Tubacero

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CONSTANCIA DE INSPECCION

INSPECTION CONSTANCY

No. CONSTANCIA (constancy No.): **100244**

CLIENTE(customer): PLESA ANÁHUAC Y CÍAS., S.A. DE C.V.

DIRECCION(address): AV. VALLE DE LAS ALAMEDAS # 66- O COL. SAN FCO. CHILPAN TULTITLÁN, EDO. DE MÉXICO. C.P. 54940

O.T. (order no.)	DIAMETRO (outside diam.)	ESPESOR (thickness)	GRADO (grade)	ESPECIFICACION (specification)	PROCESO (process)	PEDIDO (contract)	O. PREPARACION (preparation order)	PROVEEDOR (supplier)	FECHA (date)
33488	12.750"	0.375"	X42/5LB PSL 1/A53B	API SPEC 5L 44TH ED./A.S.T.M.	HFW	7689	FB-011-2010	TERNIUM	17/03/2010

TUBO (pipe) O SERIE (SERIAL)	COLADA (heat)	TYPE	LOC	PRUEBA DE TENSION(tensile test) UNIDADES: (units) PSI (Y.S.)	ORIENTACION: (orientation) 1 (T.S.)	TAMAÑO: (size) 3 % EL.	Y.S/T.S.	BEND	HARDNESS	PRUEBA DE IMPACTO (impact test) -10 °C °F ORIENTACION (orientation) TAMAÑO: (size) 1:1 ENERGY (lbs/ft) 1	2	3	AVG	SHEAR AREA 1	2	3	AVG	DWTT -10 SHEAR AREA 1	2	AVG	GRAIN SIZE
			6		75600																
58	0812864	H	7	52400	65100	42	0.80														
			6		74900																
37	0822875	H	7	53300	67100	43	0.79														
			6		75600																
83	0812441	H	7	52200	66900	42	0.78														
			6		79200																
92	0842504	H	7	59000	73600	40	0.80														
			6		75100																
165	0822877	H	7	51400	67400	42	0.76														
			6		72300																
30	0812860	H	7	53000	68200	45	0.77														
15	0812864		6																		9
110	0812861		6																		9
CRITERIOS DE ACEPTACION: (Acceptance critera) MIN:				42.1	60.2	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MAX:																					
PROMEDIO (AVG.)																					

TUBO (pipe) O SERIE (SERIAL)	TYPE	LOC	(%)ANALISIS QUIMICO / chemical analysis (%) C	Mn	P	S	Si	Al	Cu	Cr	Ni	Mo	Ti	Nb	B	V	N	Als	Ca	PCM	CE
58	H	7	0.19	0.70	0.011	0.003	0.185	0.033	0.000	0.000	0.000	0.000	0.000	0.000	0.0000	0.000	-	-	0.000	-	-
	P	7	0.17	0.72	0.013	0.002	0.191	0.027	0.009	0.001	0.001	0.001	0.002	0.002	0.0002	0.002	-	-	0.002	0.22	0.29
	P	7	0.19	0.70	0.013	0.001	0.189	0.026	0.007	0.001	0.001	0.001	0.001	0.002	0.0003	0.002	-	-	0.001	0.23	0.31
37	H	7	0.18	0.69	0.009	0.003	0.152	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.0000	0.000	-	-	0.000	-	-
	P	7	0.17	0.73	0.012	0.002	0.170	0.029	0.006	0.001	0.001	0.001	0.001	0.002	0.0003	0.001	-	-	0.002	0.22	0.30
	P	7	0.16	0.72	0.012	0.002	0.172	0.029	0.008	0.001	0.001	0.001	0.001	0.002	0.0003	0.001	-	-	0.002	0.20	0.28
83	H	7	0.17	0.67	0.008	0.005	0.154	0.034	0.006	0.012	0.003	0.001	0.001	0.001	0.0000	0.001	-	-	0.002	-	-
	P	7	0.21	0.69	0.012	0.003	0.170	0.026	0.011	0.001	0.001	0.001	0.001	0.008	0.0003	0.001	-	-	0.001	0.25	0.33
	P	7	0.21	0.69	0.012	0.003	0.170	0.026	0.008	0.001	0.001	0.001	0.001	0.001	0.0003	0.001	-	-	0.001	0.26	0.33
92	H	7	0.18	0.68	0.008	0.001	0.190	0.037	0.000	0.000	0.000	0.000	0.000	0.000	0.0000	0.000	-	-	0.000	-	-
	P	7	0.21	0.68	0.012	0.001	0.209	0.028	0.012	0.001	0.001	0.001	0.002	0.001	0.0002	0.001	-	-	0.001	0.25	0.32
	P	7	0.21	0.68	0.012	0.001	0.210	0.029	0.010	0.001	0.001	0.001	0.002	0.002	0.0002	0.001	-	-	0.001	0.25	0.33
165	H	7	0.18	0.87	0.010	0.002	0.164	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.0000	0.000	-	-	0.000	-	-
	P	7	0.16	0.91	0.013	0.001	0.186	0.029	0.012	0.001	0.001	0.001	0.001	0.001	0.0003	0.001	-	-	0.001	0.21	0.31
	P	7	0.15	0.90	0.013	0.001	0.177	0.028	0.011	0.001	0.001	0.001	0.001	0.001	0.0003	0.001	-	-	0.001	0.20	0.30
30	H	7	0.18	0.69	0.011	0.002	0.184	0.034	0.000	0.000	0.000	0.000	0.000	0.000	0.0000	0.000	-	-	0.000	-	-
	P	7	0.20	0.74	0.015	0.003	0.192	0.027	0.015	0.002	0.001	0.001	0.001	0.003	0.0003	0.001	-	-	0.001	0.25	0.33
	P	7	0.22	0.75	0.015	0.002	0.203	0.028	0.016	0.003	0.001	0.001	0.001	0.003	0.0003	0.001	-	-	0.001	0.27	0.35
CRITERIOS DE ACEPTACION: (Acceptance critera) MIN:																					
MAX:			0.26	1.20	0.030	0.030	-	-	0.500	0.400	0.400	0.150	0.040	-	-	0.080	-	-	-	-	-
PROMEDIO (AVG.)																					

PRUEBA HIDROSTATICA: (hidrostatic test) PRESION: (pressure) 2105 Psi TIEMPO: (time) 10 sec

ULTRASONIDO(U.T.): (ultrasonic) STANDARD DE REFERENCIA: J REFERENCE STANDARD

RAYOS-X (RT): (x-ray) PENETROMETRO (penetrometer): N/A

NORMALIZADO DE SOLDADURA: (heat treatment weld) TEMPERATURA (temperature): 1600° F MIN (NO UNTEMPERED MARTENSITE REMAINS)

ESTANDAR DE REFERENCIA (REFERENCE STANDARD) F: U.T. DRILLED HOLE 1/16", G: U.T. DRILLED HOLE 1/8", I: U.T. NOTCH N-5, J: U.T. NOTCH N-10 L: RT HOLE 1/16", N: RT HOLE 2-2T O: RT HOLE 2-4T Barreno (Drilled Hole)=H Muesca (Notch)=N

ORIENTACION(orientation):
1. TRANSVERSAL (transverse)
2. LONGITUDINAL (longitudinal)

TAMAÑO (size)
3.RECTANGULAR(rectangular)
4.CILINDRICA(round bar) 0.500"
5.CILINDRICA(round bar) 0.350"

LOCALIZACION (location)
6. SOLDADURA (weld)
7. METAL BASE (base metal)
8. ZONA AFECTADA (h.a.z.)
9. LINEA DE FUSION (fusion line)

TIPO DE PRUEBA (type)
H: COLADA (heat)
P: PRODUCTO (product)
R: REMUESTREO (recheck)

HACEMOS CONSTAR QUE EL MATERIAL DESCRITO HA SIDO FABRICADO, MUESTREADO, PROBADO E INSPECCIONADO DE ACUERDO A LA ESPECIFICACION MENCIONADA, Y QUE LOS RESULTADOS SON COMO APARECEN EN LOS REGISTROS DE LA COMPAÑIA
(WE HEREBY VERIFY THAT MATERIAL DESCRIBED HEREIN HAS BEEN MANUFACTURED, SAMPLED, TESTED AND INSPECTED IN ACCORDANCE WITH THE SPECIFICATION MENTIONED AND THAT THESE TEST RESULT ARE AS THEY APPEAR IN RECORDS OF THE COMPANY)

Control de Calidad (Quality Control)

CONTROL DE CALIDAD TUBACERO, S.A. DE C.V. 04

REV. 4 Mzo-09

F-TUME-013