

# 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. 554256 FOLGIO 3  
Certificate N. Sheet  
Certificat N. Feuille

DATA / Date 06/11/08

CERTIFICATO DI COLLAUDO  
TEST CERTIFICATE  
CERTIFICAT DE CONTROLE

COMPANY  
WITH QUALITY SYSTEM  
CERTIFIED BY DNV  
ISO 9001

ORDINE 225  
Purchase order  
Commande

COMMESSA 85820  
Job N.  
Confirmation de commande

PROVA Test Epreuve	MATERIALE Steel quality / Matière	COLATA Heat / Coulée	C %	Si %	Mn %	S %	P %	Cr %	Ni %	Mo %	Ti %	Cu %	V %	Al %	CE %
RASA	ASTM A105/05	06/70497	0.190 ---->	0.190 Nb% = 0.000	0.890 N % = 0.000	0.009 N % = 0.000	0.014 N % = 0.000	00.10	00.00	0.010	0.000	0.130	0.000	0.020 CEs = 0.338	0.369 CEs = 0.338
KDSA	ASTM A105/05	0835650/08	0.185 ---->	0.250 Nb% = 0.0027	1.100 N % = 0.002	0.002 N % = 0.002	0.011 N % = 0.011	00.12	00.01	0.002	0.000	0.022	0.004	0.030 CEs = 0.368	0.395 CEs = 0.368
RTRB	ASTM A105/05	0743768/07	0.185 ---->	0.240 Nb% = 0.0018	1.070 N % = 0.003	0.003 N % = 0.003	0.009 N % = 0.009	00.12	00.02	0.009	0.000	0.038	0.003	0.033 CEs = 0.363	0.393 CEs = 0.363
KADT	ASTM A105/05	0778958	0.180 ---->	0.200 Nb% = 0.000	0.870 N % = 0.007	0.007 N % = 0.007	0.007 N % = 0.007	00.05	00.04	0.010	0.022	0.130	0.017	0.022 CEs = 0.325	0.351 CEs = 0.325
RUNR	ASTM A105/05	0779134	0.185 ---->	0.220 Nb% = 0.001	0.880 N % = 0.005	0.005 N % = 0.005	0.010 N % = 0.010	00.10	00.04	0.010	0.018	0.180	0.020	0.021 CEs = 0.331	0.372 CEs = 0.331
RUNL	ASTM A105/05	0779131	0.190 ---->	0.180 Nb% = 0.000	0.910 N % = 0.006	0.006 N % = 0.006	0.012 N % = 0.012	00.12	00.04	0.010	0.022	0.180	0.021	0.023 CEs = 0.000	0.386 CEs = 0.000

PROVA Test Epreuve	PROVETTA Test specimen / Epreuvette		SNERVAMENTO N/mm <sup>2</sup> ≥ Yield point Limite d'élasticité	ROTTURA N/mm <sup>2</sup> ≥ Tensile strength Rupture	ALLUNGAMENTO % ≥ Elongation Allongement	CONTRAZIONE % ≥ Reduction of area Striction	DUREZZA HB Hardness Dureté	PIEGA Bend test Pliage	SCHIACC. Flatt. test Aplattiss.	RESILIENZA Impact test / Résilience				
	SEZIONE Section / Sect.	LUNGHEZZA Length / Longueur								UNITÀ MIS. Unit system	TIPO Type	T. °C Test tmp	VALORE / Value / Données	
RASA	1	30.6	25.0	332.0	541.0	28.3	63.3	170-175			J	KV	0	58-54-48
KDSA	1	60.1	35.0	303.0	518.0	31.5	68.6	143-149			J	KV	0	48-48-50
RTRB	1	30.6	25.0	300.0	511.0	31.0	68.0	143-149			J	KV	0	48-50-54
KADT	1	30.6	25.0	300.0	524.0	31.0	68.0	145-149			J	KV	0	58-52-54
RUNR	1	123.7	50.0	355.6	535.3	30.6	63.1	160-165			J	KV	0	148-152-166
RUNL	1	121.6	50.0	344.8	525.6	28.6	66.2	146-149			J	KV	0	160-162-174

PROVA Test Epreuve	NOTE / Remarks / Notes	EN10204/3.1	FORMA Shape / Forme : 1 = <input type="checkbox"/> 2 = <input type="checkbox"/>
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RASA	ELECT.FURNACE-NORMALIZED AT 920 C COOLED IN STILL AIR.	/CERT.11.EVASI* 537673MEGA*
KDSA	ELECT.FURNACE-NORMALIZED AT 900 C COOLED IN STILL AIR.	/CERT.10000.MEGA/I*551893 MEGA*
RTRB	ELECT.FURNACE-NORMALIZED AT 900 C COOLED IN STILL AIR.	/CERT.9657.MEGA/I*546350MEGA*
KADT	ELECT.FURNACE-NORMALIZED AT 900 C COOLED IN STILL AIR.	/CERT.9882.MEGA/I*550371MEGA*
RUNR	ELECT.FURNACE-NORMALIZED AT 900 C COOLED IN STILL AIR.	/CERT.37913.RIVA*544277MEGA*
RUNL	ELECT.FURNACE-NORMALIZED AT 900 C COOLED IN STILL AIR.	/CERT.37911.RIVA*544277MEGA*

PROVA Test Epreuve	POS. Item Pos.	QUANTITÀ Quantity Quantité	CODICE CLIENTE Customer code Code client	DESCRIZIONE / Description / Description	VISUAL AND DIMENSIONAL
RASA	048	300		BUSHING M/F NPT A/SA105N 1.1/2x1/2	OK
KDSA	063	2000		90 DEG. ELBOW S. 3000 SW A/SA105N 1	OK
RTRB	073	1000		TEE S. 3000 SW A/SA105N 1/2	OK
KADT	075	1000		TEE S. 3000 SW A/SA105N 1	OK
RUNR	083	1000		COUPLING S. 3000 SW A/SA105N 1/2	OK
RUNL	084	1002		COUPLING S. 3000 SW A/SA105N 3/4	OK

NOTE / Remarks / Notes	ENTE UFFICIALE DI COLLAUDO Inspection Authority Service Inspection Official	CAPO COLLAUDO Chief Inspection / PT Responsable assurance qualité
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MATERIAL ACCORDING TO NACE MR0175/ 2003.	DOC. CERT. M.E.G.A. Luca Marcati
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