

## **Angle steel L profiles application and making machine technology**

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Angle steel, commonly known as L profiles steel, is a long strip of steel that is perpendicular to each other on both sides. There are equal angle steel and unequal angle steel. The sides of the equiangular steel are equal in width. The specifications are expressed in millimeters of side width × side width × side thickness. For example, "L30×30×3" means an equilateral angle steel with a side width of 30 mm and a side thickness of 3 mm. It can also be expressed by model number, the model number is the number of centimeters of the side width, such as L3#.

The model does not indicate the size of the different side thicknesses in the same model. Therefore, the side width and thickness of the angle steel are filled

in the contract and other documents, so as to avoid the model number. The specification of hot rolled equal angle steel is 2#-20#. The angle steel can be composed of various force-receiving members according to the different needs of the structure, and can also be used as a connecting member between the members. Widely used in a variety of building structures and engineering structures, such as beams, bridges, transmission towers, lifting and transport machinery, ships, industrial furnaces, reaction towers, container racks and warehouses. The raw material billet for producing angle steel is a low carbon square billet, and the finished angle steel is hot rolled forming.



Angle steel is a carbon structural steel for construction. It is a steel section of simple section, mainly used for the frame of metal components and workshops. Good weldability, plastic deformation properties and certain mechanical strength are required in use. The raw material billet for producing angle steel is a low carbon square billet, and the finished angle steel is delivered in hot rolling, normalizing or hot rolling. Widely used in various building structures and engineering structures,

such as house beams, bridges, transmission towers, cranes, ships, industrial furnaces, reaction towers, container racks, cable trench supports, power piping, busbar mounting, and warehouses. Shelves, etc.

Angle steel size:

Angle steel 30\*2

Angle steel 30\*2.5

Angle steel 30\*3

Angle steel 40\*2.5

Angle steel 40\*2.75

Angle steel 40\*3.0

Angle steel 40\*4.0

Galvanized angle steel 50\*2.5

Galvanized angle steel 50\*2.75

Galvanized angle steel 50\*3.0

Galvanized angle steel 50\*3.25

Galvanized angle steel 50\*3.5

Galvanized angle steel 50\*3.75

Galvanized angle steel 50\*4.0

Galvanized angle steel 50\*4.25

It is mainly divided into two types, equilateral angle steel and unequal angle steel. The unequal angle steel can be divided into two types: unequal width and unequal thickness. The specifications of angle steel are expressed by the length of side and side thickness. . At present, the specifications of domestic angle steel are 2-20, and the number of centimeters of the side length is the number. The same angle steel often has 2-7 different side thicknesses. The imported angle steel indicates the actual size and thickness of the two sides and indicates the relevant standards. Generally, a large angle steel having a side length of 12.5 cm or more is a medium angle steel between 12.5 cm and 5 cm, and a small angle steel having a side length of 5 cm or less.

## Heavy duty L profile angle steel



The allowable range of angle geometry deviation is also specified in the standard, generally including bending, edge width, edge thickness, apex angle, theoretical weight, etc., and specifies that the angle steel must not have significant torsion.

The order of import and export angle steel is generally based on the specifications required in use, and the steel number is

the corresponding carbon steel number. In addition to the specification number, angle steel has no specific composition and performance series.

Angle steel application example



The delivery length of angle steel is divided into two types: fixed length and double rule. The range of fixed length of domestic angle steel has four ranges of 3-9m, 4-12m, 4-19m and 6-19m depending on the specification number. The length of the Japanese angle steel is selected from 6 to 15 m.

The height of the section of the unequal angle steel is calculated as the width of the long side of the unequal angle steel. Refers to steel with an angled section and unequal lengths on both sides. It is one of the angles. Its side length is from 25mm x 16mm to 200mm x 125mm. It is rolled by a hot rolling mill. The general unequal angle steel specifications are:

L50\*32--L200\*125 The thickness is 4-18mm. L profile angle steel making machine, PLC control system, high efficiency production, speed 8-12m/m. Different angle steel size design different roller



station.



## Angle steel roll forming

### machine parameter

1	Suitable material	galvanized steel coil
2	Thickness steel	0.5-3.2mm
3	Coil width	L profile drawing requirement
4	Effective width	L profile drawing requirement
5	Material frame	welded by square pipe
6	Dia. of Soild shaft	40mm, high grade 45# steel
7	Roller	Cr12 & Gcr15& #45
8	Touch screen	Simens
9	Forming station	10 rows
10	Drive type	Chain
11	Power of main motor	5.5kw
12	Servo motor	2.2KW Touch-win
13	Forming speed	8-25m/min
14	Hydraulic station	5.5kw, 46# hydraulic oil
15	PLC	Simens
16	Shear	Cr 12 Mov, quenching 58-62 °C