

WELDING PROCEDURE SPECIFICATION (WPS)				WPS No.: SMV 101-1	
				Ref.: _____	
				Date: _____ Rev.: 1	
Prod. by: Sørskår Mekaniske Verk. AS		Client: General		Ref. stand: NS-EN ISO 15614-2	
Project: General		Ref. spec.: NORSOK M-102		Exam. body: Teknologisk Institutt	
Location: Sørskår		Ref. WPQR: SMV 101 rev.2			
Welding process	131*				
Shielding gas type	1 Mison Ar (I1)	2		3	
Weaving (yes/no)	Yes max.: 12 mm		max.: mm		max.: mm
Purging gas type	NA l/min				
Welding positions	PA, PB PC, PD PE, PF				
Joint type	BW/FW				
Joint preparation	Machining				
Cleaning method	Acetone/ SS Wire brush				
Backing	nb/mb				
Single/Double	ss/bs				
Back gouging	Grinding				
Flux designation	NA				
Flux handling	NA				
Tungsten electrode	NA mm				
Torch angle	70-90 °				
Stand off distance	10-20 mm				
Nozzle diameter(s)	16				
Tack welding proc.	SMV, Standart Rev.: _____				

Identification of parent metal		I C max:	CE max:	PCM max:	II C max:	CE max:	PCM max:
	Name/Grade	Standard	Group	Delivery cond.	Thickness range [mm]	Diameter range [mm]	
I	EN AW 6082	EN 573-3	23.1	T651	3,00 - 40,00	500,0 -	
II					-	-	

Identification of filler metal				
Index	Trade name	Classification	Group	Filler handling
1	ESAB Autrod 5183	AWS A 5.10 ER 5183		Supplier Specification
2				
3				

Welding Parameters											Equipment:
Pass no.	Index	Dia. [mm]	Welding process	Wire feed speed [m/min]	Current [A]	Volt [V]	Current / Polarity	Welding speed [mm/min]	Run Out Length [mm]	Gas [l/min]	Heat input [kJ/mm]
FW				-	-	-		-			-
1	1	1,20	131	7,00-8,00	120 - 140	19 - 20	DC+	320 - 400		18-20	0,3 - 0,5
Cap	1	1,20	131	10,0-11,0	160 - 190	21 - 23	DC+	230 - 460		18-20	0,4 - 1,1
BW				-	-	-		-			-
1	1	1,20	131	7,00-8,00	110 - 140	17 - 19	DC+	320 - 350		18-20	0,3 - 0,5
Fill1	1	1,20	131	9,00-10,0	160 - 170	20 - 21	DC+	340 - 460		18-20	0,4 - 0,6
Fill2	1	1,20	131	10,0-12,0	170 - 200	21 - 22	DC+	320 - 620		18-20	0,3 - 0,8
Cap	1	1,20	131	10,0-11,0	160 - 190	21 - 23	DC+	230 - 460		18-20	0,4 - 1,1
				-	-	-		-			-

Heat treatment		Method:	
Preheat min:	30 °C	Interpass temp. max:	100 °C
Heat treatment proc.: Propan		Temp. control: Heat stick	
PWHT min:	°C	max.: °C	Soaking: min/mm
Heating rate: °C/h		Cooling rate: °C/h	
Remarks: *Valid for manual welding only Throat thickness min 7,5mm			
Additional info enclosed (Yes/No): Date/Signature: _____ Approved: _____			

WELDING PROCEDURE SPECIFICATION (WPS)				WPS No.: SMWPS 102			
				Ref.: Olav Sørskår			
				Date: Rev.: 3			
Prod. by: Sørskår Mek. Verksted AS		Client: General		Ref. stand: NS EN ISO 15614-2			
Project: General		Ref. spec.: NORSOK M-102		Exam. body: TI			
Location: TAU		Ref. WPQR: SMW 101-1 rev.2					
Welding process	131*						
Shielding gas type	1	Mison Ar (I1)	2		3		
Weaving (yes/no)	yes max.: 12 mm			max.: mm		max.: mm	
Purging gas type	NA		l/min				
Welding positions	PA, PB PC, PD PE, PF						
Joint type	BW						
Joint preparation	Machining, grinding						
Cleaning method	Acetone						
Backing	nb/mb						
Single/Double	ss/bs						
Back gouging	Grinding						
Flux designation	NA						
Flux handling	NA						
Tungsten electrode	NA mm						
Torch angle	70-90 °						
Stand off distance	10-20 mm						
Nozzle diameter(s)	16						
Tack welding proc.	SMV standard Rev.:						

Identification of parent metal		I C max:	CE max:	PCM max:	II C max:	CE max:	PCM max:
	Name/Grade	Standard	Group	Delivery cond.	Thickness range [mm]	Diameter range [mm]	
I	Aluminium 6082	EN 573-3	23.1	T651	3,00-40,00	500,0-9999	
II			23.1		-	-	

Identification of filler metal		Classification	Group	Filler handling
Index	Trade name			
1	ESAB OK Autrod 18,16	AWS A5.10:ER 5183		ESAB Supplier Specification
2				
3				

Welding Parameters												Equipment:
Pass no.	Index	Dia. [mm]	Welding process	Wire feed speed [m/min]	Current [A]	Volt [V]	Current / Polarity	Welding speed [mm/min]	Run Out Length [mm]	Gas [l/min]	Heat input [kJ/mm]	
1	1	1,20	131	7,00-8,00	110-140	17-19	DC+	320-350		18-20	0,3-0,5	
Fill	1	1,20	131	9,00-12,0	160-200	20-22	DC+	340-620		18-20	0,3-0,8	
Cap	1	1,20	131	10,0-11,0	160-190	21-23	DC+	230-460		18-20	0,4-1,1	
				-	-	-	-	-		-	-	
				-	-	-	-	-		-	-	
				-	-	-	-	-		-	-	
				-	-	-	-	-		-	-	
				-	-	-	-	-		-	-	
				-	-	-	-	-		-	-	

Heat treatment		Method:	
Preheat min: 30 °C	Interpass temp. max: 100 °C	Heat treatment proc.: Propan	Temp. control: Heat stik
PWHT min: °C	max.: °C	Soaking: min/mm	Heating rate: °C/h
		Cooling rate: °C/h	
Remarks:			
* Valid for manual Welding only			

Additional info enclosed (Yes/No):
 Date/Signature: *26.03.14*
Olav Sørskår
 Approved: