

Dimensions (USC)	7	8	0.312	8	4
Product Specification:	API Spec 5CT 1500 Edition				
Additional Specification:					
Grade / PSL	B5, M55, PSL1				
Class	Not Applicable				
Delivery Condition:	As rolled with normalizing verified				
Type of ends:	Plain End				
Surface finish:	Uncoated				

Mechanical Properties

Alt	Planes	Length [ft]	Weight [kg]		%C	%Al	%AP	%SS	%SL	%AA	%Nb	%Cu	%C	%Mo	%V	%Ni	%Sb	%Co	%Ti	%Mn	%B	CE [JW]	CE [Fein]	VS [Cu]	TS [Cu]	Elong [kg]	YS / TS	UTS [ksi]	Charpy 1 [ft-lb]	Charpy 2 [ft-lb]	Charpy 3 [ft-lb]	Charpy average [ft-lb]	Hardness test
130733	NA	1,738.07	12,536.00	Intermetallic Control	0.2602	1.0595	0.2126	0.0519	0.1764	0.0466	0.0079	0.0129	0.0622	0.0160	0.2045	0.0109	0.0634	0.0034	0.0030	0.0019	0.0017	0.0018	0.0018	21.5	35.3	30	0.0002	NA	NA	NA	NA	NA	NA
				Control	0.2602	1.0490	0.2093	0.0507	0.2120	0.0496	0.0072	0.0172	0.0590	0.0160	0.2060	0.0110	0.0619	0.0034	0.0030	0.0019	0.0017	0.0018	0.0018	21.5	35.3	30	0.0002	NA	NA	NA	NA	NA	NA
				Control	0.2103	1.1710	0.1883	0.0472	0.2588	0.0474	0.0074	0.0162	0.0607	0.0164	0.1989	0.0107	0.0606	0.0034	0.0030	0.0019	0.0017	0.0018	0.0018	21.5	35.3	30	0.0002	NA	NA	NA	NA	NA	NA
435789	2ND	121,768.01	122,118.00	Intermetallic Control	0.2602	1.0595	0.2126	0.0519	0.1764	0.0466	0.0079	0.0129	0.0622	0.0160	0.2045	0.0109	0.0634	0.0034	0.0030	0.0019	0.0017	0.0018	0.0018	21.5	35.3	30	0.0002	NA	NA	NA	NA	NA	NA
				Control	0.2602	1.0490	0.2093	0.0507	0.2120	0.0496	0.0072	0.0172	0.0590	0.0160	0.2060	0.0110	0.0619	0.0034	0.0030	0.0019	0.0017	0.0018	0.0018	21.5	35.3	30	0.0002	NA	NA	NA	NA	NA	NA
				Control	0.2103	1.1710	0.1883	0.0472	0.2588	0.0474	0.0074	0.0162	0.0607	0.0164	0.1989	0.0107	0.0606	0.0034	0.0030	0.0019	0.0017	0.0018	0.0018	21.5	35.3	30	0.0002	NA	NA	NA	NA	NA	NA
2007206	2ND	121,662.05	120,412.00	Intermetallic Control	0.2602	1.0595	0.2126	0.0519	0.1764	0.0466	0.0079	0.0129	0.0622	0.0160	0.2045	0.0109	0.0634	0.0034	0.0030	0.0019	0.0017	0.0018	0.0018	21.5	35.3	30	0.0002	NA	NA	NA	NA	NA	NA
				Control	0.2602	1.0490	0.2093	0.0507	0.2120	0.0496	0.0072	0.0172	0.0590	0.0160	0.2060	0.0110	0.0619	0.0034	0.0030	0.0019	0.0017	0.0018	0.0018	21.5	35.3	30	0.0002	NA	NA	NA	NA	NA	NA
				Control	0.2103	1.1710	0.1883	0.0472	0.2588	0.0474	0.0074	0.0162	0.0607	0.0164	0.1989	0.0107	0.0606	0.0034	0.0030	0.0019	0.0017	0.0018	0.0018	21.5	35.3	30	0.0002	NA	NA	NA	NA	NA	NA
731707	2FA	3,846.91	81,346.00	Intermetallic Control	0.2602	1.0595	0.2126	0.0519	0.1764	0.0466	0.0079	0.0129	0.0622	0.0160	0.2045	0.0109	0.0634	0.0034	0.0030	0.0019	0.0017	0.0018	0.0018	21.5	35.3	30	0.0002	NA	NA	NA	NA	NA	NA
				Control	0.2602	1.0490	0.2093	0.0507	0.2120	0.0496	0.0072	0.0172	0.0590	0.0160	0.2060	0.0110	0.0619	0.0034	0.0030	0.0019	0.0017	0.0018	0.0018	21.5	35.3	30	0.0002	NA	NA	NA	NA	NA	NA
				Control	0.2103	1.1710	0.1883	0.0472	0.2588	0.0474	0.0074	0.0162	0.0607	0.0164	0.1989	0.0107	0.0606	0.0034	0.0030	0.0019	0.0017	0.0018	0.0018	21.5	35.3	30	0.0002	NA	NA	NA	NA	NA	NA
2304917	1ND	3,873.01	82,600.00	Intermetallic Control	0.2602	1.0595	0.2126	0.0519	0.1764	0.0466	0.0079	0.0129	0.0622	0.0160	0.2045	0.0109	0.0634	0.0034	0.0030	0.0019	0.0017	0.0018	0.0018	21.5	35.3	30	0.0002	NA	NA	NA	NA	NA	NA
				Control	0.2602	1.0490	0.2093	0.0507	0.2120	0.0496	0.0072	0.0172	0.0590	0.0160	0.2060	0.0110	0.0619	0.0034	0.0030	0.0019	0.0017	0.0018	0.0018	21.5	35.3	30	0.0002	NA	NA	NA	NA	NA	NA
				Control	0.2103	1.1710	0.1883	0.0472	0.2588	0.0474	0.0074	0.0162	0.0607	0.0164	0.1989	0.0107	0.0606	0.0034	0.0030	0.0019	0.0017	0.0018	0.0018	21.5	35.3	30	0.0002	NA	NA	NA	NA	NA	NA

Laboratory tests Results

Chemical Composition	Tensile Test	Metallography	Charpy Test	Hardness Test	Ductile fracture Test	Carbon equivalent
API SPEC 70S PS-1	480 minimum yield strength	Compositional Microanalysis Per Spec	Not Applicable	Not Applicable	Not Applicable	Not Applicable

Inspection Results

Macrography	Pipe Weld Seam NDT UT-CT NDT	Flattening Test NPS SCT Approved	Hydrostatic Test 4,000 psi @ 60° Approved	Full Body NDT Not Applicable	Drift Test Approved	Dimensional Inspection AS SCT Approved	Heat Treatment Seen on drawing at 1200 °F Approved
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Terms, Definitions, Symbols and Abbreviations

[illegible]

Statement

It is hereby certified that the product was manufactured, sampled, tested and inspected according to the requirements of the applicable specifications and this result achieved has been approved.

Comments

Production Order or Customer Item

Agreeing with the foregoing herein, they sign

Kavilani Endler

FABE WEYKZ/memo

Customer Address: 1820 WILLOW PASS RD. SUITE 700, CONCORD, CA 94530 USA

São Bento do Sul, 1/14/2020