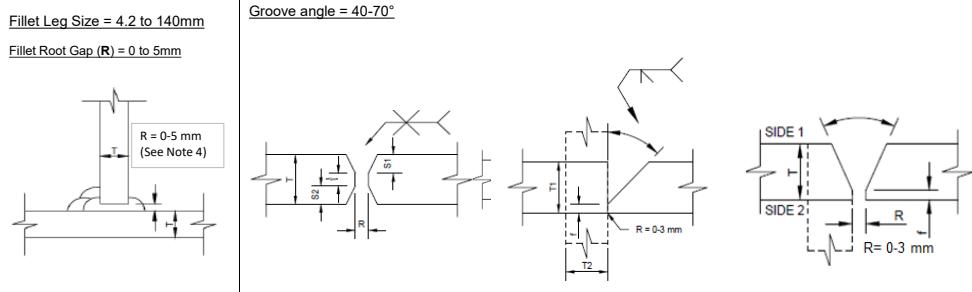


POLAR POCKET WPDS			Pocket-POLAR-01		0	April 17, 2025						
			WPDS No.		Rev.	Date						
<b>seaspan</b> SHIPYARDS	Seaspan Vancouver Shipyards Co. Ltd.			Applicable Standard(s)	Lloyds Register - Rules for the Manufacture, Testing and Certification of Materials 2022							
Process/Mode	Electrode (Wire) Classification			Brand Name(s)	Manufacturer(s)							
1 FCAW/Semi-Auto(Hand)	AWS A5.20 E71T-1C/9C-J-H4   LR Grade: 4Y40S			Dual Shield Prime 71 LT H4/C1	ESAB							
Material Designation	Base material 1 EH 36 and all lower grades excluding A,B, D and E (Note 5)	Base material 2 EH 36 and all lower grades excluding A,B, D and E (Note 5)	Min. Preheat / Interpass Temp.	As per VSY Preheat and Interpass Temperature Requirements for Welding								
Delivery Condition(s)	All except QT	All except QT	Max. Interpass Temp.	180°C								
Thickness or Dia	3 to 100 mm	3 to 100 mm	PWHT	N/A								
Nominal Pipe Size	500mm and above	500mm and above	Joint Design	Fillet, Butt single/double Bevel/Vee TKYX, CJP&PJP								
Welding Position	* All positions excluding Vertical down											



TYPICAL JOINT PREPARATION											
COMPLETE JOINT PENETRATION		Welding Layer	JOINT TYPE	Back Purge	N/A	Contact Tip to Work Distance	9.5-20 mm				
<input checked="" type="checkbox"/> Back-gouged to sound metal		multi-layer	<input checked="" type="checkbox"/> BUTT	Backing type	N/A						
<input type="checkbox"/> Welded onto backing			<input checked="" type="checkbox"/> CORNER								
<input type="checkbox"/> Welded from one side without backing			<input checked="" type="checkbox"/> LAP	Stringer/Slight Weave	Interpass Cleaning	Grinding and Wire Wheel					
<input type="checkbox"/> Welded both sides w/o back-gouging			<input checked="" type="checkbox"/> TEE	Max. Bead Width	18mm	Shielding Gas	100% CO2				
			<input checked="" type="checkbox"/> EDGE	Tungsten Electrode	N/A Ø:	Gas Flow	16-25 LPM				
Method of steel preparation	Oxy fuel/Plasma cut   Grinding   Milling			No. of electrodes	1		34-53 CFH				
BM Thickness, T(mm)	Layers / Passes	Position	Electrode Size (mm)	Welding Process	Power Mode	Consumable	Amperage (A)	Voltage (V)	WFS (IPM)	Travel Speed (mm/min)	Heat Input <sup>1</sup> kJ/mm
3 ≤ T ≤ 100	Root	All Ex. Vd.	1.2,1.4	FCAW Hand	CV DC+	AWS A5.20: E71T-1C/9C	130 - 250	19 - 25	170 - 300	55 - 140	See Note 6
3 ≤ T ≤ 100	Hot/Fill/Cap	All Ex. Vd.	0.9-1.6	FCAW Hand	CV DC+	AWS A5.20: E71T-1C/9C	110-430	16 - 38	170 - 500	100 - 650	See Note 6

Note 1: Heat Input (kJ/mm) = [V x A x 60] / [Travel Speed (mm/min) x 1000]

Note 2: Grind joint and adjacent surfaces to bright metal prior to welding to remove all traces of paint, primer, scale, rust, moisture and any other contaminants. Wire brush, grinding to be used for interpass cleaning.

Note 3: Travel angle = 5-10° Pull, For vertical up position/progression slight push should be used.

Note 4: Where the root gap R exceeds 3 mm but does not exceed 5 mm, the fillet leg length should be increased by R-2 mm.

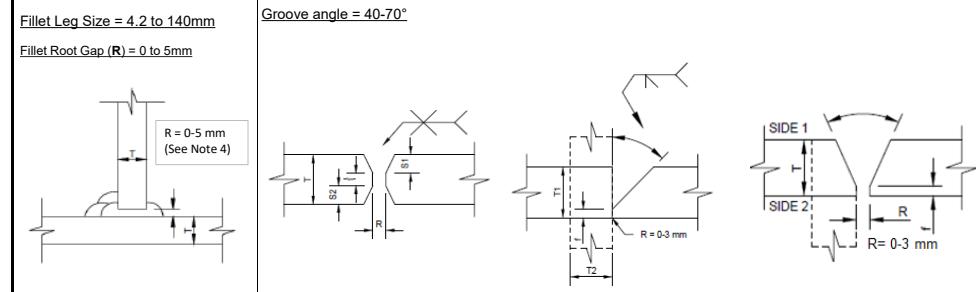
Note 5: Welding of the normal strength hull structure steel to normal strength hull structure steel (Grade A,B,D and E) using Dual Shield Prime 71LT is subject to special agreement with Lloyds Register.

Base Metal THK (mm)	3 ≤ T < 24	24 < T ≤ 100
Root Heat Input (kJ/mm)	1.5 - 3.2	1.5 - 3.8
Hot/Fill/Cap (kJ/mm)	0.5 - 2.0	0.6 - 2.7

Engineer Stamp

Reference WPS No. FC-CS-G-01 (Rev. 2)

POLAR POCKET WPDS			Pocket-POLAR-01		0	April 17, 2025						
			WPDS No.		Rev.	Date						
<b>seaspan</b> SHIPYARDS	Seaspan Vancouver Shipyards Co. Ltd.			Applicable Standard(s)	Lloyds Register - Rules for the Manufacture, Testing and Certification of Materials 2022							
Process/Mode	Electrode (Wire) Classification			Brand Name(s)	Manufacturer(s)							
1 FCAW/Semi-Auto(Hand)	AWS A5.20 E71T-1C/9C-J-H4   LR Grade: 4Y40S			Dual Shield Prime 71 LT H4/C1	ESAB							
Material Designation	Base material 1 EH 36 and all lower grades excluding A,B, D and E (Note 5)	Base material 2 EH 36 and all lower grades excluding A,B, D and E (Note 5)	Min. Preheat / Interpass Temp.	As per VSY Preheat and Interpass Temperature Requirements for Welding								
Delivery Condition(s)	All except QT	All except QT	Max. Interpass Temp.	180°C								
Thickness or Dia	3 to 100 mm	3 to 100 mm	PWHT	N/A								
Nominal Pipe Size	500mm and above	500mm and above	Joint Design	Fillet, Butt single/double Bevel/Vee TKYX, CJP&PJP								
Welding Position	* All positions excluding Vertical down											



TYPICAL JOINT PREPARATION											
COMPLETE JOINT PENETRATION		Welding Layer	JOINT TYPE	Back Purge	N/A	Contact Tip to Work Distance	9.5-20 mm				
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<input type="checkbox"/> Welded onto backing			<input checked="" type="checkbox"/> CORNER								
<input type="checkbox"/> Welded from one side without backing			<input checked="" type="checkbox"/> LAP	Stringer/Slight Weave	Interpass Cleaning	Grinding and Wire Wheel					
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			<input checked="" type="checkbox"/> EDGE	Tungsten Electrode	N/A Ø:	Gas Flow	16-25 LPM				
Method of steel preparation	Oxy fuel/Plasma cut   Grinding   Milling			No. of electrodes	1		34-53 CFH				
BM Thickness, T(mm)	Layers / Passes	Position	Electrode Size (mm)	Welding Process	Power Mode	Consumable	Amperage (A)	Voltage (V)	WFS (IPM)	Travel Speed (mm/min)	Heat Input <sup>1</sup> kJ/mm
3 ≤ T ≤ 100	Root	All Ex. Vd.	1.2,1.4	FCAW Hand	CV DC+	AWS A5.20: E71T-1C/9C	130 - 250	19 - 25	170 - 300	55 - 140	See Note 6
3 ≤ T ≤ 100	Hot/Fill/Cap	All Ex. Vd.	0.9-1.6	FCAW Hand	CV DC+	AWS A5.20: E71T-1C/9C	110-430	16 - 38	170 - 500	100 - 650	See Note 6

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Engineer Stamp

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