



Hobart Brothers LLC USA
 101 Trade Square East
 Troy, OH 45373

AWS D1.8/D1.8M 2016 Annex B Intermix CVN Toughness Certificate of Conformance
 (Applicable to the Hobart Brothers' intermixed welding electrodes and fluxes listed below)

Substrate/Root Electrode:			Fill Electrode:			CVN Toughness:	
Test Number:	Product Name:	AWS Classification:	Product Name:	AWS Classification:	Diameter:	All Weld Acceptance Reqs: 20 ft. lbs. @ 0°F (27 J @ -18°C)	Demand Critical Weld Acceptance Reqs: 40 ft. lbs. @ 70°F (54 J @ 21°C)
PD6738	Hobart 418	E7018-1 H4R	Fabshield XLNT-6	E70T-6	3/32"	31, 32, 33 / 32 avg. (42, 43, 45 / 43 avg.)	62, 63, 64 / 63 avg. (84, 85, 87 / 85 avg.)
PD2891	Hobart 418	E7018-1 H4R	Fabshield XLR-8	E71T-8JD-H8	1/16"	41, 40, 38 / 40 avg. (56, 54, 52 / 54 avg.)	74, 64, 66 / 68 avg. (100, 87, 89 / 92 avg.)
PD2900	Hobart 418	E7018-1 H4R	Fabshield XLR-8	E71T-8JD-H8	.072"	64, 60, 69 / 64 avg. (88, 81, 94 / 88 avg.)	91, 96, 105 / 97 avg. (123, 130, 142 / 132 avg.)
PD2915	Hobart 418	E7018-1 H4R	Fabshield XLR-8	E71T-8JD-H8	5/64"	103, 112, 104 / 106 avg. (140, 152, 141 / 144 avg.)	141, 134, 140 / 138 avg. (191, 182, 190 / 188 avg.)
PE2848	FabCO RXR	E70T-1C, E70T-9C	Fabshield XLR-8	E71T-8JD-H8	1/16"	40, 42, 42 / 41 avg. (54, 57, 57 / 56 avg.)	68, 65, 61 / 65 avg. (92, 88, 83 / 88 avg.)
PE2840	FabCO RXR	E70T-1C, E70T-9C	Fabshield XLR-8	E71T-8JD-H8	.072"	46, 48, 45 / 46 avg. (62, 65, 61 / 63 avg.)	83, 79, 80 / 81 avg. (112, 107, 108 / 109 avg.)
PE2846	FabCO RXR	E70T-1C, E70T-9C	Fabshield XLR-8	E71T-8JD-H8	5/64"	68, 65, 61 / 65 avg. (92, 88, 83 / 88 avg.)	64, 65, 65 / 65 avg. (87, 88, 88, / 88 avg.)
PE1728	FabCO TR-70	E70T-1C H8, E70T-9C H8	Fabshield XLR-8	E71T-8JD-H8	1/16"	38, 40, 36 / 38 avg. (52, 54, 49 / 52 avg.)	62, 72, 70 / 68 avg. (84, 98, 95 / 92 avg.)
PE2834	FabCO TR-70	E70T-1C H8, E70T-9C H8	Fabshield XLR-8	E71T-8JD-H8	.072"	48, 52, 50 / 50 avg. (65, 70, 68 / 68 avg.)	77, 78, 77 / 77 avg. (104, 106, 104 / 105 avg.)
PE2832	FabCO TR-70	E70T-1C H8, E70T-9C H8	Fabshield XLR-8	E71T-8JD-H8	5/64"	51, 51, 53 / 52 avg. (69, 69 72) / 70 avg.)	83, 82, 84 / 83 avg. (112, 111, 114 / 112 avg.)
PE2772	FabCO Excel-Arc 71	E71T-1C/M H8, E71T-9C/M H8	Fabshield XLR-8	E71T-8JD-H8	1/16"	36, 34, 37 / 36 avg. (49, 46, 50 / 48 avg.)	52, 51, 54 / 52 avg. (70, 69, 73 / 71 avg.)
PE2771	FabCO Excel-Arc 71	E71T-1C/M H8, E71T-9C/M H8	Fabshield XLR-8	E71T-8JD-H8	.072"	45, 46, 48 / 46 avg. (61, 62, 65 / 63 avg.)	80, 81, 79 / 80 avg. (108, 110, 107 / 108 avg.)
PE2768	FabCO Excel-Arc 71	E71T-1C/M H8, E71T-9C/M H8	Fabshield XLR-8	E71T-8JD-H8	5/64"	34, 33, 35 / 34 avg. (46, 45, 47 / 46 avg.)	58, 63, 66 / 62 avg. (76, 85, 89 / 83 avg.)
PE2806	FabCO Triple 7	E71T-1C/M H8, E71T-9C/M H8	Fabshield XLR-8	E71T-8JD-H8	1/16"	36, 36, 36 / 36 avg. (49, 49, 49 / 49 avg.)	55, 62, 57 / 58 avg. (74, 84, 77 / 78 avg.)
PE2808	FabCO Triple 7	E71T-1C/M H8, E71T-9C/M H8	Fabshield XLR-8	E71T-8JD-H8	.072"	48, 49, 46 / 48 avg. (65, 66, 62 / 64 avg.)	81, 81, 80 / 81 avg. (110, 110, 108 / 109 avg.)



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PE2812	FabCO Triple 7	E71T-1C/M H8, E71T-9C/M H8	Fabshield XLR-8	E71T-8JD-H8	5/64"	50, 53, 56 / 53 avg. (68, 72, 76 / 72 avg.)	84, 77, 74 / 78 avg. (114, 104, 100 / 106 avg.)
PE2621	FabCOR 86R	E70C-6M H4	Fabshield XLR-8	E71T-8JD-H8	1/16"	32, 31, 31 / 31 avg. (43, 42, 42 / 42 avg.)	48, 54, 52 / 51 avg. (65, 73, 70 / 69 avg.)
PE2706	FabCOR 86R	E70C-6M H4	Fabshield XLR-8	E71T-8JD-H8	.072"	38, 37, 40 / 38 avg. (52, 50, 54 / 52 avg.)	77, 74, 77 / 76 avg. (104, 100, 104 / 103 avg.)
PE2507	FabCOR 86R	E70C-6M H4	Fabshield XLR-8	E71T-8JD-H8	5/64"	22, 23, 24 / 23 avg. (30, 31, 32 / 31 avg.)	42, 38, 41 / 40 avg. (57, 52, 54 / 54 avg.)
PE2709	FabCOR Edge XP	E70C-6M H4	Fabshield XLR-8	E71T-8JD-H8	1/16"	33, 33, 32 / 33 avg. (45, 45, 43 / 44 avg.)	50, 50, 55 / 52 avg. (68, 68, 75 / 70 avg.)
PE2708	FabCOR Edge XP	E70C-6M H4	Fabshield XLR-8	E71T-8JD-H8	.072"	49, 47, 45 / 47 avg. (66, 64, 61 / 64 avg.)	77, 78, 77 / 77 avg. (104, 106, 104 / 105 avg.)
PE2733	FabCOR Edge XP	E70C-6M H4	Fabshield XLR-8	E71T-8JD-H8	5/64"	44, 40, 44 / 43 avg. (60, 54, 60 / 58 avg.)	70, 63, 70 / 68 avg. (95, 85, 95 / 92 avg.)
PE3000	SubCOR EM12K HN-590 Flux	F7A6-EC1	Fabshield XLR-8	E71T-8JD-H8	1/16"	38, 37, 37 / 37 avg. (52, 50, 50 / 51 avg.)	54, 53, 54 / 54 avg. (73, 72, 73 / 73 avg.)
PE3038	SubCOR EM12K HN-590 Flux	F7A6-EC1	Fabshield XLR-8	E71T-8JD-H8	.072"	43, 54, 48 / 48 avg. (58, 73, 65 / 65 avg.)	76, 71, 75 / 74 avg. (103, 96, 102 / 100 avg.)
PE3039	SubCOR EM12K HN-590 Flux	F7A6-EC1	Fabshield XLR-8	E71T-8JD-H8	5/64"	37, 40, 39 / 39 avg. (50, 54, 53 / 52 avg.)	59, 61, 57 / 59 avg. (80, 83, 77 / 80 avg.)
PE3245	SubCOR 92-S HN-590 Flux	F8A8-ECM1- M1	Fabshield XLR-8	E71T-8JD-H8	1/16"	19, 29, 23 / 24 avg. (26, 39, 31 / 32 avg.)	49, 47, 52 / 49 avg. (66, 64, 70 / 67 avg.)
PE3854	SubCOR 92-S HN-590 Flux	F8A8-ECM1- M1	Fabshield XLR-8	E71T-8JD-H8	.072"	41, 42, 37 / 40 avg. (56, 57, 50 / 54 avg.)	67, 66, 73 / 69 avg. (91, 89, 99 / 93 avg.)
PE3855	SubCOR 92-S HN-590 Flux	F8A8-ECM1- M1	Fabshield XLR-8	E71T-8JD-H8	5/64"	37, 37, 36 / 37 avg. (50, 50, 49 / 50 avg.)	52, 55, 57 / 55 avg. (70, 75, 77 / 74 avg.)

Note: Substrate/Root electrode diameter references are not required by AWS D1.8/D1.8M:2016 Annex B and are excluded from this test report.

This is to certify that the products named are of the same classification, manufacturing process, and material requirements as the material, which were used for the tests which were concluded on the date shown, the results of which are shown above. All tests required by the code or specifications were performed and the material tested met all requirements. The product was manufactured and supplied by the Quality System Program of Hobart Brothers, which meets the requirements of ISO 9001:2015, ANSI/AWS A5.01, and other specification and Military requirements, as applicable.

The information contained or otherwise referenced herein is presented without guarantee or warranty. Hobart Brothers LLC expressly disclaims any liability incurred from any reliance thereon. Data for the above-supplied products are those obtained during the welding process and tested in accordance with the above specification with electrodes of the same manufacturing processes and material requirements. All tests for the above classification were performed satisfactorily. No data is to be construed as a recommendation for any welding condition or technique not controlled by Hobart Brothers. Please refer to the Hobart Brothers website at www.hobartbrothers.com for current Safety Data Sheets ("SDS").

Quality Assurance Specialist David A. Thomas, May 13, 2022