as support beams for the construction of commercial and residential buildings.

Both look almost the same on the outside, except that they differ in geometry. These are the two versions of steel structural beams used in a wide range of applications.

The H beam has an H-shaped cross-section, while the I beam has a cross-section in the form of the capital letter 'I'.

Technically, an I-beam can be referred to as an H-beam with slightly different mechanical properties, such as strength/weight ratio, load capacity, tensile strength and so on.



I BEAM

Standard	ASTM,DIN,JIS,EN
Grade Group	A572 Grade 50,A36,Q235,Q345,Q195,Q215,S235JR/S235/S355JR/S355, SS440/SM400A/SM400B
Flange Width	100-350mm
Flange Thickness	3-14mm
Web Width	150-600mm
Web Thickness	3-12mm
Suface Treatment	Black Painted / Oiled /Galvanized
Length	1-12m
Usage	widely used inmechanical manufacture,construction field,farm vehicles,agriculture greenhouse,automotive industry, railway,decoration,steel structure,etc

H BEAM

Specification (Height x Flange Width)	Standard Cross-section dimensions (mm)	
	HxB	R
100x100	*100x100	8
125x125	125x125	8
150x150	15x150	8
175x175	175x175	13
200x200	200x200	13
	*200x204	13
250x250	*244x252	13
	250x250	13
	*250x255	13
300x300	*294x302	13
	300x300	13
	*300x305	13
350x350	*344x348	13
	*344x354	13
	350x350	13
400x400	400x400	22

FLATBAR & REBAR

REBAR

Rebar is not typically visible in concrete structures because it is usually buried within the concrete structure. It is almost always made of steel because steel has thermal expansion properties like concrete which reduces temperature change issues. Rebar is usually not smooth, it is made with ribs to prevent slippage within the concrete structure.

FLAT BAR

Grade Description

17-4 PH Precipitation hardened, can be heat treated to high levels of hardness and strength. Features machinability and corrosion resistance.

303 Corrosion resistant to sterilizing solutions, most organic and inorganic chemicals, most dyes, nitric acid, and atmospheric exposures.

304 Offers resistance to corrosion, has good formability and can be readily welded by all methods. One of the most commonly used grades across the industry.

304L Extra low carbon avoids harmful carbide precipitation due to welding. Same corrosion resistance as 304 with lower mechanical properties.

316 Better pitting and corrosion resistance than 304, as well as higher strength at elevated temperatures. 316 can be used for valves, marine equipment, pumps, and chemical equipment.

FLAT BAR

Type	Mild Steel Flat Bar
Coating	S235, S275, S355, SS400
Thickness	3.00mm to 150.00mm
Size	20mm to 2000mm

Flats are an extruded bar product that are very versatile and have a wide range of applications. Flat bar is widely used for all types of fabrication projects where lightweight and corrosion resistance is a concern.Flats are an extruded bar product that are very versatile and have a wide range of applications. Flat bar is widely used for all types of fabrication projects where lightweight and corrosion resistance is a concern.

REBAR

Nominal diameter/mm	Cross sectional area/mm^2	Mass per metre/kg
6	28.3	0.222
8	50.3	0.395
10	78.5	0.617
12	113	0.888
16	201	1.58
20	314	2.47
25	491	3.85
32	804	6.31
40	1257	9.86
50	1963	15.4

Head Office

1303, Palace Towers
Dubai Silicon Oasis
Dubai - UAE

+971 4 332 5454

Factory 1

Sajja Industrial Area,
Sharjah - UAE

Factory 2

Sharjah Industrial Area 12,
Sharjah - UAE

Factory 3

Al Ain New Industrial Area,
Al Ain - UAE

Store

Emirates Industrial City,
Sajja Ind.
Sharjah - UAE

info@ruwaissteel.com

www.ruwaissteel.com