



# VILLACERO

## MILL TEST REPORT

**PRODUCT:** 1 1/4" C80 ASTM A-53-A / NMX B-177  
**FINISHING:** TUBO BARNIZADO EXTREMO LISO

**CUSTOMER:** BODEGAS PYLSA

**SHIPPING DATE:** 03/07/15

**SPORT PLATAFORM:**

**TRANSPORT/ TRANSPORTE:**

**OTERO HERNANDEZ FRANCISCO**

**INVOICE:** 00540T

**ORDER:** NA

**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:** HFW

MANUFACTURING INFORMATION/ INFORMACION DE MANUFACTURA							DIMENSIONS (DIMENSIONES)		
DATE	SHIFT	OPER	ORDER OP #	GRADE	MANUFACT PROCESS	HEAT TREATMENT	OUTSIDE DIAMETER (In)	Thickness (In)	LENGTH (Mts)
20/12/14	1	COM	413	A	E	NO	1.660"	0.191	6.40

ONLINE TESTS (PRUEBAS DE CAMPO)									
HEAT NUMBER (COLADA)	HYDROSTATIC TEST (PSI)	DELIVERY CONDITION	TIME (Sec.)	NON-DESTRUCTIVE TEST (PND)	METALLOGRAPHY TEST	BENDING TEST	FLATTERING TEST	VISUAL INSPECTION	
242984	1814	AS ROLLED	5	OK	N/A	N/A	OK	OK	

CHEMICAL ANALYSYS (ANALISIS QUIMICOS)/ MECHANICAL PROPERTIES (PROPIEDADES MECANICAS)									
HEAT NUMBER (COLADA)	%C	%Mn	%P	%S	%Si	%Cr	%Mo	%Ni	%Cu
242984	0.1600	0.8150	0.0150	0.0080	0.0116	0.0190	0.0030	0.0190	0.0300
	%Nb	%Sn	%Ti	%V	YIELD ST (PSI)	UT (PSI)	% ELONG	HARDNESS (HRb)	CARBON EQUIVALENT %
	0.0010	0.0000	0.0020	0.0020	53150	59467	29.300	74	N/A

CHARPY TEST (PRUEBA CHARPY)					
HEAT IDENT NUM	ABSORBED ENERGY (FT-LB)			AVERAGE	TEMPERATURE TEST °C
	1	2	3		
242984	N/A	N/A	N/A	N/A	N/A

**NOTE:** THE SUM OF THE NIOBIUM, VANADIUM AND TITANIUM CONCENTRATIONS SHALL BE  
**NOTA:** LA SUMA DE LA CONCENTRACION DE NIOBIO, VANADIO Y TITANIO NO DEBE SER

0.15%  
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

ING. DAVID ANGEL MOLINA PEREZ  
**QUALITY ASSURANCE MANAGER**