

	POLAR POCKET WPDS		Pocket-POLAR-03	0	April 17, 2025
	WPDS No.	Rev.	Date		



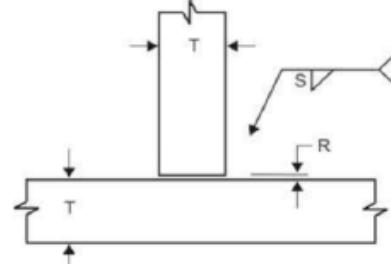
Seaspan Vancouver Shipyards Co. Ltd.

Lloyds Register - Rules for
the Manufacture, Testing
and Certification of
Materials 2022

Process/Mode	Electrode (Wire) Classification		Brand Name(s)	Manufacturer(s)
1 FCAW/Auto(Moggy)	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 6)	Base material 2 EH 36 and all lower grades excluding A,B,D, and E (Note 6)	Min. Preheat / Interpass Temp.	As per VSY Preheat and Interpass Temperature Requirements for Welding
Delivery Condition(s)	All except QT	All except QT		
Thickness or Dia	3 mm - 24 mm	3 mm - 24 mm	Max. Interpass Temp.	150°C
Nominal Pipe Size	500mm and above	500mm and above	PWHT	N/A
Welding Position	All positions excluding vertical down		Joint Design	Fillet

Fillet Leg Size = 4 to 8mm (see Note 6)

Fillet Root Gap (R) = 0 to 5 mm



TYPICAL JOINT PREPARATION

COMPLETE JOINT PENETRATION		JOINT TYPE	Back Purge	N/A	Contact Tip to Work Distance	9.5-20 mm									
<input type="checkbox"/>	Back-gouged to sound metal	<input type="checkbox"/> BUTT	Backing type	N/A											
<input type="checkbox"/>	Welded onto steel backing	<input type="checkbox"/> CORNER	Welding Technique	Stringer/Slight Weave											
<input type="checkbox"/>	Welded form one side without backing	<input checked="" type="checkbox"/> LAP	Max. Bead Width	18mm											
<input type="checkbox"/>	Welded both sides w/o back-gouging	<input type="checkbox"/> TEE	Tungsten Electrode	N/A											
<input type="checkbox"/>	Welded onto other than steel backing	<input type="checkbox"/> EDGE	Cleaning	Grinding and Wire Wheel											
BM Thickness, T(mm)	Layers / Passes	Electrode Size (mm)	Welding Process	Power Mode	Consumable	Amperage	Voltage	WFS (IPM)	Travel Speed (mm/min)	Heat Input ¹ kJ/mm					
3 ≤ T ≤ 24	All	All ex. Vd	1.2 - 1.6	FCAW Moggy	CV DC+	AWS A5.20: E71T-1C/9C	200 - 310	20- 30	255 - 438	161 - 380	0.8 - 1.9				

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

Note 2: Welding joints and adjacent surface to be free from all contaminants, welding over shop primer is permitted in accordance with Note 5.

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

Note 4: Shop Primer: Interplate 937 (Manufacturer: International) maximum dry film thickness: 20 µm as per manufacturer recommendation.

Note 5: 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 6: 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.

Engineer Stamp

Bug-O Weave Setting	Dwell(L&R): 0 - 1.0	Weave width: 0 - 18	
	Weave Pattern No.: #1 for 2G / #1 & #3 for other	Weave speed: 0 - 50	
Reference WPS No.	FC-CS-F-04 (Rev.0)		

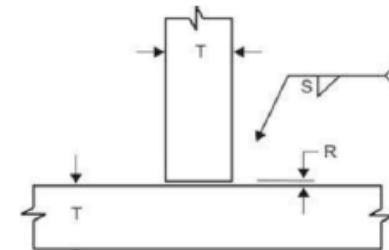
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