

Finish Options for Stainless Steel



1. Standard Surface & Weld Finish

All standard JACOB stainless steel parts are purge welded, using TIG-welding method. These parts are externally welded with 100% penetration. Due to the purge welding process, there is little to no protrusion on the interior of the part. If there are sharp protrusions (i.e., catch points) that extend beyond the weld bead into the interior of the part, this will be ground smooth to eliminate the sharp protrusion, but to no specific finish. The degree of this grinding is at the discretion of the JACOB Production team.

For further information & details regarding the welding process, please see the JACOB TUBING document "Interior Weld Seams for SS.doc."

All stainless steel parts are bead-blasted on the outside with a surface roughness of approximately 1.00-6.00 μm (40-240 μin). However, due to various component configurations and production procedures, the interior surface roughness widely varies [0.30-6.00 μm (12-240 μin)]. If a specific interior finish is required, please refer to the other options listed below.

2. "No cracks, no crevices" Finish

JACOB TUBING offers, at an additional charge, additional attention to the interior welds in order to eliminate any cracks/crevices where product might get trapped. This process includes the addition of weld material to fill these cracks, crevices, pock marks, etc. There is no polishing performed on these welds, only slight buffing/grinding to eliminate any projections that might occur while adding the weld.

This option is offered at an additional charge and will require a longer lead time.

3. Polishing of Interior Welds

JACOB TUBING offers, at an additional charge, polishing of all interior welds. This polishing is performed by an outside supplier. It applies only to the interior welds and not the interior surface of the part. The customer must supply the polishing specification to which the interior welds are to be polished.

This process requires all parts to be at least 2mm thick material. If the customer insists upon parts with material less than 2mm thick, the customer is responsible for purchasing replacement parts in the event the polishing process burns through the material.

This option is offered at an additional charge and will require a longer lead time.

4. Polishing of Interior Surfaces

JACOB TUBING offers, at an additional charge, polishing of all interior surfaces. This polishing is performed by an outside supplier. The customer must supply the polishing specification to which the interior welds are to be polished.

This process requires all parts to be at least 2mm thick material. If the customer insists upon parts with material less than 2mm thick, the customer is responsible for purchasing replacement parts in the event the polishing process burns through the material.

This option is offered at an additional charge and will require a longer lead time.