

Customer Name:

Application Number:

Project:

Material:

Prepared By:

Date:

Revision:

Email:

	Location Description	General Dimensional Guidelines	Recommendations
W	Wall Thickness	Minimum 0.090" (2.29mm) and/or 4B	
B	Energy Director Base Width	0.010" - 0.040" (0.25mm - 1.00mm)	
A	Energy Director Height	Less than or equal to B/2	
T	Tongue Width	W/3	
H	Tongue Height	W/3	
G	Groove Width	T + 2C	
D	Groove Depth	H + 0.001" (H + 0.03mm)	
S	Groove Side Wall Width	Minimum 0.035" (0.89mm)	
C	Clearance	0.002" to 0.006" (0.05mm - 0.15mm)	
E	Energy Director Radius	180° (Full)	

The tongue and groove energy director joint for ultrasonic welding is used to obtain a strong, leak tight weld. This type of weld joint also contains flash well.

Performance evaluations of the round ED using Dukane's Ultrasonic Servo Welding Technology has confirmed that parts with this type of ED can be successfully welded with weld strength and consistency matching and even exceeding similar parts that have a 90-deg ED.