VOLZHSKY TRUBNY

"VOLZHSKY PIPE PLANT" OJSC

MANUFACTURER:

VOLZHSKY PIPE PLANT OJSC
404119, VOLZHSKY, VOLGOGRAD REG.,
RUSSIA

QUALITY CERTIFICATE

Contract No. ST-1415/77, Spec. 09-0080
Description of Goods:
Steel seamless hot-finished pipes.
The pipes are supplied from secondary materials available in stock or finished production (Tel Quel).
Pipes for oil and gas application.

Consignee:
TMK North America Inc., USA.
(End user: "Tubos y Barras Huecas, S.A.", Henry Ford No. 1 y 7.
Col. San Nicolas Tlalnepantla. Edo de Mexico, CP 54000. MX. Mexico.

CERTIFICATE № 780 DATE OF ISSUE 25.06.2009

SIZE	HEAT No / HEAT TREATMENT LOT No	LOT No	QUANTITY, PIPES	LENGTH, METRES	NET WEIGHT TONS		CHEMICAL COMPOSITION, % C x 100	Mn x 100	P x 1000	S x 1000	Cr x 100	Cu x 100	Ti x 100	V x 100	Nb x 100			MILL CONTROL PROT. No		ORIENTATION	TENSILE TEST TEST SPECIMEN	GL. 'C' YS MPa	GL. 'C' UTS MPa	EL. %	HARDNESS TEST	IMPACT TEST ORIENTATION	NOTCH	SIZE	TEST TEMP °C		IMPACT VALUE	FRACTURE %	HEAT TREATMENT	NDT	HYDROSTATIC TEST DURATION (SECONDS)	PRESSURE KG/CM2 (MPa)	NOTE
						*1	28 max	120 max	30 max	30 max	30 max	30 max							*2	*3	*4	min 245.00	min 415.00	min 30.0		*3	*5	*6		*7			*8	*9 * (10)	min 5	min 86.00 (8.40)	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
273.1x7.8MM GRADE B API 5L/ISO 3183 PSL 1 44-th EDITION LENGTH: 6.0 12.5 MM	290561	3-0263				H	17	68	10	4	11	21	0	0	0					L	K												O&T	M & UT (12)	G	G	
						P	16	68	9	5	10	21	0	0	0			6681																			
						P	16	67	8	4	10	21	0	0	0			6681																			
	11																	3289	L			420	520	41.5													
	21																	3290	L			411	510	43.3													

TUBOS Y BARRAS HUECAS DE MEXICO, S.A. DE C.V.
CLIENTE: 1 CIAS
16 ENE. 2012
PEDIDO: 281809
CANTIDAD: 82,34 MTS

DESCRIPTION OF TESTS	VISUAL AND DIMENSIONS	BEVELING INSPECTION	END'S PROTECTORS	NONDESTRUCTIVE INSPECTION	COATING							MARKING: STENCILING	STEEL MAKING PROCESS - ELECTRIC FURNACE
	G	G	G	G	G							G	

NOTES: G: GOOD
*1: H: HEAT ANALYSIS, P: PRODUCT ANALYSIS, C: CONTROL ANALYSIS, R: RECHECK ANALYSIS
*2: L: LOT TEST, H: HEAT CONTROL TEST, A: ADDITION TEST, R: RECHECK TEST
*3: L: LONGITUDINAL, T: TRANSVERSE
*4: STRIP G: 1/2 in, H: 3/4 in, N: 1 in, K: 1 1/2 in, S: 12 mm.
*5: V: 2mm V, U: 2mm U, B: 3mm U, C: 4mm U, E: 2mm U FASE NOTCH, F: 2mm V FASE NOTCH
*6: F: 10x10mm, 7: 10x7.5mm, 6: 10x6.7mm, 5: 10x5mm, 3: 10x3.3mm, 2: 10x2.5mm
*7: E - EACH VALUE, A - AVERAGE VALUE
*8: HEAT TREATMENT, O&T: QUENCHED & TEMPERED
*9: M: WET FLUORESCENT MAGNETIC PARTICLE TEST, EMI: ELECTROMAGNETIC TEST, UT: ULTRASONIC TEST
UTB: PIPE BODY UT FOR LAMINATION, UTE: PIPE ENDS UT FOR LAMINATION
UTS: PIPE WALL THICKNESS UT
*10: 5 - NOTCH 5%, 12 - NOTCH 12.5%

WE CONFIRM THAT PIPES COVERED BY THIS CERTIFICATE ARE MANUFACTURED, TESTED, AND INSPECTED IN ACCORDANCE WITH TERMS OF THE CONTRACT

MANAGER - INSPECTION
VOLZHSKY PIPE PLANT
DATE: 30.06.09