

# M.E.G.A.

**CERTIFICATO DI COLLAUDO**  
**TEST CERTIFICATE**  
**CERTIFICAT DE CONTROLE**

COMPANY  
 WITH QUALITY SYSTEM  
 CERTIFIED BY DNV  
 ISO 9001

CLIENTE  
 Customer  
 Client  
**PROVEEDORA DE MATERIALES AN CER**  
**SA DE CV**  
**ALFONSO REYES 4030 NTE.**  
**COL. DEL NTE. MONTERREY, N.L.**

CERTIFICATO N.  
 Certificate N.  
 Certificat N.  
**571092**  
 FOLIO  
 Sheet  
 Feuille  
**1**  
 DATA / Date  
**11/06/10**  
 CONMESSA  
 Job N.  
 Confirmation de commande  
**91349**

ORDINE  
 Purchase order  
 Commande  
**244**

PROVA Test Epreuve	MATERIALE Material / Matière	COLATA Heat / Coulée	C %	Si %	Mn %	S %	P %	Cr %	Ni %	Mo %	Ti %	Cu %	V %	Alx	CEX
PXNU	ASTM A105/09	4101043555	0.185	0.230	1.050	0.008	0.019	00.10	00.02	0.005	0.000	0.038	0.003	0.022	0.386
			--->	Nb% = 0.0023										CEs = 0.360	
PRNX	ASTM A105/05	09/78924	0.180	0.220	0.860	0.007	0.013	00.12	00.05	0.010	0.017	0.150	0.019	0.023	0.366
			--->	Nb% = 0.002				Sn% = 0.008						CEs = 0.3233	
PRXU	ASTM A105/05	0941774/09	0.180	0.220	1.090	0.002	0.008	00.13	00.01	0.003	0.000	0.021	0.003	0.030	0.391
			--->	Nb% = 0.003					B % = 0.000					CEs = 0.3617	
KLAF	ASTM A105/05	780495	0.200	0.200	0.950	0.008	0.013	00.07	00.08	0.020	0.024	0.180	0.003	0.018	0.394
			--->	Nb% = 0.002	B % = 0.000									CEs = 0.358	
PUCD	ASTM A105/05	V01621	0.150	0.410	1.350	0.004	0.012	00.00	00.00	0.000	0.000	0.000	0.000	0.000	0.375
			--->	Nb% = 0.000	B % = 0.000									CEs = 0.375	
NWVA	ASTM A105/05	1T-27093	0.190	0.220	0.890	0.010	0.009	00.06	00.11	0.010	0.002	0.250	0.001	0.034	0.376
			--->	Nb% = 0.003	N % = 0.000			Sn% = 0.010	B % = 0.000					CEs = 0.338	

PROVA Test Epreuve	PROVETTA Test specimen / Eproeuvette		SNERVAMENTO MPa >	ROTTURA MPa >	ALLUNGAMENTO % >	CONTRAZIONE % >	DUREZZA HB	PIEGA Bend test	SCHACC. Flat. test	RESILLENZA Impact test / Résilience				
	SEZIONE Section / Sect.	LUNGHEZZA Length / Longueur								Yield strength Limite d'élasticité	Tensile strength Rupture	Elongation Allongement	Reduction of area Striction	Hardness Dureté
PXNU	1	30.6	25.0	302.0	524.0	32.2	69.6	143-156			J	KV	0	42-52-42
PRNX	1	60.1	35.0	307.0	524.0	32.6	69.2	143-149			J	KV	0	42-46-44
PRXU	1	60.1	35.0	306.0	527.0	32.5	68.9	143-149			J	KV	0	42-46-44
KLAF	1	60.1	35.0	321.5	517.2	30.4	71.1	156-159			J	KV	0	140-152-158
PUCD	1	122.9	50.0	353.9	515.3	30.6	78.5	157-159			J	KV	0	138-156-160
NWVA	1	121.7	50.0	361.8	538.6	30.6	66.6	167-170			J	KV	0	164-172-184

PROVA Test Epreuve  
 NOTE / Remarks / Notes  
**EN10204/3.1**  
 FORMA Shape / Forme : 1 =  2 =

PXNU	ELECT. FURNACE-NORMALIZED AT 900 C COOLED IN STILL AIR.	/CERT.10841.MEGA/I*570069MEGA*
PRNX	ELECT. FURNACE-NORMALIZED AT 900 C COOLED IN STILL AIR.	/CERT.10709.MEGA/I*568174MEGA
PRXU	ELECT. FURNACE-NORMALIZED AT 900 C COOLED IN STILL AIR.	/CERT.10615.MEGA/I*567064MEGA
KLAF	ELECT. FURNACE-NORMALIZED AT 900 C COOLED IN STILL AIR.	/CERT.06962.TENARIS*549498MEGA*
PUCD	ELECT. FURNACE-NORMALIZED AT 900 C COOLED IN STILL AIR.	/CERT.001997/02.VALACOVNA*568180MEGA*
NWVA	ELECT. FURNACE-NORMALIZED AT 900 C COOLED IN STILL AIR.	/CERT.AS10808.06.LEALI*537210.MEGA*

PROVA Test Epreuve	POS. Item Pos.	QUANTITA' Quantity Quantité	CODICE CLIENTE Customer code Code client	DESCRIZIONE / Description / Description	VISUAL AND DIMENSIONAL
PXNU	005	3295		90 DEG. ELBOW S. 3000 NPT A/SA105N 1	OK
PRNX	006	700		90 DEG. ELBOW S. 3000 NPT A/SA105N 1.1/2	OK
PRXU	007	1850		90 DEG. ELBOW S. 3000 NPT A/SA105N 2	OK
KLAF	038	1652		COUPLING S. 3000 NPT A/SA105N 2	OK
PUCD	040	300		COUPLING S. 3000 NPT A/SA105N 3	OK
NWVA	043	200		CAP S. 3000 NPT A/SA105N 1/4	OK

NOTE / Remarks / Notes  
**MATERIAL ACCORDING TO NACE MR0175/ 2003.**

ENTE UFFICIALE DI COLLAUDO  
 Inspection Authority  
 Service Inspection Official

CAPO COLLAUDO  
 Chief Inspection DPT  
 Responsable assurance qualité

DOC. CERT. M.E.G.A.  
 Emmanuel Centemeri