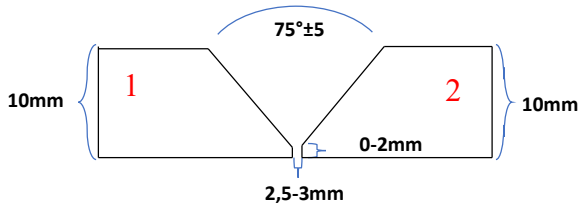
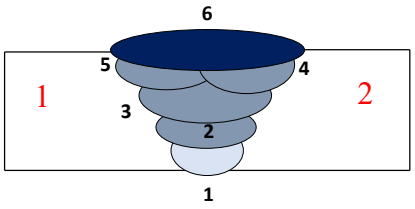
Ser Hidrolik Makina Mühendislik Elektrik Elektronik Sanayi ve Tic. Ltd.Şti	BV Rules on Material and Welding for the Classification of Marine Units, NR216, Ch 12, Sec 3, Approval of Welding Procedures **WPS**	WPS No: SER-WPS005 1173.ITB.24 Date of issue: 20.01.2025 Page 1/1

WELDING PROCEDURE SPECIFICATION

			Part 1	Part 2
WPQR No	: WPQR-05	Parent Material Grade	: 316L	316L
Method of preparation	: Grinding	Range of Material thickness	: 3mm≤t≤20mm	3mm≤t≤20mm
and cleaning	: Brushing	Range of Outside diameter	: 40mm ≤ OD	40mm ≤ OD
Joint Type	: Butt Joint	Range of Welding Position	: PA	
Welding Position	: PA			
Material Dia. &Thickness	: ø80mm, t:10mm			
Parent Material Spec.	: S. Steel & S. Steel			
BV Job Number	: 1173.ITB.24			

Weld Preparation Details

Joint design	Welding sequences
	

Welding Details

Run number	1	2	3	4	5	6
Welding process	141 (TIG)					
Autom. Welding .nr. of heads	-					
.weaving	-					
Filler metal:wire (W) or electrode (E)	W					
.Designation	Geka – ELOX SG 316 L					
.Grade	-					
.Description	-					
.Diameter	2,4	3,2	3,2	3,2	3,2	3,2
Shielding:Flux (F) or gas (G)	G					
.Power flux .description	-					
.type and trade name	-					
.Gas flux .descriprition	I1					
.type and trade name	KOYUNCU GAZ – **Backing:** I1 , **Shielding:** I1					
.Backing .flow rate (l/mn)	3 - 4					
.Shielding .flow rate (l/mn)	12 - 13					
.Plasma	-					
Tungsten electrode: type/size	-					
Type of current	DC					
Electrode or wire polarity	-					
Current (A)	90 - 100	120 - 140	120 - 140	120 - 140	120 - 140	120 - 140
Voltage (V)	12 - 14	13 - 15	13 - 15	13 - 15	13 - 15	13 - 15
Travel speed S (cm/min)	37,68	68,51	41,87	52,88	54,81	50,24
Wire feed speed (m/min)	-	-	-	-	-	-
Heat input (kJ/cm) = [k x V x A x 60] / S	1,03 – 1,34	0,83 – 1,10	1,34 – 1,81	1,06 – 1,43	1,02 – 1,38	1,12 – 1,50
Preheat temperature in °C	20°C					
Interpass temperature in °C (min/max)	250°C					

Post heating ☑ No ☐ Yes Temperature°C..... Holding Time.....

Post Weld Heat treatment ☑ No ☐ Yes Temperature°C..... Holding Time.....

Prepared by Firm Representative

Name: Mr. Orhan YİĞİT

Signature
Stamp

SER HİDROLİK MAKİNA MÜHENDİSLİK ELEKTRİK ELEKTRONİK

Bu Belge, 5070 Sayılı Elektronik İmza Kanunu'na Göre Güvenli Elektronik İmza ile İmzalanmıştır.

Endorsed by BV Surveyor

Name: Mr. Tarık KAMÇI

Signature:
BV Stamp

Tarık KAMÇI

This document was signed with Secure Electronic Signature according to 'The Electronic Signature Law' No.5070.