

FORM ENQ Rev. 0 15-05-2009

# M.E.G.A.

CLIENTE  
Customer  
Client

PROVEEDORA DE MATERIALES ANGER  
SA DE CV  
ALFONSO REYES 4030 NTE.  
COL. DEL NTE. MONTERREY, N.L.

CERTIFICATO N. 570971 **FOGLIO 5**  
Certificat N. **Sheet**  
Certificat N. **Feuille**

DATA / Date 08/06/10

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

COMPANY  
WITH QUALITY SYSTEM  
CERTIFIED BY DHV  
ISO 9001

DRDIME 244  
Purchase order  
Commande

COMMESSA 91349  
Job N.  
Confirmation de commande

PROVA Test Epreuve	MATERIALE Material / Matière	COLATA Heat / Coulée	C %	Si %	Mn %	S %	P %	Cr %	Ni %	Mo %	Ti %	Cu %	V %	Al %	CE %
PDWA	ASTM A105/09	192295	0.172	0.206	1.018	0.003	0.010	00.09	00.07	0.010	0.000	0.115	0.001	0.029	0.374
			--->	Nb% = 0.002				Sn% = 0.007						CEs = 0.3417	
KDXD	ASTM A105/05	0834829/08	0.190	0.245	1.080	0.002	0.009	00.12	00.01	0.003	0.000	0.024	0.004	0.040	0.397
			--->	Nb% = 0.0029		B % = 0.0001								CEs = 0.370	
KTRU	ASTM A105/05	08/76570	0.180	0.220	0.920	0.008	0.012	00.09	00.05	0.010	0.019	0.150	0.017	0.021	0.370
			--->	Nb% = 0.001		N % = 0.000		Sn% = 0.009		B % = 0.000				CEs = 0.333	
KTXT	ASTM A105/05	0834827/08	0.180	0.235	1.090	0.002	0.017	00.11	00.01	0.006	0.000	0.069	0.004	0.035	0.392
			--->	Nb% = 0.0028		B % = 0.000								CEs = 0.361	
PADR	ASTM A105/05	0941773/09	0.195	0.215	1.090	0.003	0.009	00.14	00.04	0.010	0.000	0.019	0.003	0.021	0.411
			--->	Nb% = 0.0033										CEs = 0.3767	
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	

PROVA Test Epreuve	PROVETTA Test specimen / Epreouvette		SNERVAMENTO MPa <sub>z</sub> Yield strength Limite d'élasticité	ROTTURA MPa <sub>z</sub> Tensile strength Rupture	ALLUNGAMENTO % <sub>z</sub> Elongation Allongement	CONTRAZIONE % <sub>z</sub> Reduction of area Striction	DUREZZA HB Hardness Dureté	PIEGA Bend test Pliage	SCHIACC. Flat. test Aplattiss.	REBILLENZA Impact test / Résilience				
	SEZIONE Section / Sect.	LUNGHEZZA Length / Longueur								UNITÀ MIS. UM	TIPO Type	T. °C Test temp	VALORE / Value / Données	
PDWA	1	30.6	25.0	303.0	522.0	31.5	68.8	143-149			J	KV	0	48-38-42
KDXD	1	122.6	50.0	293.0	501.0	32.0	71.0	137-143			J	KV	0	46-38-40
KTRU	1	122.4	50.0	403.1	595.2	28.6	77.1	168-172			J	KV	0	158-174-180
KTXT	1	122.6	50.0	305.0	526.0	32.3	69.5	143-149			J	KV	0	44-42-46
PADR	1	60.1	35.0	327.0	533.0	29.2	67.3	152-159			J	KV	0	48-52-56
PRNX	1	60.1	35.0	307.0	524.0	32.6	69.2	143-149			J	KV	0	42-46-44

PROVA Test Epreuve NOTE / Remarks / Notes EN10204/3.1

PDWA	ELECT. FURNACE-NORMALIZED AT 900 C COOLED IN STILL AIR.		7CERT.153.EVASTI* MEGA	
KDXD	ELECT. FURNACE-NORMALIZED AT 900 C COOLED IN STILL AIR.		/.CERT.10077.MEGA/I*55183MEGA*	
KTRU	ELECT. FURNACE-NORMALIZED AT 900 C COOLED IN STILL AIR.		/CERT.10369.MEGA/I*558757MEGA	
KTXT	ELECT. FURNACE-NORMALIZED AT 900 C COOLED IN STILL AIR.		/CERT.10433.MEGA/I*561044MEGA	
PADR	ELECT. FURNACE-NORMALIZED AT 900 C COOLED IN STILL AIR.		/CERT.10579.MEGA/I*566724MEGA	
PRNX	ELECT. FURNACE-NORMALIZED AT 900 C COOLED IN STILL AIR.		/CERT.10709.MEGA/I*568174MEGA	

PROVA Test Epreuve	POS. Item Pos.	QUANTITÀ Quantity Quantité	CODICE CLIENTE Customer code Code client	DESCRIZIONE / Description / Description	VISUAL AND DIMENSIONAL
PDWA	055	3600		90 DEG. ELBOW S. 3000 SW A/SA105N 1/2	OK
KDXD	059	341		90 DEG. ELBOW S. 3000 SW A/SA105N 2	OK
KTRU	059	106		90 DEG. ELBOW S. 3000 SW A/SA105N 2	OK
KTXT	059	2787		90 DEG. ELBOW S. 3000 SW A/SA105N 2	OK
PADR	059	999		90 DEG. ELBOW S. 3000 SW A/SA105N 2	OK
PRNX	059	767		90 DEG. ELBOW S. 3000 SW A/SA105N 2	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