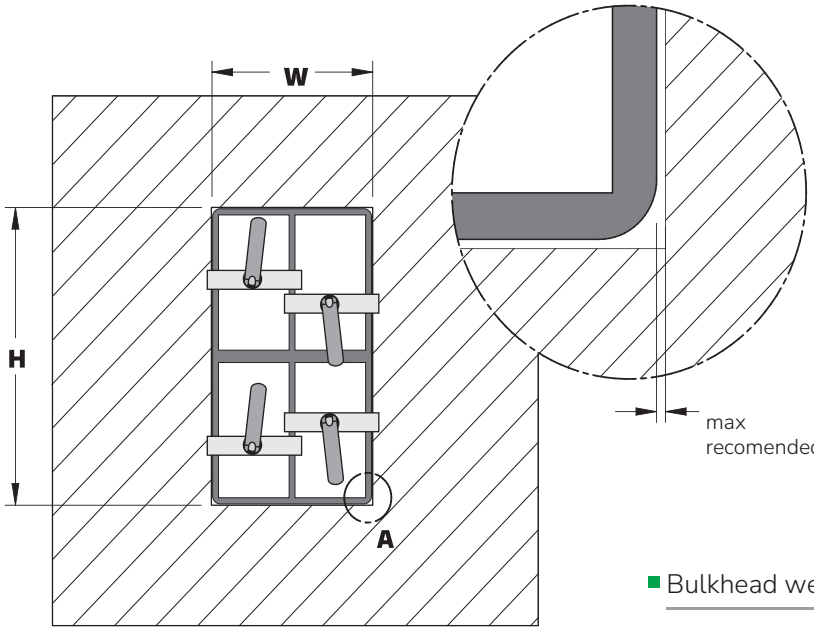
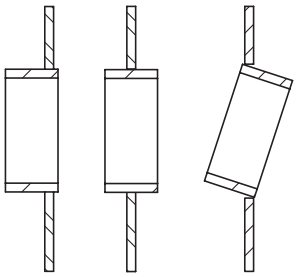
HTS

STANDARD WELDING INSTRUCTIONS

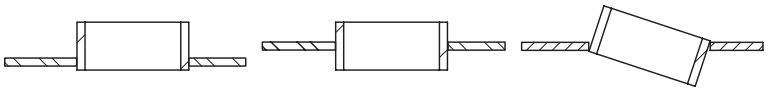
1. Check the measures of the precut hole and external dimensions of the frame. Recommended gap around the frame is in between 1mm and 2mm (0.5-1mm on every side of the frame).



■ Bulkhead welding positions



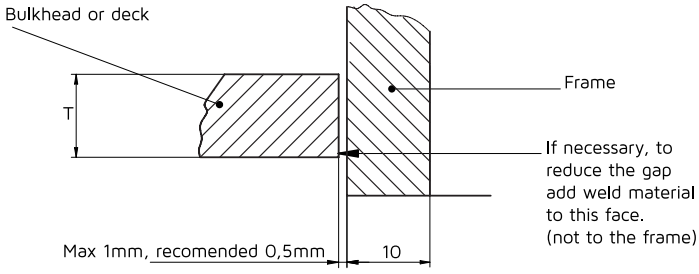
■ Deck welding positions

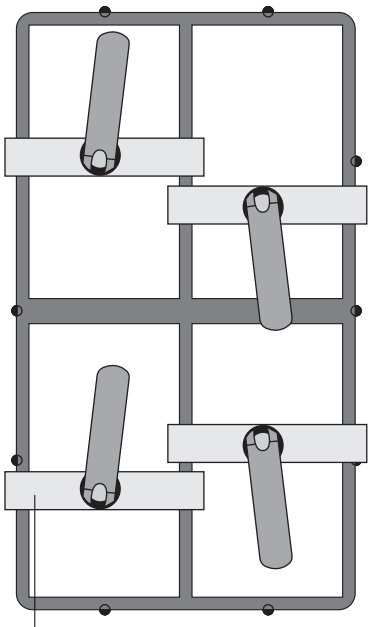


2. Tack weld on the front side, centring the frame onto the cut-out hole:

- Horizontally, one tack on every aperture.
- Vertically, one tack on every aperture and on every vertical division.

Check the gap measures all around the frame are maintained. If necessary, add weld material to the bulkhead/deck to reduce the gap (not to the frame) Use HTS welding tool to prevent frame deformations during welding process.



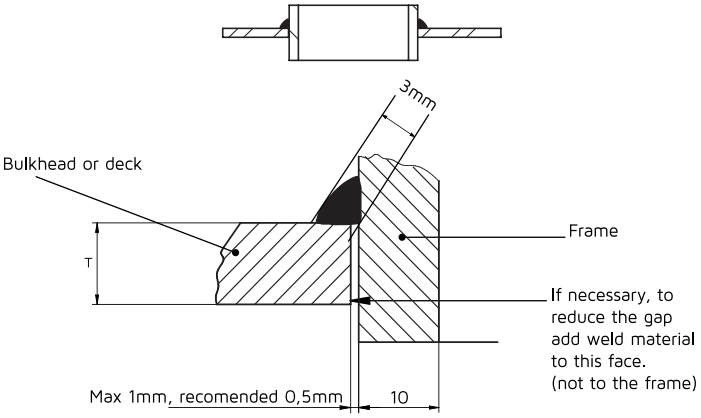


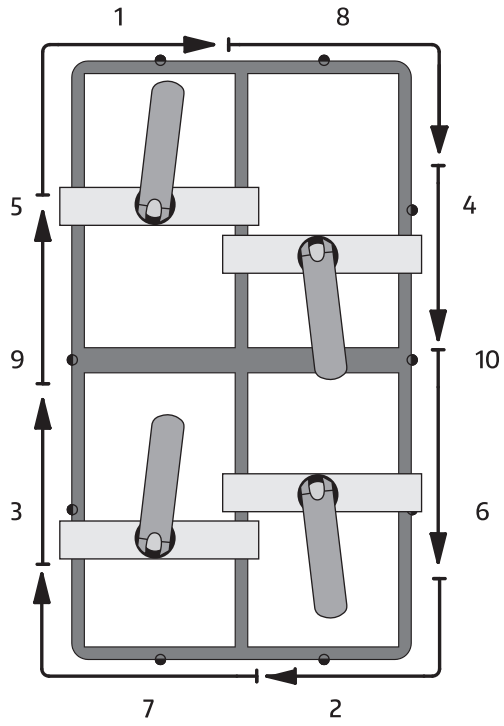
■ Welding tool (See page..80) can be used to prevent deformation during the welding.

3. Start welding the frame with a sealing fillet weld on the backside. Follow appropriate welding sequence.
This welding throat should not excess of 3mm.

The interpass temperature should not exceed 200°C for mild steel and aluminium and 150°C for stainless steel.

- Max Run Lenght
  - Mild Steel — 200 mm
  - Stainless Steel — 150 mm
  - Aluminum — 200 mm





$$\text{Heat Input}_{(KJ/mm)} = \frac{V \cdot I \cdot \eta}{vel \cdot 1000}$$

η = { 1 SMAW; 0,8 GMAW / FCAW; 0,6 GTAW }

V = volts / I = amperes / vel = mm/s

	Máx. Heat Input (KJ/mm)		
	Mild Steel	Stainless Steel	Aluminium
a = 3 mm	1,2	1,1	2

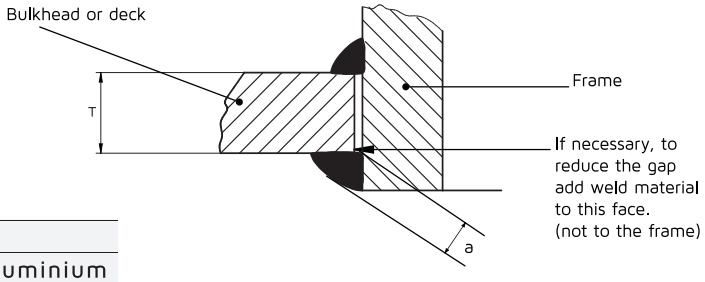
4. Grind off weld tacks before start filled weld. Weld runs should not start or stop at a tack weld but should run over a tack.

Follow same welding sequence for correct procedure.
The interpass temperature should not exceed 200°C for mild steel and aluminium and 150°C for stainless steel.

This welding throat should not excess following values:

T > 7mm a=5mm
T ≤ 7mm a=4mm

- Max Run Lenght
  - Mild Steel — 200 mm
  - Stainless Steel — 150 mm
  - Aluminum — 200 mm



	Máx. Heat Input (KJ/mm)		
	Mild Steel	Stainless Steel	Aluminium
a = 4 mm	1,2	1,1	2
a = 5 mm	1,4	1,1	2