



VILLACERO

MILL TEST REPORT

PRODUCT: 1 1/2" G80 ASTM A-53-A / NMX B-177
 FINISHING: TUBO BARNIZADO EXTREMO LISO

CUSTOMER: PLESA ANAHUAC Y CIAS, S.A. DE C.V.

SHIPPING DATE: 29/06/13

SPORT PLATAFORMA:

LOGISTICA ABURTO

INVOICE: FT-16152
 ORDER: 1200126408

TRANSPORT/ TRANSPORTE:

MANUFACTURER/ PLANTA : LAMINA Y PLACA COMERCIAL S.A DE C.V.
 DIEGO DIAZ DE BERLANGA, NO. 1002 SUR
 SAN NICOLAS DE LOS GARZA, NUEVO LEON, MEXICO

I HEREBY CERTIFY THAT THE PRODUCT ACCOMPLISHED WITH THE SPECIFICATION TO THE INVOICE AND/ OR REMISSION (DATABASE OF SYSTEM).

ESTE PRODUCTO FUE FABRICADO BAJO LA NORMA QUE SE DESCRIBE HACIENDO CUMPLIR LOS REQUERIMIENTOS DE LA ESPECIFICACION (BASE DE DATOS DEL SISTEMA).

PROCESS: HFVW

MANUFACTURING INFORMATION/ INFORMACION DE MANUFACTURA						DIMENSIONS (DIMENSIONES)			
DATE	SHIFT	OPER	ORDER OR #	GRADE	MANUFACT PROCESS	HEAT TREATMENT	OUTSIDE DIAMETER (In)	Thickness (In)	LENGTH (Mts)
18/12/12	1	COM	296	A	E	NO	1.900"	.200"	6.40

ONLINE TESTS (PRUEBAS DE CAMPO)									
HEAT NUMBER (COLADA)	HYDROSTATIC TEST (Pst)	DELIVERY CONDITION	TIME (Sec)	NON-DESTRUCTIVE TEST	(PNID)	METALLOGRAPHY TEST	BENDING TEST	FLATTENING TEST	VISUAL INSPECTION
NB166791	1814	AS ROLLED	5	OK		N/A	N/A	OK	OK

CHEMICAL ANALYSIS (ANALISIS QUIMICOS)/ MECHANICAL PROPERTIES (PROPIEDADES MECANICAS)									
HEAT NUMBER (COLADA)	%C	%Mn	%P	%S	%Si	%Cr	%Mo	%Ni	%Cu
NB166791	0.0880	0.3620	0.0170	0.0080	0.0140	0.0300	0.0030	0.0240	0.0480
%Nb	%Sn	%Ti	%V		YIELD ST (Pst)	UT (Pst)	% ELONG	HARDNESS (HRB)	CARBON EQUIVALENT %
0.0000	0.0000	0.0010	0.0010		50490	58170	28.700	74	N/A

CHARPY TEST (PRUEBA CHARPY)					
HEAT IDENT NUM	ABSORBED ENERGY (FT-LB)			AVERAGE	TEMPERATURE TEST °C
	1	2	3		
NB166791	N/A	N/A	N/A	N/A	N/A

NOTE: THE SUM OF THE NiOBIUM, VANADIUM AND TITANIUM CONCENTRATIONS SHALL BE $\leq 0.15\%$
 NOTA: LA SUMA DE LA CONCENTRACION DE NiOBIO, VANADIO Y TITANIO NO DEBE SER $\leq 0.15\%$

I HAVE PERSONAL KNOWLEDGE AS TO ACCURACY OF THE ABOVE INFORMATION, AND HAVE AUTHORITY TO SIGN ON BEHALF OF THE COMPANY.
 TENGO EL CONOCIMIENTO Y AUTORIZACION EN NOMBRE DE LA COMPAÑIA PARA AVALAR ESTA INFORMACION.

SINCERELY

INGEN. JORGE LUIS MENDOZA GUZMAN PRUZE

QUALITY ASSURANCE MANAGER