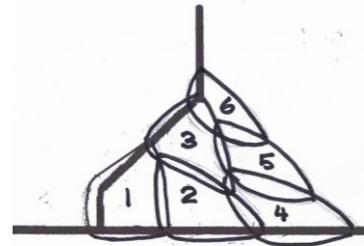
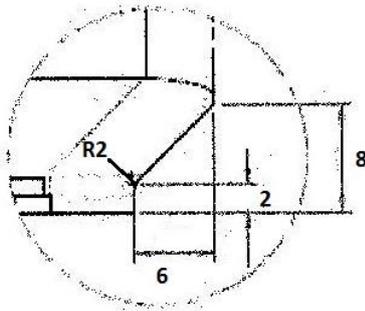
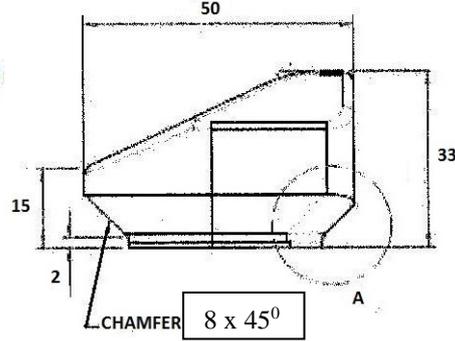
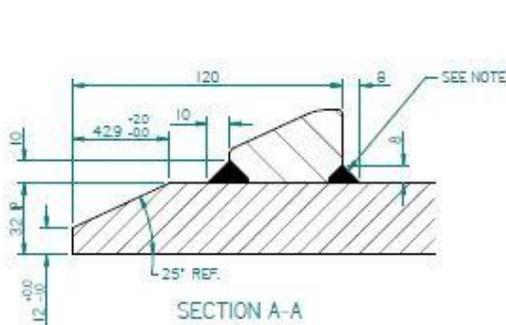


# SANDVIK SHARK (G.E.T.) PRODUCT WELDING DOCUMENTATION

## WELD PROCEDURE SPECIFICATION WPS: SS-005 REV: 1 DATE: 05/02/14

**WELDING CODE: SANDVIK Drg. No. MD0032**

**Joint details: Compound 6mm x 45° Bevel Butt and 8mm Fillet Weld on Rear Edge of Boss onto 32mm Lip Plate  
Compound 8mm x 45° Bevel Butt and 10mm Fillet Weld on 2 sides and front edge of Boss onto 32mm Lip Plate**



**Detail A: Joint Edge Preparation**

**Welding Sequence (bevel butt with 12mm fillet)**

**CLEANING:** Wire brush or grind to achieve clean metal surface  
**PREHEAT:** Preheat lip from 150°C to 250°C and maintain this temperature  
**TORCH SETUP:** Face of contact tip must not be recessed within gas nozzle more than 5mm.  
**APPROACH ANGLE:** Use PUSH TECHNIQUE with Torch Lead Angle of 5-10°C.  
**ARC STARTING:** TOUCH START, run at constant speed and HOLD Welding Position for 2-4 secs after releasing trigger

Process	Wire Diam	Gas Shield	Gas Flow Rate	Electrode Classification	Material Qualified	Thickness mm
GMAW	0.9mm	Ar+16	16 L/min	AWS A5.18	BOSS SS2000	33
		20%	(nozzle)	ER70S-6	LIP PLATE	32
		CO <sub>2</sub>			Hardox 400/450	

### WELDING DETAILS

The 6 weld runs to complete the bevel butt with 12mm fillet are to be made by running on at the rear corner, along one side, across the nose, and along the other side with run-out onto the lip plate surface.

Grinding of run-on and run-outs to clean metal surface to be done prior to commencing the welding of the bevel butt with 8mm fillet across the back of the boss. These welds are to be made by running on from the plate surface and running out onto the plate surface.

Grinding of run-on and run-outs to be done after completion of welding.

Weld Size	Pass No.	Pos	Amps	Volts	Polarity	Travel Speed mm/min	Heat Input kJ/mm
6 x 45°	1 - 3	2G	130-150	24-26	DC+	250 - 270	0.69 – 0.94
8mm	4	2F					
8 x 45°	1 - 3	2G					
12mm	4 - 6	2F				230 - 250	0.74 – 1.02

