

# M.E.G.A.

CLIENTE  
Customer  
Client

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

CERTIFICATO N. 549086 FOLGIO 7  
Certificate N. Sheet  
Certificat N. Feuille

DATA / Date 14/04/08

CERTIFICATO DI COLLAUDO  
TEST CERTIFICATE  
CERTIFICAT DE CONTROLE

COMPANY  
WITH QUALITY SYSTEM  
CERTIFIED BY DNV  
ISO 9001

ORDINE  
Purchase order  
Commande 210

COMMESSA  
Job N. 82149  
Confirmation de commande

| PROVA<br>Test<br>Epreuve | MATERIALE<br>Steel quality / Matière | COLATA<br>Heat / Coulée | C %           | Si %         | Mn %  | S %         | P %   | Cr %  | Ni %  | Mo %  | Ti %  | Cu %  | V %   | Al %        | CE %  |
|--------------------------|--------------------------------------|-------------------------|---------------|--------------|-------|-------------|-------|-------|-------|-------|-------|-------|-------|-------------|-------|
| RUCU                     | ASTM A105/05                         | 07/78382                | 0.180<br>---> | 0.200        | 0.910 | 0.009       | 0.012 | 00.08 | 00.05 | 0.010 | 0.000 | 0.180 | 0.000 | 0.025       | 0.364 |
| RNBT                     | ASTM A105/05                         | 05/75386                | 0.185<br>---> | 0.180        | 0.910 | 0.007       | 0.010 | 00.09 | 00.06 | 0.010 | 0.000 | 0.210 | 0.000 | 0.021       | 0.374 |
| RALL                     | ASTM A105/05                         | FTS*77214               | 0.195<br>---> | 0.270        | 0.910 | 0.017       | 0.011 | 00.09 | 00.05 | 0.010 | 0.005 | 0.170 | 0.000 | 0.023       | 0.381 |
| RWXS                     | ASTM A105/05                         | 0730979/07              | 0.180<br>---> | 0.235        | 1.080 | 0.001       | 0.010 | 00.11 | 00.01 | 0.009 | 0.000 | 0.054 | 0.005 | 0.026       | 0.389 |
| RLND                     | ASTM A105/05                         | 0546865/05              | 0.170<br>---> | 0.200        | 1.220 | 0.003       | 0.012 | 00.18 | 00.02 | 0.015 | 0.000 | 0.078 | 0.001 | 0.024       | 0.419 |
| RCDL                     | ASTM A105/05                         | 074376607               | 0.175<br>---> | 0.230        | 1.060 | 0.001       | 0.001 | 00.14 | 00.06 | 0.014 | 0.000 | 0.053 | 0.003 | 0.041       | 0.390 |
|                          |                                      |                         |               | Nb% = 0.0026 |       |             |       |       |       |       |       |       |       | CEs = 0.351 |       |
|                          |                                      |                         |               | Nb% = 0.003  |       |             |       |       |       |       |       |       |       | CEs = 0.373 |       |
|                          |                                      |                         |               | Nb% = 0.0032 |       | N % = 0.000 |       |       |       |       |       |       |       | CEs = 0.346 |       |

| PROVA<br>Test<br>Epreuve | PROVETTA<br>Test specimen / Epreouvette |                                | SNERVAMENTO<br>N/mm <sup>2</sup> ≥<br>Yield point<br>Limite d'élasticité | ROTTURA<br>N/mm <sup>2</sup> ≥<br>Tensile strength<br>Rupture | ALLUNGAMENTO<br>% ≥<br>Elongation<br>Allongement | CONTRAZIONE<br>% ≥<br>Reduction of area<br>Striction | DUREZZA<br>HB<br>Hardness<br>Dureté | PIEGA<br>Bend test<br>Pliage | SCHIACC.<br>Flatt. test<br>Aplattiss. | RESILIENZA<br>Impact test / Résilience |              |                   |                          |
|--------------------------|-----------------------------------------|--------------------------------|--------------------------------------------------------------------------|---------------------------------------------------------------|--------------------------------------------------|------------------------------------------------------|-------------------------------------|------------------------------|---------------------------------------|----------------------------------------|--------------|-------------------|--------------------------|
|                          | SEZIONE<br>Section / Sect.              | LUNGHEZZA<br>Length / Longueur |                                                                          |                                                               |                                                  |                                                      |                                     |                              |                                       | UNITA MIS.<br>Unit system              | TIPO<br>Type | T. °C<br>Test tmp | VALORE / Value / Données |
| RUCU                     | 1                                       | 30.6 25.0                      | 325.0                                                                    | 538.0                                                         | 28.7                                             | 66.5                                                 | 149-156                             |                              |                                       | J                                      | KV           | 0                 | 54-60-48                 |
| RNBT                     | 1                                       | 30.6 25.0                      | 299.0                                                                    | 512.0                                                         | 31.4                                             | 68.8                                                 | 140-146                             |                              |                                       | J                                      | KV           | 0                 | 54-52-48                 |
| RALL                     | 1                                       | 122.6 50.0                     | 330.0                                                                    | 532.0                                                         | 32.0                                             | 58.0                                                 | 159-163                             |                              |                                       |                                        |              |                   |                          |
| RWXS                     | 1                                       | 30.6 25.0                      | 302.0                                                                    | 512.0                                                         | 31.0                                             | 68.4                                                 | 143-149                             |                              |                                       | J                                      | KV           | 0                 | 46-48-54                 |
| RLND                     | 1                                       | 30.6 25.0                      | 300.0                                                                    | 518.0                                                         | 31.4                                             | 68.3                                                 | 140-146                             |                              |                                       | J                                      | KV           | 0                 | 52-58-50                 |
| RCDL                     | 1                                       | 30.6 25.0                      | 291.4                                                                    | 502.0                                                         | 33.1                                             | 712.0                                                | 146-152                             |                              |                                       | J                                      | KV           | 0                 | 48-52-50                 |

PROVA Test Epreuve NOTE / Remarks / Notes EN10204/3.1

FORMA Shape / Forme : 1 =  2 =

RUCU ELECT.FURNACE-NORMALIZED AT 920 C COOLED IN STILL AIR. /CERT.126.EVASI\*544392MEGA\*

RNBT ELECT.FURNACE-NORMALIZED AT 920 C COOLED IN STILL AIR. /CERT.92.EVASI\*542253MEGA\*

RALL ELECT.FURNACE-NORMALIZED AT 920 C COOLED IN STILL AIR. /CERT.3256.METALFAR\*

RWXS ELECT.FURNACE-NORMALIZED AT 900 C COOLED IN STILL AIR. /CERT.9714.MEGA/I\*547160MEGA\*

RLND ELECT.FURNACE-NORMALIZED AT 900 C COOLED IN STILL AIR. /CERT.9554.MEGA/I\*545433MEGA\*

RCDL ELECT.FURNACE-NORMALIZED AT 900 C COOLED IN STILL AIR. /CERT.9275.MEGA/I\*540757MEGA\*

| PROVA<br>Test<br>Epreuve | POS.<br>Item<br>Pos. | QUANTITA<br>Quantity<br>Quantité | CODICE CLIENTE<br>Customer code<br>Code client | DESCRIZIONE / Description / Description | VISUAL AND<br>DIMENSIONAL |
|--------------------------|----------------------|----------------------------------|------------------------------------------------|-----------------------------------------|---------------------------|
| RUCU                     | 101                  | 500                              |                                                | 45 DEG. ELBOW S. 3000 SW A/SA105N 1     | OK                        |
| RNBT                     | 102                  | 200                              |                                                | 45 DEG. ELBOW S. 3000 SW A/SA105N 1.1/2 | OK                        |
| RALL                     | 103                  | 50                               |                                                | 45 DEG. ELBOW S. 3000 SW A/SA105N 3     | OK                        |
| RWXS                     | 104                  | 1000                             |                                                | TEE S. 3000 SW A/SA105N 1/2             | OK                        |
| RLND                     | 105                  | 1000                             |                                                | TEE S. 3000 SW A/SA105N 3/4             | OK                        |
| RCDL                     | 106                  | 884                              |                                                | TEE S. 3000 SW A/SA105N 1               | OK                        |

NOTE / Remarks / Notes

ENTE UFFICIALE DI COLLAUDO  
Inspection Authority  
Service Inspection Official

CAPO COLLAUDO  
Chief Inspection DPT  
Responsable assurance qualité

MATERIAL ACCORDING TO NACE MR0175/ 2003.

DOC. CERT. M.E.G.A.