Tubacero

Ave. Guerrero
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CONSTANCIA DE INSPECCION

INSPECTION CONSTANCY

No. CONSTANCIA (constancy No.): **110686**

CLIENTE(customer): PLESA ANÀHUAC Y `CIAS., S.A. DE C.V.

DIRECCION(address): AV. VALLE DE LAS ALAMEDAS # 66-O COL. SAN FCO. CHILPAN. TULTITLÀN, EDO. DE MÈXICO. 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)
33545	12,750"	0,250"	X42/ B PSL 1/A53B	API SPEC 5L 44TH ED./A.S.T.M.	HFW/ERW	10807	SB-145-2011	AHMSA	09/07/2011

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) °C ORIENTACION °F (orientation) ENERGY (lbs/ft) 1	2	3	AVG	TAMAÑO. (size) SHEAR AREA 1	2	3	AVG	DWTT SHEAR AREA 1	2	AVG	GRAIN SIZE
159	105959	H	6		77100																
			7	53400	71000	39	0.75														
252	208988	H	6		72900																
			7	53800	65800	42	0.81														
3	208987	H	6		68800																
			7	53800	65800	43	0.81														
133	209001	H	6		73200																
			7	55700	67300	42	0.82														
212	204867	H	6		73200																
			7	53900	69200	40	0.77														
209	110117	H	6		86300																
			7	57300	74200	40	0.77														
130	208992	H	6		71300																
			7	51200	64100	41	0.79														
14	208987		6																		9
166	105959		6																		9
CRITERIOS DE ACEPTACION: (Acceptance critera)	MIN:			42100	60200	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8
	MAX:			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	PROMEDIO (AVG.)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(%)ANALISIS QUIMICO / chemical analysis (%)

TYPE	LOC	C	Mn	P	S	Si	Al	Cu	Cr	Ni	Mo	Ti	Nb	B	V	N	Als	Ca	PCM	CE
H	7	0.19	0.81	0.015	0.009	0.100	0.041	0.011	0.015	0.017	0.004	-	-	-	-	-	-	-	-	-
P	7	0.20	0.83	0.013	0.006	0.120	0.039	0.013	0.017	0.016	0.005	0.001	0.001	0.0002	0.001	-	-	0.001	0.25	0.36
P	7	0.22	0.81	0.010	0.004	0.140	0.035	0.015	0.015	0.017	0.004	0.002	0.001	0.0001	0.001	-	-	0.002	0.27	0.34
H	7	0.10	0.80	0.014	0.005	0.247	0.035	0.014	0.021	0.019	0.006	-	-	-	-	-	-	-	-	-
P	7	0.11	0.80	0.015	0.003	0.220	0.030	0.012	0.025	0.017	0.006	0.001	0.001	0.0001	0.001	-	-	0.001	0.16	0.25
P	7	0.14	0.84	0.017	0.005	0.240	0.033	0.013	0.028	0.019	0.004	0.001	0.001	0.0001	0.001	-	-	0.001	0.19	0.29
H	7	0.11	0.78	0.012	0.004	0.250	0.038	0.015	0.015	0.015	0.004	-	-	-	-	-	-	-	-	-
P	7	0.13	0.77	0.013	0.003	0.270	0.039	0.016	0.016	0.016	0.003	0.001	0.001	0.000	0.001	-	-	0.001	0.18	0.26
P	7	0.15	0.80	0.015	0.005	0.260	0.041	0.018	0.014	0.015	0.005	0.001	0.001	0.000	0.001	-	-	0.001	0.20	0.29
H	7	0.11	0.79	0.018	0.005	0.220	0.034	0.018	0.018	0.018	0.006	-	-	-	-	-	-	-	-	-
P	7	0.13	0.85	0.018	0.006	0.190	0.034	0.018	0.020	0.022	0.007	0.001	0.001	0.0001	0.002	-	-	0.001	0.18	0.28
P	7	0.15	0.86	0.019	0.005	0.170	0.037	0.020	0.023	0.023	0.006	0.001	0.001	0.0001	0.001	-	-	0.001	0.20	0.30
H	7	0.14	0.43	0.010	0.012	0.011	0.038	0.020	0.013	0.020	0.004	-	-	-	-	-	-	-	-	-
P	7	0.15	0.45	0.012	0.010	0.014	0.041	0.023	0.015	0.021	0.005	0.001	0.001	0.0001	0.001	-	-	0.001	0.18	0.23
P	7	0.18	0.51	0.010	0.009	0.012	0.039	0.019	0.013	0.025	0.002	0.001	0.001	0.0001	0.001	-	-	0.001	0.21	0.27
H	7	0.17	0.82	0.019	0.005	0.121	0.029	0.016	0.035	0.017	0.006	-	-	-	-	-	-	-	-	-
P	7	0.18	0.84	0.020	0.005	0.125	0.032	0.015	0.032	0.019	0.005	0.001	0.002	0.0001	0.002	-	-	0.001	0.23	0.33
P	7	0.20	0.82	0.023	0.004	0.132	0.033	0.017	0.033	0.020	0.003	0.001	0.001	0.0002	0.001	-	-	0.001	0.25	0.35
H	7	0.11	0.79	0.014	0.005	0.216	0.039	0.024	0.019	0.017	0.005	-	-	-	-	-	-	-	-	-
P	7	0.12	0.81	0.016	0.006	0.230	0.035	0.026	0.021	0.018	0.006	0.002	0.002	0.0001	0.001	-	-	0.002	0.17	0.26
P	7	0.14	0.80	0.018	0.005	0.210	0.034	0.024	0.022	0.019	0.005	0.001	0.001	0.0001	0.001	-	-	0.001	0.19	0.28
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		0.26	1.20	0.030	0.030	-	-	0.500	0.400	0.400	0.150	0.040	-	-	0.080	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

PRUEBA HIDROSTATICA: (hidrostatic test) PRESION: (pressure) 1400 Psi TIEMPO: (time) 10 sec

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

PRUEBA DE APLASTAMIENTO: (flattening test) 0° OK 90° OK

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)
T: UNIDAD DE PRUEBA (Test unit)

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 APPER IN RECORDS OF THE COMPANY)

CONTROL DE CALIDAD TUBACERO, S. DE R.L. DE C.V. 04

Control de Calidad (Quality Control)
Ing. Samuel Montoya Laguna.

REV. 5 Jun.-10

F-TUME-013