

Sulfur Free Cutting Steel

Free cutting steel is widely applied to parts used on motor vehicles, office machines like photocopy machines and computers. In recent years the demand has grown rapidly and in Taiwan alone yearly demand can go as high as 80,000 tons. Taiwan totally depended on import before CSC successfully developed free cutting steel. There are two types of free cutting steel: sulfur and lead, but smelting lead-containing free cutting steel causes serious pollution to the environment due to the toxic nature of lead. In some parts of Europe and America use of lead containing free cutting steel by downstream industries is banned., which makes most advanced steel mills around the world aggressively engage in developing lead-free free cutting steel. Following the trend CSC also started its non-lead free cutting steel R&D project. Since 1990 CSC introduced AISI1141, AISI1144 and AISI1215 sulfur free cutting steel series and won recognition from its clients. Until December 2004, the cumulative amount of production and supply of these 3 items reached over 40,000 tons, worth more than NT\$500 million.



High Quality Electrical Steel Sheet

High quality electrical steel sheet is widely used for high-efficiency motor. It is a typical "green" product which directly contributes to energy conservation. High quality electrical steel sheet in Taiwan used to be imported from Japan. However, since CSC started a specialized production line of high quality electrical steel sheet and risk production in 2003, it has been able to meet domestic demand with its mass production capacity. In addition, CSC's high quality electrical steel sheet also found a large overseas market. The achievement helps upgrade electrical engineering industry as well as contribute to energy saving and the environment.

High Strength Hot-dip Galvanized and Galvannealed Steel

High strength steel is widely used on automobiles for its safety, light weight and low consumption of energy. Poor formability is a major disadvantage of traditional high strength steel, so it can hardly be used on automobiles. Combining high strength and formability is the challenge large steel mills have been trying to tackle. In 2004 CSC introduced 59-KG

Product Performance

Fire Resistant Steel (FR Steel)

Steel strength decreases as temperature goes up in a fire. Traditional way of keeping the strength of steel structure in high temperature is applying a heavy layer of fire retardant coating on the surface to make it fire resistant. However, coating is time consuming and NOT environmental-friendly. Therefore, by using alloy and physical metallurgy technology CSC developed Fire Resistant Steel that saves greatly on coating materials as well as cost down expenditure on steel structure construction work. It is estimated that in the future annual sales of FR steel will reach 10,000 tons. CSC developed FR steel SM520CFR in the laboratory in 2004 and is currently undertaking on-line try production of 50-KG grade SN490CFR. Development of 57-KG grade FR Steel will have to depend on future demand in construction industry.



grade and 39-KG grade with high strength and high formability. At present it supplies major domestic auto plants with its auto sheet metals and structural parts, a great contributor for energy conservation.

Chrome-free Surface-Treated Steel Sheet

Chrome-free surface-treated steel sheet is an environmental-friendly product, a replacement for chrome containing surface-treated steel sheet. Coatings on electrical sheet, electro-galvanized steel sheet, hot-dip galvanized and galvannealed steel sheet have different functions. For instance, that on electrical sheet features insulation and anti-rust; electro-galvanized sheet features anti-finger print and electric conduction. Surface-treated sheets are highly value-added and treatment materials play an important role. In 2004 CSC started production of chrome-free anti-finger print surface-treated EG sheets and GI sheets, supplying 90,106 tons and 5,551 tons respectively. It plans to invest more in chrome-free products R&D and be a socially responsible corporation in terms of environmental protection.

