



HURST STAINLESS STEEL FACT SHEET

What is stainless steel?

Stainless steel is an iron based metal which contains low carbon levels and various levels of chromium. When chromium is exposed to air it forms a protective layer of chromium oxide which keeps stainless steel from rusting.

What type of stainless steel should I use?

Of the over 100 types of stainless steel, type #304 stainless steel accounts for over one-half of USA production. Type 304 is highly corrosion resistant when used within normal temperature ranges, including autoclaving.

Type #316L is a slightly harder stainless steel which contains 2 to 3% molybdenum, a high heat additive. Type #316L is indicated for use in depyrogenating.

Type #316L is a best choice when used in contact with distilled water or chlorides.

What finishes are available?

HURST stainless steel products are generally available in two finishes;

1. Standard mill finish 2B has an extremely smooth slightly milky surface. 2B is economical and easy to clean. Finish is sometimes expressed as "RA" or arithmetic roughness. RA is the distance (in inches or microns) of deviation from a selected average (mean) surface. The RA of a 2B finish is generally 8.
2. A #4 finish is a fine grade of brushed metal also known as a Florentine finish. #4 is a mechanical finish and typically used to finish outside welds. Fine grinding, polishing and buffing can further smooth a #4 finish to a higher luster, however this process is very expensive. The RA of a #4 finish is generally 25-30.

Electro-polishing is available to burn off oxides, brighten, and reduce roughness by 30 to 40%. EP improves sterilization and surface maintenance.

What thickness or gauge of stainless steel is available? How much does it weigh?

Gauge	Thickness	Weight per square foot
11	.120"	5.040 lbs.
14	.075"	3.154 lbs.
16	.060"	2.499 lbs.
18	.048"	2.016 lbs.
20	.036"	1.491 lbs.

What corner welds are available?

Gas tungsten arc welding, also known as TIG welding and fusion welding, is normally used to provide a water tight structure. It is also recommended to eliminate corner cracks and crevasses which may support microbial growth. TIG welding is expensive and demands hand finishing.

Corners may be designed with folding tabs which are tack-welded for structural support. Tab and tack-welded corners are inexpensive and a good choice in a non-sterile environment.

Some thicknesses of stainless steel are rigid enough to be used without welding.

What perforations are available?

Any design or size hole or slot is readily available.