

INSPECTION CERTIFICATE

Purchaser: TUBOS DE ACERO DE MEXICO S.A.

D M Y Certificate No.

02/06/2005 T- 2005740012

E-No. MA-139 Purchase Order No. 3500014172 Job No.

No.	MFG. No. (Heat Identification No.)	Specification for Material Made from Seamless Pipe ASTM A234-63/ASME SA234 WPB	Specification for Inspection		Visual Examination	Dimensional Inspection										
			Quantity	Heat Treatment (Note 1)												
		Product & Size (T*1)	ASME B16.9													
1	05E10140	T WPB 6 S40	785/1,114	S	Good	Good										
2	05E10141	T WPB 6 S40	229/1,114	S												
3	05B10164	T WPB 6 S80	80/165	S												
4	05E10103	T WPB 6 S40	19/1,114	S												
5	05E10104	T WPB 6 S40	81/1,114	S												
Specification		Chemical Composition %					Tension Test *2									
Min.		C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	Nb	C.E.	YS	TS	E
Max.		X 100	X 100	X 100	X 1000	X 1000	X 100	X 100	X 100	X 100	X 1000	X 1000	X 100	MPa.	%	
Material Heat No.			10	29										240	415	30
		30		106	50	56	40	40	40	15	80	20			585	
1	J5K1220	18	20	53	12	8	3	2	5	1	0	1	28	312	470	60
2	J5K1220	18	20	53	12	8	3	2	5	1	0	1	28	312	470	60
3	61290	19	21	68	10	1	5	5	3	1	1	1	32	305	476	40
4	J5L1524	19	19	55	16	8	2	2	6	1	0	1	30	310	465	45
5	J5L1524	19	19	55	16	8	2	2	6	1	0	1	30	310	465	45

(NOTE 1) A : HOT FORMED WITH FINAL TEMPERATURE BETWEEN 620 C - 960 C, AIR COOLING
 B : NORMALIZING 910 C X 0.5 HR AIR COOLING S : STRESS RELIEF PARTIAL EXAMINATION FOR TENS ONLY : GOOD
 We hereby certify that the product described herein has been manufactured in accordance with the specifications concerned and also with the purchaser's requirements and that the test results shown herein are correct.
 * 1 : "T" symbolized wall thickness in mm. * 2 : YS Yield strength TS = Tensile strength E = Elongation
 TZ-61

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