

Hot rolled aluminum sheet

Hot rolled aluminum sheet product introduction

Hot rolling generally refers to the rolling of metals above the crystallization temperature. Compared with ordinary cast-rolled products, hot-rolled aluminum sheet has the characteristics of good surface quality, strong mechanical properties and ductility, and good oxidation effect. Mingtai Aluminum has the industry's "1+4" hot continuous rolling production line and SMS 2800mm six-roller cold rolling. The hot-rolled aluminum sheet produced not only has a smoother and more delicate surface, good deep drawing and oxidation effects, and the finished product width is as high as 2650mm. , is one of the few manufacturers in China that can produce ultra-wide aluminum sheets. At present, the hot-rolled aluminum sheets produced by Mingtai Aluminum are widely used in wide curtain wall panels, automobiles, ships, busbars, silos, stamping parts, molds and other fields.

What is hot rolling

Hot rolling generally refers to rolling performed above the metal recrystallization temperature. During hot rolling, the deformed metal undergoes hardening and softening processes at the same time. Due to the influence of deformation speed, as long as the recovery and recrystallization process does not have time to proceed, the metal will produce a certain amount of work hardening as the degree of deformation increases. However, in the hot rolling temperature range, the softening process plays a leading role. Therefore, at the end of hot rolling, the recrystallization of the metal is usually incomplete, and the aluminum alloy plate and strip after hot rolling presents a microstructure state in which recrystallization and deformation structure coexist.

Technical Parameters

Alloy Series	1xxx Series	2xxx Series	3xxx Series	5xxx Series	6xxx Series	7xxx Series
Alloy	1050、 1060、 1070、 1100	2A11、 2A12、 2024	3003、 3004、 3005、 3104	5052、 5083、 5182、 5754	6061、 6063、 6082	7075、 7050
Temper	O、H*2、H*4、H*6、H*8、H111、H112、T4、T6、T651					
Thickness(mm)	0.3-600					
Width(mm)	200-2650					
Length(mm)	500-16000					

Features of hot rolled aluminum sheet

1. Hot rolling can significantly reduce energy consumption, good plastic processing, low deformation resistance, no obvious work hardening, easy rolling, and reduced energy consumption required for metal deformation.
2. Hot rolling usually uses large ingots and large reductions for rolling. The production rhythm is fast and the output is large, which creates conditions for large-scale production.
3. Hot rolling can effectively improve the processing performance of metals and alloys, that is, the coarse grains in the casting state are broken, the micro-cracks are healed, the casting defects are reduced or eliminated, the as-cast structure is transformed into a deformed structure, and the processing performance of the metal is improved.
3. The as-cast structure is transformed into a processed structure through hot rolling, and the plasticity of the material is greatly improved through the transformation of the structure.
4. The characteristics of the rolling method determine that there is anisotropy in the properties of the rolled sheet. First, there are obvious

performance differences in the longitudinal, transverse and high directions of the material. Second, there are deformation textures and recrystallization textures. There is an obvious directionality in control performance.

Hot-rolled aluminum sheet manufacturer Mingtai Aluminum

Henan Mingtai Al Industry Co., Ltd. has been focusing on aluminum processing for 26 years. It sells 5052 aluminum sheets and 6061 aluminum sheets. Mingtai products cover 1 series, 2 series, 3 series, 4 series, 5 series, 6 series, 7 series and 8 series aluminum Alloy and other 8 specification series. Mingtai Aluminum has a professional R&D and production team, with guaranteed product quality, complete specifications, customized on-demand, complete after-sales service system, rigorous and scientific management, fast production scheduling, timely delivery, and guaranteed product quality.