

 “VOLZHSKY PIPE PLANT” OJSC	404119 Avtodoroga 7-6, Volzhsky, Volgograd region, Russia Fax: (78443) 25-69-02 E-mail: VTZ@vtz.ru
---	--

MANUFACTURER:		MILL TEST CERTIFICATE															AMERICAN PIPING PRODUCTS, INC.																		
VOLZHSKY PIPE PLANT OJSC 404119, VOLZHSKY VOLGOGRAD REGION RUSSIA		Spec 1510/72-11-0405/Customer FOR P11397/ INR PO# 11-0463															11403 NORTH HOUSTON ROSSER ROAD HOUSTON, TX 77066, USA																		
		DESCRIPTION OF GOODS: CARBON STEEL SEAMLESS PIPE ACCORDING TO API SPEC 5L PSL2 (442M EDITION 2007) 420/80; RTH 1106/1106 (2008) GR. B/C/ RTH 455/2 53M (2007) GR.B; RTH 64106 (2007); RTH SA 53 (2007)/ NACE MR-01-75 (2003)/MR-0103 (2007); BEVELLED ENDS.															CERTIFICATE # 1524 DATE OF ISSUE 01.08.2011																		
SIZE	HEAT NO	LOT NO	QUAN- TITY	LENGTH, FEET	NET WEIGHT TONS	CHEMICAL COMPOSITION, %															TENSILE TEST				IMPACT TEST				HYDROSTATIC TEST		NOTES				
HEAT- TREAT- MENT LOT NO	NO	NO				C	Mn	P	S	Cr	Mo	Ni	Al	Si	Fe	Y	UTS	EL.	RED.	TEMP	IMPACT	FRAC-TURE	HEAT- TREAT- MENT	TEMP	ORIENTA- TION	NO-TCH	VALU	ORIENTA- TION	NO-TCH	VALU		ORIENTA- TION	NO-TCH	VALU	
						X	X	X	X	X	X	X	X	X	X	X	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
						1	18	10	29	25	15	30	30	40	15	4	5	42100	70000	26.0	3	5	4	49	1	3	3	6	1	1	1	1	1	1	
						1	18	10	29	25	15	30	30	40	15	4	5	42100	70000	26.0	3	5	4	49	1	3	3	6	1	1	1	1	1	1	
						1	18	10	29	25	15	30	30	40	15	4	5	42100	70000	26.0	3	5	4	49	1	3	3	6	1	1	1	1	1	1	1
						1	18	10	29	25	15	30	30	40	15	4	5	42100	70000	26.0	3	5	4	49	1	3	3	6	1	1	1	1	1	1	1
						1	18	10	29	25	15	30	30	40	15	4	5	42100	70000	26.0	3	5	4	49	1	3	3	6	1	1	1	1	1	1	1
						1	18	10	29	25	15	30	30	40	15	4	5	42100	70000	26.0	3	5	4	49	1	3	3	6	1	1	1	1	1	1	1
						1	18	10	29	25	15	30	30	40	15	4	5	42100	70000	26.0	3	5	4	49	1	3	3	6	1	1	1	1	1	1	1
						1	18	10	29	25	15	30	30	40	15	4	5	42100	70000	26.0	3	5	4	49	1	3	3	6	1	1	1	1	1	1	1
						1	18	10	29	25	15	30	30	40	15	4	5	42100	70000	26.0	3	5	4	49	1	3	3	6	1	1	1	1	1	1	1
						1	18	10	29	25	15	30	30	40	15	4	5	42100	70000	26.0	3	5	4	49	1	3	3	6	1	1	1	1	1	1	1
						1	18	10	29	25	15	30	30	40	15	4	5	42100	70000	26.0	3	5	4	49	1	3	3	6	1	1	1	1	1	1	1
						1	18	10	29	25	15	30	30	40	15	4	5	42100	70000	26.0	3	5	4	49	1	3	3	6	1	1	1	1	1	1	1
						1	18	10	29	25	15	30	30	40	15	4	5	42100	70000	26.0	3	5	4	49	1	3	3	6	1	1	1	1	1	1	1
						1	18	10	29	25	15	30	30	40	15	4	5	42100	70000	26.0	3	5	4	49	1	3	3	6	1	1	1	1	1	1	1
						1	18	10	29	25	15	30	30	40	15	4	5	42100	70000	26.0	3	5	4	49	1	3	3	6	1	1	1	1	1	1	1
						1	18	10	29	25	15	30	30	40	15	4	5	42100	70000	26.0	3	5	4	49	1	3	3	6	1	1	1	1	1	1	1
						1	18	10	29	25	15	30	30	40	15	4	5	42100	70000	26.0	3	5	4	49	1	3	3	6	1	1	1	1	1	1	1
						1	18	10	29	25	15	30	30	40	15	4	5	42100	70000	26.0	3	5	4	49	1	3	3	6	1	1	1	1	1	1	1
						1	18	10	29	25	15	30	30	40	15	4	5	42100	70000	26.0	3	5	4	49	1	3	3	6	1	1	1	1	1	1	1
						1	18	10	29	25	15	30	30	40	15	4	5	42100	70000	26.0	3	5	4	49	1	3	3	6	1	1	1	1	1	1	1
						1	18	10	29	25	15	30	30	40	15	4	5	42100	70000	26.0	3	5	4	49	1	3	3	6	1	1	1	1	1	1	1
						1	18	10	29	25	15	30	30	40	15	4	5	42100	70000	26.0	3	5	4	49	1	3	3	6	1	1	1	1	1	1	1
						1	18	10	29	25	15	30	30	40	15	4	5	42100	70000	26.0	3	5	4	49	1	3	3	6	1	1	1	1	1	1	1
						1	18	10	29	25	15	30	30	40	15	4	5	42100	70000	26.0	3	5	4	49	1	3	3	6	1	1	1	1	1	1	1
						1	18	10	29	25	15	30	30	40	15	4	5	42100	70000	26.0	3	5	4	49	1	3	3	6	1	1	1	1	1	1	1
						1	18	10	29	25	15	30	30	40	15	4	5	42100	70000	26.0	3	5	4	49	1	3	3	6	1	1	1	1	1	1	1
						1	18	10	29	25	15	30	30	40	15	4	5	42100	70000	26.0	3	5	4	49	1	3	3	6	1	1	1	1	1	1	1
						1	18	10	29	25	15	30	30	40	15	4	5	42100	70000	26.0	3	5	4	49	1	3	3	6	1	1	1	1	1	1	1
						1	18	10	29	25	15	30	30	40	15	4	5	42100	70000	26.0	3	5	4	49	1	3	3	6	1	1	1	1	1	1	1
						1	18	10	29	25	15	30	30	40	15	4	5	42100	70000	26.0	3	5	4	49	1	3	3	6	1	1	1	1	1	1	1
						1	18	10	29	25	15	30	30	40	15	4	5	42100	70000	26.0	3	5	4	49	1	3	3	6	1	1	1	1	1	1	1
						1	18	10	29	25	15	30	30	40	15	4	5	42100	70000	26.0	3	5	4	49	1	3	3	6	1	1	1	1	1	1	1
						1	18	10	29	25	15	30	30	40	15	4	5	42100	70000	26.0	3	5	4	49	1	3	3	6	1	1	1	1	1	1	1
						1	18	10	29	25	15	30	30	40	15	4	5	42100	70000	26.0	3	5	4	49	1	3	3	6	1	1	1	1	1	1	1
						1	18	10	29	25	15	30	30	40	15	4	5	42100	70000	26.0	3	5	4	49	1	3	3	6	1	1	1	1	1	1	1
						1	18	10	29	25	15	30	30	40	15	4	5	42100	70000	26.0	3	5	4	49	1	3	3	6	1	1	1	1	1	1	1
						1	18	10	29	25	15	30	30	40	15	4	5	42100	70000	26.0	3	5	4	49	1	3	3	6	1	1	1	1	1	1	1
						1	18	10	29	25	15	30	30	40	15	4	5	42100	70000	26.0	3	5	4	49	1	3	3	6	1	1	1	1	1	1	1
						1	18	10	29	25	15	30	30	40	15	4	5	42100	70000	26.0	3	5	4	49	1	3	3	6	1	1	1	1	1	1	1
						1	18	10	29	25	15	30	30	40	15	4	5	42100	70000	26.0	3	5	4	49	1	3	3	6	1	1	1	1	1	1	1
						1	18	10	29	25	15	30	30	40	15	4	5	42100	70000	26.0	3	5	4	49	1	3	3	6	1	1	1	1	1		

CHEMICAL COMPOSITION

X	Y	Z	C			Mn			Si			S			P		
			min	max	typ	min	max	typ	min	max	typ	min	max	typ	min	max	typ
100	100	100	10	10	10	100	100	100	10	10	10	100	100	100	10	10	10
10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10

HARDNESS TEST. HKN 200MC	
PIPE NO.	CONTROL
QUADRANT No.	1
NO.	
1Z	6372
OD	1
AD	1
ID	1

OD-OUTSIDE DIAMETER
AD-AVERAGE DIAMETER
ID-INSIDE DIAMETER

Temperature at the exit of Oxidizing furnace: 1634 F - 1706 F

Temperature at the exit of Tempering furnace: 1262 F - 1256 F

ACTUAL HYDROSTATIC TEST PRESSURE: 4976 PSI

MATERIAL HARDNESS CONFORMS TO NACS NR 0215/HR 0105. WE CONFIRM THAT PIPES HAS NO CONTAMINATION BY MERCURY AND NO REPAIR BY WELDING HAS BEEN CARRIED OUT, IN ACCORDANCE WITH THE STANDARD EN 10204.3.12. COUNTRY OF ORIGIN IS RUSSIA.

INSPECTOR - RYZHOVA A.N.
VOLZHSKY PIPE PLANT
DATE: 02.08.2011

[Signature]