



Sypris Technologies, Inc. Tube Turns Products  
Industrias Quimicas No. 200 Zona Industrial Toluca

Toluca, Estado de México 50071

**CERTIFICATE OF CONFORMANCE**

CUSTOMER		CUSTOMER PO#		UIC#	DATE	
TUBE TURNS PRODUCTS		119234		-	12/11/2018	
STAMPED	QTY	SIZE	THICKNESS	PLATE MFG.	MILL HEAT #	SLAB/COIL #
PTM-13	6	6"	-	U.S.S. SEAMLESS TUBULAR OPS	MB5516	(10-02)

**MATERIAL:** API 5L Grade X52



INSPECTION OF CHEMICAL COMPOSITION

ToIFO-394 Rev. 2

NAME OF SUPPLIER
SEAMLESS TUBULAR OPS

SYPRIS ORDER NUMBER: \_\_\_\_\_

REVISION REPORT: \_\_\_\_\_ 1 \_\_\_\_\_

DESCRIPTION OF MATERIAL: Pipe X52Q PSL-2 ( SA 106 grade B/ C) 6.00" Ced 40.

Thickness: \_\_\_\_\_ PLATE (QUANTITY): \_\_\_\_\_

HEAT CODE ORIGINAL: MB5516 HEAT CODE ASSIGNED: PTM-13 \*SLAB/ COIL: (10-02)

Chemical composition of material(%)

C 0.30 Max	Mn 0.29-1.06	P 0.035 Max	S 0.035 Max	Si 0.10 Min	Cu 0.40 Max	Ni 0.40 Max	Cr 0.40 Max	Mo 0.15 Max	V 0.08 Max	CE 0.50 Max	Cr+V+Ni+ Mo+Cu 1.0% max
0.1500	1.080	0.0080	0.0030	0.200	0.120	0.040	0.050	0.080	0.030	0.370	0.320
YIELD (MPa) 240 min :	65,000		TENSILE (MPa) 415 Min:	80,000		ELONG % 20 % min (A):	47.2%				

Accepted

XXX

Rejected

\_\_\_\_\_

Observation

Verification cumple with ASME 2017

Certificate reference Serial No: F0112997

Juan

Villavicencio

Firmado digitalmente  
por Juan Villavicencio  
Fecha: 2019.05.31  
17:24:05.000

Approved by:



U.S.S. SEAMLESS TUBULAR OPS

FAIRFIELD TUBULAR OPERATIONS  
CERTIFIED TEST REPORT

DATE: 06/15/18  
TIME: 04:09:28  
SERIAL NO: F0112997  
EBS NO: 2002646530 1

MILL ORDER ITEM NO DR98282 01	SHIPPERS NO. 203725-00	P.O. NUMBER 203725-00	VEHICLE ID
SOLD TO ADDRESS		MAIL TO ADDRESS	

VENDOR  
U.S.S. SEAMLESS TUBULAR OPS  
FAIRFIELD TUBULAR OPERATIONS  
5700 VALLEY ROAD  
P.O. BOX 599  
FAIRFIELD, AL 35064

SPECIFICATION AND GRADE

SMLS LINE PIPE API 5L 45TH EDITION DATED 12/1/12 GRADE X52Q PSL-2 REG MILL COAT PE BEV 30 DEGREE  
APPLICABLE REQUIREMENTS OF NACE MR0103/ISO 17945-2012 ED AND NACE MR0175/ISO 15156-2 2015 ED

Reviewed per code Asme  
sec II part A ed.2017

PTM-13

Juan Villavicencio  
Firmado digitalmente por Juan Villavicencio  
Fecha: 2019.05.31  
1743:26-05'00'

MATERIAL COND:	QUENCHED & TEMPERED		YIELD		TENSILE PSI	Y/T	ELONG % (IN 2")	HARDNESS SCALE:HRB	MIN HYDRO PSI	DWELL(SEC)
	TEST COND.	SAUGE WIDTH IN	MIN	MAX						
MB5121	QT	1.5	69,500	84,500	66,700	0.82	24.0	87.9	2970	5
MB5121	QT	1.5	70,000	85,000	66,700	0.82	41.1	2970		
MB5516	QT	1.5	67,000	81,000	66,700	0.82	44.6	2970		
MB5516	QT	1.5	65,000	80,000	66,700	0.81	47.2	2970		

PRODUCT IDENTIFICATION	TYPE	T-T-TRANSVERSE NM-NORMALIZED										AR-AS ROLLED TR-THERMO MECHANICAL ROLLED										W-WELD	
		C	MIN	P	S	SI	CU	NI	CR	MO	AL	N	V	B	T	CB	CO	CE*	MAX				
MB5121	HEAT	13	109	008	004	18	14	05	07	09	027												
MB5121	PROD	14	106	010	006	17	13	05	08	09	028												
MB5121	PROD	14	106	010	006	17	13	05	08	09	029												
MB5516	HEAT	13	109	006	000	21	11	04	04	08	022												
MB5516	PROD	14	106	008	003	22	11	04	05	09	022												
MB5516	PROD	15	108	008	003	20	12	04	05	08	021												

\*C.E IS BASED ON THE FOLLOWING EQUATION(S):

C+MN/6+CR/5+MO/5+V/5+NI/15+CU/15 (EUROPEAN CEV)

DECIMAL POSITIONS FOR ELEMENTS ARE INDICATED BY THE LEFT MARGIN, VERTICAL DOTTED LINE OR DECIMAL POINT. ELEMENTS REPORTED IN MASS FRACTION (%)



U.S.S. SEAMLESS TUBULAR OPS      FAIRFIELD TUBULAR OPERATIONS      DATE: 06/15/18  
 DR98282 01      SHIPPERS NO. 203725-00      CERTIFIED TEST REPORT      TIME: 04:09:28  
 (IN ACCORDANCE WITH ISO 10474/EN10204/DIN50049 "type 3.1")      P.O. NUMBER      SERIAL NO: F0112997  
 EBS NO: 2002646530 1

MATERIAL COND:	DR98282 01		SHIPPERS NO. 203725-00		P.O. NUMBER		EBS NO: 2002646530 1	
PRODUCT IDENTIFICATION	QUENCHED & TEMPERED		OD: 6.625 (1.68.275)		WALL: 0.280 (7.112)		In (mm)	
FLAT	BEND	GRAIN SIZE	MIN COLLAPSE	DIR	TEST LOC.	TEMP	SIZE	TEST COND.
			** END OF DATA THIS SHEET **			DEG		1 2 3 AVG 1 2 3 AVG
L - LONGITUDINAL			T - TRANSVERSE			B - BODY		
W - WELD			HAZ - HEAT AFFECTED ZONE					
TEST / INSPECTION								
YES				RESULTS / COMMENTS				
FULL LENGTH VISUAL				X				
FULL LENGTH EMI				X				
FULL LENGTH MPI				OD _____ OD/ID _____ X L _____ LT _____ X 10.0/10.0% NOTCH				
FULL LENGTH UT				ID _____ OD/ID _____ L _____ LT _____				
END AREA INSPECTION (PLAIN END)				MPI _____ X UT _____				
SPECIAL END AREA (SEA) INSP				MPI _____ UT _____				
FULL LENGTH DRIFT				DRIFT MANDREL SIZE: _____				
ADDITIONAL NOTES/COMMENTS								
ALL MANUFACTURING TOOK PLACE IN THE USA. IMPACT STRIKER RADIUS 8MM. NO REPAIRS BY WELDING. NO MERCURY OR MERCURY COMPOUNDS ARE ADDED TO THE STEEL AND ALL MERCURY BEARING EQUIPMENT IS PROTECTED BY A DOUBLE BOUNDARY OF CONTAINMENT. *NOTE B SEE ATTACHED REPORT FOR ADDITIONAL NOTES.								

THIS IS TO CERTIFY THAT THE PRODUCT DESCRIBED HEREIN WAS MANUFACTURED, SAMPLED, TESTED AND/OR INSPECTED IN ACCORDANCE WITH THE SPECIFICATION AND FULFILLS THE REQUIREMENTS IN SUCH RESPECTS.

PREPARED BY THE OFFICE OF: MICHAEL HENRY -MANAGER, Q.A.  
 FAIRFIELD TUBULAR OPERATIONS

DATE 06/15/18

00000000      K4W40B32      8677395018

\*\*



U. S. Steel Tubular Products  
Fairfield Tubular Operations  
5700 Valley Road  
Fairfield, AL 35064

12/19/2018

To Whom It May Concern:

**RE: DR97869-01 (4.5" x 0.337" X52) Pieces and Weight**

Order DR97869-01(purchase order 201123-00) 4.5" diameter x 0.337" wall X52 had 95 total pieces produced from heats MB5516. Shipping loads P90141 and P90204 at 15 lbs/ft. The pieces identified for certification are noted below.

Heat	Lot	Pieces	Length (ft)	Weight (lbs)
MB5516	P90141	48	2,017.0	30,428
MB5516	P90204	45	1,792.1	27,217

Respectfully,

A handwritten signature in black ink, appearing to read 'Michael Henry'.

Michael Henry  
Metallurgy & Quality Assurance  
Fairfield Tubular Operations