

## **Elegant Carbon and Stainless Steel Tubing with Tube Mills**

*By Tom Wang - Stainless Steel Tube Mills Manufacturer*

*Dated: Jun 02, 2009*

*Boundless Innovation. Great High Frequency Welding Carbon and Stainless Steel Tubing, Tube Mills, Tig Welding*

Carbon Steel Tubing & Stainless Steel Tubing & Tube Mills -

Nowadays, carbon steel tube and stainless steel tube manufacturing is a very dynamic industry, and tube mill purchasing is an important factor for generating fine tubes. Apart from the high demand for carbon steel or stainless steel products, the new multiple uses of steel keep the trade going strong. In the recent years, the demand for both carbon and stainless steel have continually risen, and the carbon and stainless steel manufacturing industry have continued to boom. This is because the fact that steel has become the preferred building material among contractors due to its attractive appearance, its resistance to corrosion, its strength, and low-maintenance characteristics, stainless steel manufacturing firms have also developed innovative ways to use their products.

Carbon Steel Tubing and Stainless Steel tubes are designed and manufactured for the automotive, architectural, agricultural, food processing, and health-care sectors in a competitive world market. Carbon steel and stainless steel tube mills are used in various industries. These industries are nearly as diverse as the number of tubing pieces available.

The tooling's job is to take a continuously coiled flat strip, form it so that the two edges come together, hold the edges in place while they are welded, and then size and straighten the finished tubular product to the required specifications. With some tube mills running at 1,000 feet per minute, the tooling must be able to perform consistently.

Designing a Tube Mill

When designing a tube mill with its specifications, the client first determines what product or range of products will be made. The client also determines the preferred rate of production, quality level, and any particular characteristics such as end condition, length tolerance, position of the seam on shapes, etc.

Generally, the material chosen dictates the type of welder used. The required output of the welder is determined by the diameter, wall, and required speed of the mill. If the client has not chosen a speed, the mill builder can determine that based on annual production requirements, estimated uptime, number of shifts, and expected changeover frequency. With this information, the mill builder can also calculate the horsepower requirements.

The number and size of the stands and the diameter of the roll shafts is determined by the diameter of the tube, its wall thickness, and the material being formed. The ratio of thickness to diameter, the surface finish, and the shape of the product also have a direct bearing on the number of stands required. Other factors, such as the need to preserve existing tooling or specific placement of the seam, may also affect the design. Finally, after the number of stands and the required horsepower are finalized, the number and placement of motors can be determined.

Today, most stainless steel tube and carbon tube is welded with HF welders, which are also suitable for 400 series stainless and even 300 series if the tubing is for decorative use. Compared to other welding techniques, high frequency is somewhat forgiving of less-than-perfect edge registration.

Material for tubing - Carbon Steel

Carbon Steel: Carbon steel is broken down into four classes based on carbon content: mild and low carbon steel, higher carbon steel, medium carbon steel, high carbon steel and ultra-high carbon steel. Steel with a low carbon content has properties similar to iron. As the carbon content rises, the metal becomes harder and stronger but less ductile and more difficult to weld. In general, higher carbon content lowers the melting point and its temperature resistance. Material for tubing - Stainless Steel.

The stainless steel is made from a combination of alloys which are selected according to which industry or purpose the tubing will serve. The stainless steel alloys used for aircraft hydraulic lifts, for instance, will use percentages of nickel and large percentages of chromium.

Many factories, tube mills and production lines use carbon or stainless steel components for their machines and in the products they make. The use of carbon steel and stainless steel for tubing is popular for the production of high quality mufflers in the auto industry. Fuel and heat lines need the strength of stainless steel tubes in order to resist the extreme elements which will be forced through them. Badly made carbon steel tubes or stainless steel tubes break easily, and their shape and appearance look improper.

Different steel materials use different welding methods with tube mills, for example carbon steel uses high frequency welders and stainless steel uses TIG welding as their main tube production method.

» Tube mill manufacturer - Sunfone Technology. ( <http://tube-mills.ready-online.com/> )

Sunfone Technology Co., Ltd. is a tube mill maker that is specialized in making tube mills and other related carbon and stainless steel tubing machines. Sunfone has been accumulating manufacturing experience in supplying tube mills using tig welding and high frequency welder and its peripheral equipments to ensure the stainless steel tubes are made with high-quality. Until now, they've gotten outstanding reputations and widely patronages from domestic and overseas customers. They have well experienced and seasoned staff capable of handling all of your challenging projects. The team of professionals ensure that your tube mills and equipment is handled based on sophisticated skills. Sunfone is a premier designer and builder of tube mills and other related steel tubing equipment. Their goal is to cater the customers by offering high-efficiency, high-production equipment. They now offer High Frequency Tube Mills, Stainless Steel Tube Mills, Automatic Steel Coil Slitting Lines, CNC Cut-to-Length Machine, Round/Square Tube Polish Machine, End Facing Machine, Straightening Machine, Rolls & Knives, Saw Blade Grinding Machine, Eddy Current Tester and Hydrostatic Tester.

###

Sunfone manufactures high quality tube mills and excellent after service is one of the reasons that they are trusted by their clients. Sunfone has built an organization with aggressive and experienced personnel to provide reliable and efficient equipment in today's competitive market. Sunfone is totally dedicated to provide state of the art equipment to the carbon/stainless steel tubing industry. They supply a broad range of carbon steel tube mills and stainless steel tube mills, and other related equipment to meet your business needs. Their understanding of the processes that are required to create premium tube mills. In addition, they have the world's best tube mills and equipment to do the job. Check out tube mills and other accessories. <http://tube-mills.ready-online.com/>

Tags                    high frequency tube mills, stainless steel tube mills, automatic steel coil slitting lines, cnc cut-to-length machine

Email                    [Click to contact author](#)

Phone                    886-2-2748-4387

Fax                        886-2-2748-6261

Address 7F.-8, No.141, Sec. 1, Keelung Rd., Xinyi Dist.,  
Taipei  
City/Town Taipei  
State/Province Taipei  
Zip 110  
Country Taiwan  
Link <http://prlog.org/10248643>



Scan this QR Code with your SmartPhone to-  
\* Read this news online  
\* Contact author  
\* Bookmark or share online