

# Welding Procedure Specification

EN ISO 15609-1:2004

<b>Client:</b> IHC Hydrohammer BV.		<b>WPS nr.:</b> LAB 2027D		<b>Additional info:</b>							
<b>Project:</b> Inner/outer screen NMS sections		<b>Rev. Nr.:</b> 00									
<b>Project No.:</b> 13772/13773		<b>Order No.:</b> ---									
<b>Supervision and inspection by:</b> QC IHC Hydrohammer BV.		<b>Drawing no.:</b> ---		<b>Dim:</b> Plate+Tube t: 20~80mm D: ≥ Ø150mm  <b>Dim:</b> Plate+Tube t: 20~80mm D: ≥ Ø150mm							
<b>Scope of work:</b> Welding of several structural details.		<b>Base material</b>	<b>1:</b> <b>Group:</b> 1.1 & 1.2 acc. EN ISO 15608 <b>Type:</b> ≤ S355 / Grade DH-36 <b>Chem.comp:</b> %C --- <b>Ceq. (IIW)</b> ---								
			<b>2:</b> <b>Group:</b> 1.1 & 1.2 acc. EN ISO 15608 <b>Type:</b> ≤ S355 / Grade DH-36 <b>Chem.comp:</b> %C --- <b>Ceq. (IIW)</b> ---								
<b>Welding process:</b>	<b>Root:</b> 138-S (GMAW)	<b>Filling pass:</b> 136-S (FCAW)		<b>Back welding:</b> 136-S (FCAW)							
<b>Welding position:</b>	PA (1G)	<b>Tackwelding Proces / method:</b>		Tackwelding in according with tackweld procedure LAB 2027A							
<b>Heat treatment, method &amp; details:</b>		<b>Workpiece temp.:</b> ≥ 100 °C (or calculated acc. NEN EN 1011-2)		<b>Interpass.temp.:</b> ≤ 225 °C							
		Gas burner or electric, controlled with calibrated temperature meter.		<b>Insulation:</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No							
<b>PWHT or ageing:</b> na.		<b>Soaking (post-heating) temp.:</b> --- °C		<b>Soaking (post heating) time:</b> --- Hours							
<b>Distance contact tube/work piece:</b> 10-15mm		<b>Shieldinggas nozzle diameter:</b> 16~20 mm		<b>Handling of consumables:</b> ---							
				<b>Remarks:</b> <b>Welding filler material:</b> A) Elga, Elgacore MXX 100 (AWS A5.18: E70C-6M/-6C) B) Elga, Elgacore DWA 50 (AWS A5.20:E71T-1M) <b>Shieldinggas / flux:</b> Argon 80% + CO <sub>2</sub> 20% (M21 acc. ISO 14175)							
<b>Edge preparation / bead sequence</b>				<input checked="" type="checkbox"/> <b>Weaving:</b> ≤12mm	<input checked="" type="checkbox"/> <b>Stringer-bead</b>						
Bead- or welding seq. nrs.	Apply to welding position	Welding Filler Material	Dim.	Shielding gas-/flux	Current (settings)			Shielding gas (l/min)	Travel-speed (mm/min)	Heat-input (KJ/mm)	
					Electrode polarity	Ampere (or wire-feed speed)	Voltage			Q	K=0.8
1	root	MXX 100	Ø1,2	M21	DC+	240 - 260	26 - 28	16 - 20	250 - 300	1.0	1.4
2	Hot pass	DWA 50	Ø1,2	M21	DC+	260 - 280	29 - 31	16 - 20	300 - 350	1.0	1.4
3 ~ n	Filler + cap	DWA 50	Ø1,2	M21	DC+	260 - 280	29 - 31	16 - 20	300 - 350	1.0	1.4
<b>Preparation of weld seam:</b> Thermal cutting / grinding, seam must be bright, dry and free from flame cutting slag, rust, scale, paint and any other impurities.											
<b>Treatment of root:</b> None						<b>Torch angle or position:</b> 80°					
<b>Backgouging method, depth &amp; shape:</b> Air-arc gouge & grind out the backside of the weld to sound metal before backwelding.											
<b>WPQR No.:</b>			<b>Range PQR:</b> NEN EN ISO 15614-1				<b>WPQ acc.:</b>				
No supporting WPQR available. For NDT & mechanical examination see MME ordernumber: <b>NDT: ND 1062676</b> <b>DT: 2027/1</b>			<b>Joint type:</b> BW + PP + FW t: 20 ~ 80,0 mm D: ≥ Ø 150 mm (rotating) a: ml: Unlimited <b>Position:</b> PA				NEN EN ISO 9606-1:2013 (EN 287-1: 2011)				
<b>NDT-ΔT</b>		As per applicable code requirements.									
<b>Originator WPS:</b>		<b>Checked by Sepers BV.</b>		<b>Approved by customer:</b>		<b>Approved by Insp. auth.:</b>					
Date: 08-01-2015		Date:		Date:		Date:					
http://www.sepers.nl/											