



Welding Instructions - Straddle adaptor

Welding Instructions

Following is a quick reference on consumables that can be used to weld FEURST products. For a complete reference on welding procedures, refer to the document entitled «General welding recommendations».

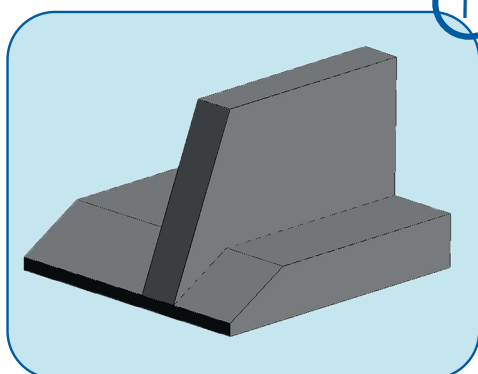
Welding unalloyed filler consumables

PROCESS	EN CLASS	AWS CLASS
SMAW	EN ISO 2560-S E42X	E70X ACCORDING TO A5.1 OR EQUIVALENT UNDER A5.5
GWAM	EN ISO 14341-A G42X EN ISO 14341-A G46X	E70C-X ACCORDING TO A5.18 OR EQUIVALENT UNDER A5.28 E70S-X ACCORDING TO A5.18 OR EQUIVALENT UNDER A5.28
FCAW	EN ISO 16834-A T42X	E7XT-X ACCORDING TO A5.20 OR EQUIVALENT UNDER A5.29

Welding austenitic stainless filler consumables

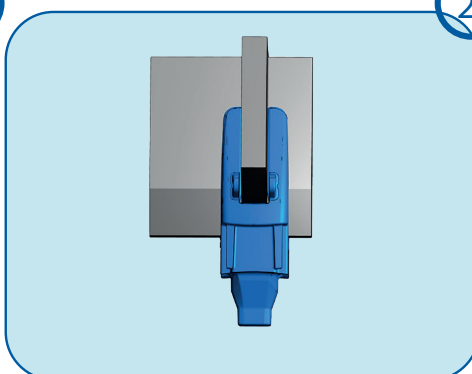
PROCESS	AWS CLASS
SMAW	E307-X ACCORDING TO A5.4
GWAM	E307T-X ACCORDING TO A5.22 ER307 ACCORDING TO A5.9
FCAW	E307-X ACCORDING TO A5.22

1



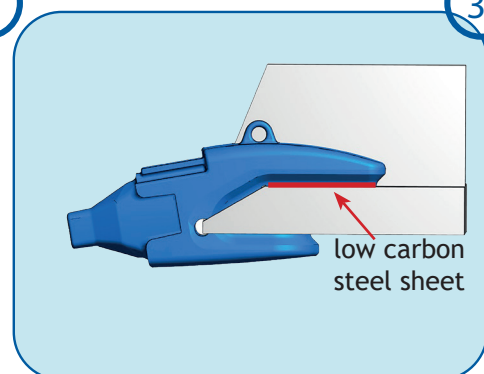
Preparation : Prepare the bucket wings and the blade by cleaning them.

2



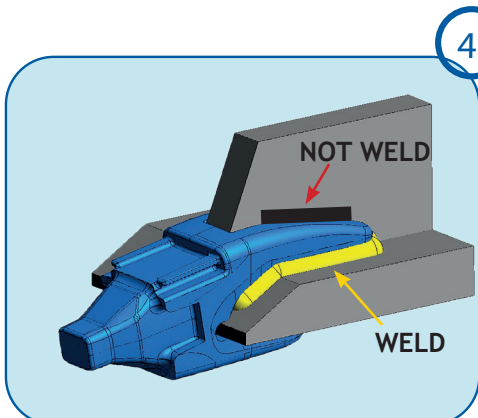
Installation (Step 1): Install the Straddle Adaptor and align it with the center of the wing. Do not remove material from the Straddle adaptor, as this will compromise his strength and toughness.

3



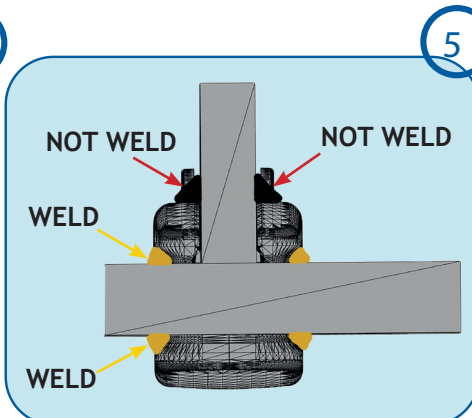
Installation (Step 2): If there is more than 4 mm of gap under the upper leg, insert a low carbon steel sheet shaped to fit the leg to fill the gap. Deposit stringer bead(s) along the adaptor to reduce gap condition.

4

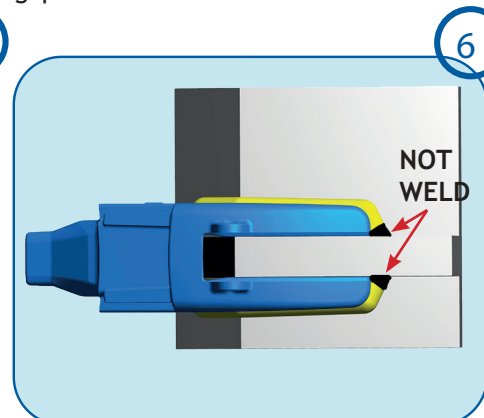


Welding (Step 1): Preheat adapter and lip to a temperature between 175°C to 200°C within an offset of 100mm. Consider the areas to be welded and those that don't need to be welded according to the following figures.

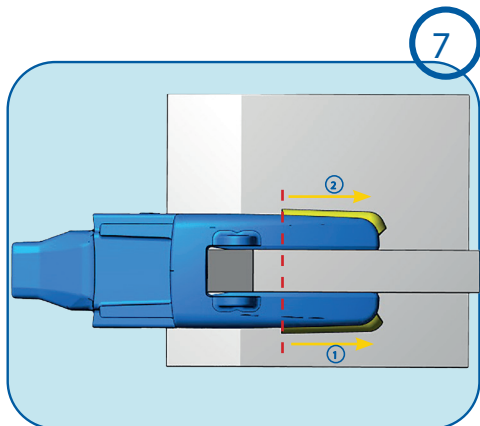
5



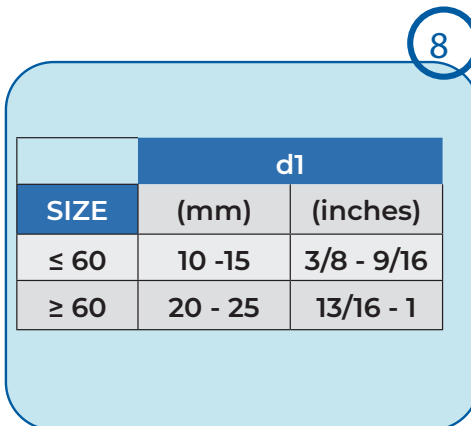
6



Welding Instructions - Straddle adaptor

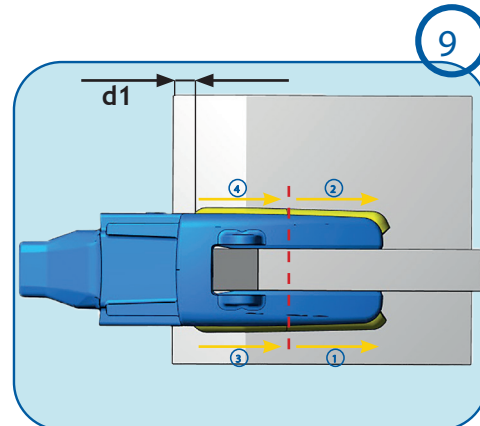


Welding (Step 2): Start by welding at the center of the top leg and weld one pass according to the sequence shown in the next figure.

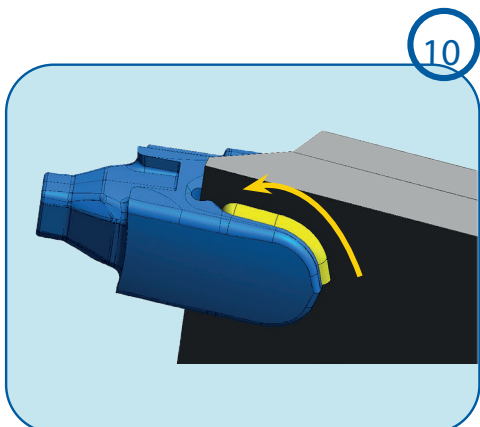


SIZE	d1	
	(mm)	(inches)
≤ 60	10 -15	3/8 - 9/16
≥ 60	20 - 25	13/16 - 1

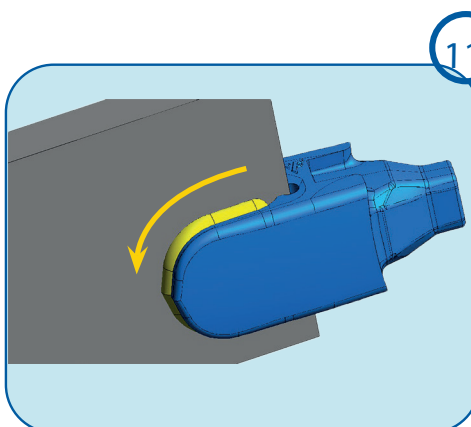
Welding (Step 3): Do not weld within «d1» distance, from the lip leading edge, as shown the table.



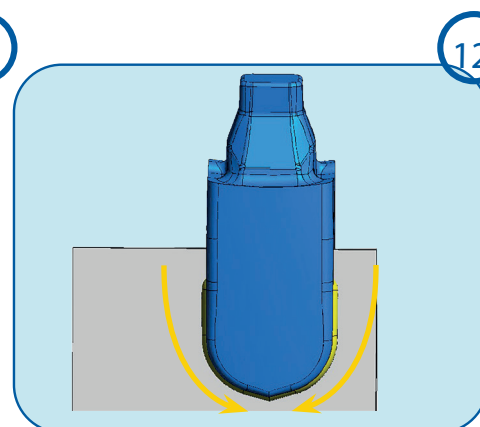
Welding (Step 4): Repeat this sequence (Step 2) three times. Vary the length of the beads slightly so that the start/stop positions are not at exactly the same location.



Welding (Step 4): Flip the lip/bucket over. Start by welding at the front of the weld groove on the bottom leg and weld to the back of the leg. Do not weld within «d1» distance from the lip leading edge, as indicated in «Step 2».



Welding (Step 5): Start by welding at the front of the groove on the opposite side of the leg, joining the initial bead at the back of the leg.



Welding (Step 6): Repeat this sequence (Step 4 & 5) three times. Vary the length of the beads slightly so that the start/stop positions are not at exactly the same location.

- Adapters with bigger dimensions requires additional weld layers, turn the lip over and weld three layers according to the sequence for the top legs.
- Flip the lip/bucket over again and apply three layers according to the sequence for the bottom leg
- The leg sizes of the fillet must be flush and less than 3.2mm - 1/8 in. above the edge of the cast weld groove. In some adaptor patterns, the weld groove height decreases near the leading edge of the lip. With these adapters, the size of the fillet shall decrease correspondingly in the region.
- Ensure that the welding technique comply with what is exposed on the document entitled : «General welding recommendations».