High Quality Cold Rolled Steel Coil China In Stock For Manufacturers

Shandong Hengze New Material Co., Ltd. is a cold rolled steel coil factory in stock in China and also a cold rolled steel coil factory supplier. Welcome to consult.

Cold rolling: The Cold rolled strip is made from hot rolled steel. After hot rolled steel coil is pickling and removing the oxide skin, the finished product is hard rolled. The cold hardening caused by continuous cold deformation makes the strength, hardness and ductile index of the hard rolled coil decline. Therefore, the stamping performance will deteriorate and can only be used for simple deformation parts. Rolled hard coils can be used as raw materials for the galvanizing plant because the galvanizing units are equipped with annealing lines. The weight of hard rolled coil is usually 6~13.5 tons. The inner diameter is 610mm.

Before you find a cold rolled steel coil factory supplier and ask if there a cold rolled steel coil factory price is, you need to know about what cold rolled steel coil is.

**Cold Rolled Steel Coil Production process**
The high quality cold rolled steel coil china has a high hardness (HRB greater than 90) without annealing treatment, poor mechanical processing performance, and can only be simply bent (perpendicular to the direction of coiling) with directivity less than 90 degrees.

In simple terms, cold rolling is made on the basis of hot-rolled sheet rolling. Generally speaking, it is the process from hot rolling to pickling to cold rolling.

Cold rolling is the processing of hot-rolled sheet at room temperature, although the process because of rolling will also make the steel plate heating, it is still called cold rolling. The cold rolled steel coil china by hot rolling through continuous cold deformation, the mechanical performance is relatively poor, too high hardness, must be annealed to restore its mechanical performance, without annealing is called rolling hard. Rolled hard rolls are generally used for products that do not require bending, stretching and are under 1.0 thickness rolled hard by good luck on both sides or sides.

The high quality cold rolled steel coil china is usually done by longitudinal rolling. The process of cold rolling generally includes material preparation, pickling, rolling, degreasing, annealing (heat treatment), finishing, etc. In order to guarantee the surface of cold rolling products, phosphorus should be removed from the raw materials before cold rolling. Rolling is the main process to deform materials. The purpose of decreasing is to remove the lubricating grease which is attached to the rolled material during rolling, so as not to contaminate the steel surface during annealing.

Annealing includes intermediate annealing and heat treatment of finished products. Intermediate annealing is the process hardening generated when the cold deformation is eliminated by recrystallization to restore the plasticity of materials and reduce the deformation resistance of metals. The purpose of heat treatment of finished products is to
eliminate hardening by recrystallization. It also depends on the technical requirements of
the product to obtain the required organization (such as various texture, etc.) and product
performance (such as deep drawing, electromagnetic performance, etc.). Finishing
includes inspection, cutting, straightening (leveling), printing, classification packaging, etc.
The high quality cold rolled steel coil china has high packaging requirements to prevent
surface scratches during transportation.

In addition to the above processes, there are some special processes for the production of
some special products. For example, when rolling silicon steel plate, decarburization
annealing should be carried out before cold rolling, coating film, high-temperature
annealing, stretching straightening (see tension straightening) and tempering should be
carried out after rolling.

**Characteristics of cold rolling strip rolling process**

Compared with the hot-rolled strip, the rolling process of the cold-rolled strip has the
following characteristics.

1. Adopt process lubrication and cooling to reduce deformation resistance and cooling roll
during rolling.
2. Adopt high-tension rolling to reduce deformation resistance and keep the rolling process
stable. The average unit tension value used is 10% ~ 60% of the yield strength of the
material, generally no more than 50%.
3. Multi-pass rolling. As cold rolling causes the material to produce work hardening, when
the total deformation reaches 60% ~ 80%, it becomes very difficult to continue the
deforation. For this reason, intermediate annealing is carried out to allow the rolling
process to continue after softening the material. Such intermediate annealing may take
place many times in order to obtain the required thin strip steel. The rolling between two
intermediate annealing is called a rolling process. Annealing of the cold rolled strip is
carried out in continuous annealing furnace or cover annealing furnace with protective gas
(see cold rolled strip annealing). At present, the minimum thickness of cold rolled strip steel
can reach 0.05mm and the cold rolled steel coil factory in stock foil can reach 0.001mm.

**The difference between cold rolled strip and hot rolled strip**

1. Appearance and surface quality: Because of cold plate is, resulting from the hot plate in
cold rolling process and cold rolling at the same time also can do some surface finishing
so cold plate on the surface quality (such as surface roughness, etc.) better heat plate, so
if the product after the sequence on the quality of paint coating, such as there are higher
requirements, generally choose the cold plate, hot plate, pickling board and other pickling
plate, pickling board surface as the pickling too so into normal metal color, but remained in
the high cold plate, cold rolled steel coil factory in stock so surface without pickling plate
surface oxide layer with, usually hair black, or ferrosilic oxide layer, the popular speak
be fire roasted, And it usually comes with a little embroidery if the storage environment is
not good.

2. Performance: in general, hot plate and pipes in the engineering mechanical properties
are no more thought, although there are certain work hardening heat pipes in the process of cold rolling, (but do not rule out strict in mechanical properties, that is need to discriminate), cold plate heat plate usually slightly high yield strength, surface hardness is higher, what specific needs to see the degree of cold plate annealing. However, the annealing cold plate is stronger than the hot plate.

3. Forming performance: As the performance of cold and hot plates is not much different, the factors affecting the forming performance shall be determined by the difference in surface quality.

At last, it’s difficult to find a cold rolled steel coil factory supplier and get a cold rolled steel coil factory price, there are some China supply cold rolled steel coil manufacturers on the internet. Shandong Hengze New Material Co., Ltd is a cold rolled steel coil factory in stock, welcome to consult cold rolled steel coil price.