

**CERTIFICADO DE CALIDAD
INSPECTION CERTIFICATE**
(DIN EN 10204:2004E - ISO 10474 3.1.B)

Numero:
Number:
30749

Pagina/Page:
1

Lista de Empaque:
Packing List:
17000

Pedido del Cliente No:
Customers Order No:
7941 - 7905 -

Vendido a: PROVEEDORA DE MATERIALES ANKER, S.A.
DE C.V.

Fecha/Date:
27 de febrero de 2017

Factura/Invoice:
Bocas / Ends
Biselado / Bevelled ends

Especificaciones y Grados / Standard or Specification and Steel Grade
Seamless Fittings according to ASTM A 234 WPB-13e
Conform to ASME II Ed. 2013 ASME SA-234, Grade WPB

Dimensiones y tolerancias / Dimension and tolerances
ASME B 16.9 - 2012

DESCRIPCION DE MATERIAL / MATERIAL DESCRIPTION		PRUEBAS MECANICAS / MECHANICAL TEST		PRUEBA DE IMPACTO 0°C / IMPACT TEST 0°C								
ART. ITEM	COLADA HEAT CODE	CANTIDAD QUANTITY	DESCRIPCION / DESCRIPTION	ESF. CEDENCIA YIELD STRENGTH (Mpa)	ESF. RUPTURA TENSILE STRENGTH (Mpa)	ELONG. %2"	DUREZA HARDNESS HBW	DIMENSIONES SAMPLE DIM mm	1 Joules	2 Joules	3 Joules	PROMEDIO AVERAGE Joules
1	T80806	90	CODO 16 X 45° CED-STD	337	492	41	135					
2	S41566	600	CODO 2 X 45° CED-STD	316	496	37	128					
3	T80490	40	CODO 14 X 45° CED-STD	280	486	46	120					
4	T84988	1500	CODO 2 1/2 X 90° R.L. CED-STD	352	507	38	84					
5	T80908	58	CODO 12 X 45° CED-STD	294	495	44	126					

ANALISIS QUIMICO / CHEMICAL ANALYSIS														
PROCESO PROCESS	COLADA HEAT CODE	COLADA/HEAT M.P./MOTHER PIPE	%C.E.	%C	%Mn	%P	%S	%Si	%Cr	%Cu	%Mo	%Ni	%V	%Nb
HF	T80806	80806	0.300	0.170	0.680	0.004	0.001	0.270	0.020	0.060	0.012	0.030	0.000	0.000
HF	S41566	41566	0.320	0.190	0.730	0.011	0.002	0.260	0.050	0.030	0.010	0.020	0.002	0.001
HF	T80490	80490	0.300	0.170	0.680	0.006	0.001	0.270	0.030	0.067	0.020	0.030	0.000	0.000
HF	T84988	84988	0.320	0.170	0.770	0.010	0.001	0.330	0.040	0.058	0.016	0.030	0.000	0.000
HF	T80908	80908	0.320	0.180	0.720	0.007	0.002	0.280	0.060	0.062	0.023	0.030	0.000	0.000

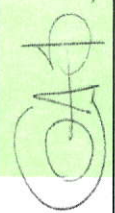
Certificamos que los resultados de los Análisis Químicos y Pruebas Mecánicas son verdaderos o una copia fiel de los certificados enviados por el Fabricante y/o el proveedor de Materia Prima (Tubería Sin Costura) conforme ASTM A106 Grado B con N°: We certify that result of chemical analysis and mechanical test are true and correct copy of the test certificate issued by the manufacturer and/or supplier Raw material (Seamless Pipe) certs conform to ASTM A106 Grade B N°: 16011036 16019892 16008094 17007495 16012519

Este material cumple con los requerimientos especificados en la orden.
The material of this certificate heat number mentioned above is in compliance with the requirements specified in the order.

The Products described herein were produced in accordance with the above referenced specification and are identified with the "R" which is permanently marked on each fitting. The values of hardness for fittings NPS 2 1/2" and smaller ones obtain from the conversion of hardness Rockwell B to hardness Brinell HBW by means of table WILSON DESK CHART 60. Los valores de dureza para conexiones de NPS de 2 1/2" y menores, se obtienen de la conversión de dureza Rockwell B a dureza Brinell HBW mediante la tabla WILSON DESK CHART 60.

MATERIAL ACCORDING TO NACE MR0175/ISO 15156-1, 2009 AND NACE MR0103, 2012 ONLY HARDNESS

FOR03161



Quality Manager/Jefe de Calidad:
ING. ALFONSO ORTEGA GARCIA

Notas:
Formado en caliente a 620°C-980°C, enfriado al aire. Formed fittings in a range from 620°C to 980°C, cooled in still air.
Cold formed normalized at 940°C max. Holding time 10'.
Visual dimensional check: Satisfactoria.
HF: FORMADO EN CALIENTE/HOT FORMED CF: FORMADO EN FRIO/COLD FORMED