



VILLACERO

MILL TEST REPORT

PRODUCT: 3X3 ROJO ASTM A-500-A / NMX B-199
FINISHING: PERFIL ESTRUCTURAL RECTANGULAR (PERT)

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

SHIPPING DATE: 15/01/14

SPORT PLATAFORM:

INVOICE: ft-18477
ORDER: 1200149733

TRANSPORT/ TRANSPORTE:

TESS TRANSPORTADORA

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)
09/12/13	1	COM	423	A	E	NO	3X3"	0.188"	6.00

ONLINE TESTS (PRUEBAS DE CAMPO)									
HEAT NUMBER (COLADA)	HYDROSTATIC TEST (PSI)	DELIVERY CONDITION	TIME (Sec.)	NON-DESTRUCTIVE TEST (PND)	METALLOGRAPHY TEST	BENDING TEST	FLATTENING TEST	VISUAL INSPECTION	
431320	N/A	AS ROLLED	N/A	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
431320	0.0950	0.3770	0.0130	0.0070	0.0770	0.0180	0.0040	0.0220	0.0220
%Nb	%Sn	%Ti	%V		YIELD ST (PSI)	UT (PSI)	% ELONG	HARDNESS (HRb)	CARBON EQUIVALENT %
0.0020	0.0000	0.0020	0.0020		53700	62140	30.100	74	N/A

CHARPY TEST (PRUEBA CHARPY)					
HEAT IDENT NUM	ABSORBED ENERGY (FT-LB)			AVERAGE	TEMPERATURE TEST °C
	1	2	3		
431320	N/A	N/A	N/A	N/A	N/A

NOTE: THE SUM OF THE NIOBIUM, VANADIUM AND TITANIUM CONCENTRATIONS SHALL BE 0.15%
 NOTA: LA SUMA DE LA CONCENTRACION DE NIOBIO, VANADIO Y TITANIO NO DEBE SER 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 COMPAÑÍA PARA AVALAR ESTA INFORMACIÓN.

SINCERELY

ING. DAVID ANGEL MOLINA PEREZ
QUALITY ASSURANCE MANAGER