

SEMI F45-0307 (Reapproved 0812) SPECIFICATION FOR MACHINED STAINLESS-STEEL REDUCING WELD FITTINGS

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1 Purpose

1.1 The purpose of this Specification is to prevent confusion among the manufacturers of stainless steel reducing weld fittings, piping fabricators and end users and to standardize the dimensions of weld fittings.

2 Scope

2.1 This Specification applies to 6.35 mm (1/4 in.), 9.53 mm (3/8 in.) and 12.7 mm (1/2 in.); the machined stainless steel reducing weld fittings elbows and tees made for use in the semiconductor industry.

NOTICE: SEMI Standards and Safety Guidelines do not purport to address all safety issues associated with their use. It is the responsibility of the users of the Documents to establish appropriate safety and health practices, and determine the applicability of regulatory or other limitations prior to use.

3 Referenced Standards and Documents

3.1 None.

4 Terminology

4.1 Definitions

4.1.1 *reducing elbow weld fittings* — machined fittings shaped like the letter ‘L’, for welding tubes in a right angle. (see Figure 1)

4.1.2 *reducing tee weld fittings* — machined fittings shaped like the letter ‘T’, for welding tubes in a T-shape. (see Figure 2)

4.1.3 *reducing weld fittings* — machined fittings to be welded or welded fittings.

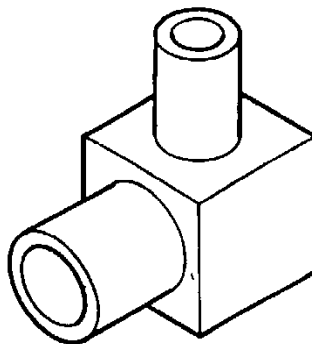


Figure 1
Reducing Elbow Weld Fittings

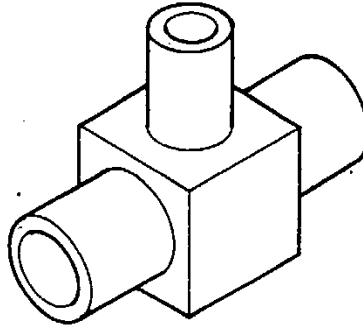
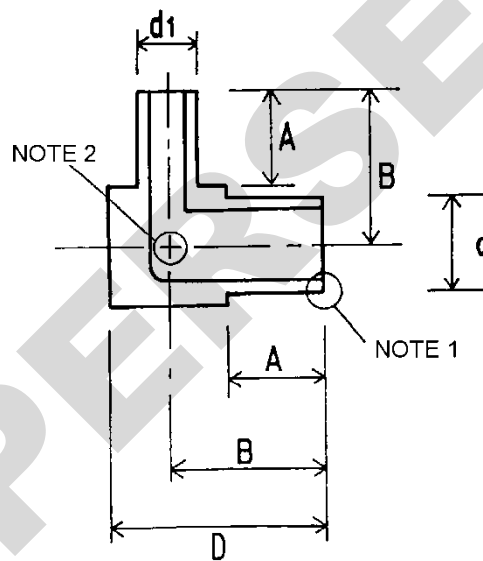


Figure 2
Reducing Tee Weld Fittings

5 Dimensions of Reducing Weld Fittings

- 5.1 *Reducing Elbow Weld Fittings* — See Figures 3 and 4.
- 5.2 *Reducing Tee Weld Fittings* — See Figures 5 and 6.



- #1 Machined tube weld ends shall be square tolerance $\pm 0.5^\circ$.
- #2 Intersection shall be square tolerance $\pm 0.5^\circ$.

Figure 3
Dimensions of Reducing Elbow Weld Fittings