



CLIENTE
Customer
Client

PROVEEDORA DE MATERIALES ANKER
SA DE CV, AV ADOLFO LOPEZ
MATEOS 150, COL LAGRANGE,
SAN NICOLAS DE LOS GARZA, N.L.

CERTIFICATO N.
Certificate N.
Certificat N.

592051

FOLGIO
Sheet
Feuille

2

DATA / Date

R.1 18/09/13

CERTIFICATO DI COLLAUDO
TEST CERTIFICATE
CERTIFICAT DE CONTROLE

COMPANY
WITH QUALITY SYSTEM
CERTIFIED BY DNV
=ISO 9001=

ORDINE
Purchase order
Commande

263

COMMESSA
Job N.
Confirmation de commande

98254

| PROVA Test Epreuve | MATERIALE Material / Matière | COLATA Heat / Couée | C % | Si % | Mn % | S % | P % | Cr % | Ni % | Mo % | Ti % | Cu % | V % | Al % | CE % |
|--------------------------|---------------------------------|------------------------|-------|-------|-------------|-------------|-------------|-------|-------|-------|-------|-------|-------|--------------|-------|
| VRNR | ASTM A105/12 | 12/73162 | 0.180 | 0.230 | 0.890 | 0.007 | 0.015 | 00.15 | 00.07 | 0.010 | 0.016 | 0.180 | 0.016 | 0.024 | 0.380 |
| | | TEST:VRNX | --- | | Nb% = 0.004 | B % = 0.000 | Sn% = 0.011 | | | | | | | CEs = 0.3283 | |
| VRRN | ASTM A105/12 | 12/73162 | 0.180 | 0.230 | 0.890 | 0.007 | 0.015 | 00.15 | 00.07 | 0.010 | 0.016 | 0.180 | 0.016 | 0.024 | 0.380 |
| | | TEST:VRNR | --- | | Nb% = 0.004 | B % = 0.000 | Sn% = 0.011 | | | | | | | CEs = 0.3283 | |
| VCRU | ASTM A105/12 | 12/72580 | 0.190 | 0.210 | 0.890 | 0.010 | 0.010 | 00.10 | 00.05 | 0.010 | 0.020 | 0.130 | 0.017 | 0.026 | 0.375 |
| | | | --- | | Nb% = 0.002 | B % = 0.000 | Sn% = 0.000 | | | | | | | CEs = 0.3383 | |
| VXBF | ASTM A105/12 | 12/73573 | 0.185 | 0.210 | 0.880 | 0.010 | 0.013 | 00.08 | 00.04 | 0.010 | 0.015 | 0.110 | 0.019 | 0.022 | 0.363 |
| | | | --- | | Nb% = 0.003 | B % = 0.000 | Sn% = 0.008 | | | | | | | CEs = 0.3317 | |
| VXCB | ASTM A105/12 | 12/73575 | 0.190 | 0.210 | 0.850 | 0.010 | 0.010 | 00.10 | 00.06 | 0.020 | 0.015 | 0.170 | 0.016 | 0.032 | 0.374 |
| | | | --- | | Nb% = 0.002 | B % = 0.000 | Sn% = 0.018 | | | | | | | CEs = 0.3317 | |
| UNAC | ASTM A105/12 | 10/73676 | 0.180 | 0.200 | 0.870 | 0.009 | 0.008 | 00.09 | 00.06 | 0.020 | 0.015 | 0.180 | 0.017 | 0.022 | 0.366 |
| | | | --- | | Nb% = 0.002 | B % = 0.010 | Sn% = 0.001 | | | | | | | CEs = 0.325 | |

| PROVA Test Epreuve | PROVETTA Test specimen / Epreuvette | | SNERVAMENTO MPa \geq Yield strength Limite d'élasticité | ROTTURA MPa \geq Tensile strength Rupture | ALLUNGAMENTO % \geq Elongation Allongement | CONTRAZIONE % \geq Reduction of area Striction | DUREZZA HB Hardness Dureté | PIEGA Bend test Pliage | SCHIACC. Flatt. test Aplattiss. | RESILLENZA Impact test / Résilience | | | |
|--------------------------|--|-------------------------------|--|--|---|---|-------------------------------------|------------------------------|---------------------------------------|--|--------------|--------------------|--------------------------|
| | SEZIONE Section / Sect | LUNGHEZZA Length / Longeur | | | | | | | | UNITÀ MIS. UM | TIPO Type | T. °C Test temp | VALORE / Value / Données |
| VRNR | 1 | 30.9 | 25.0 | 322.7 | 493.3 | 40.5 | 70.1 | 150-152 | | J | KV | 0 | 114-80-137 |
| VRRN | 1 | 30.5 | 25.0 | 297.2 | 494.3 | 34.2 | 60.8 | 159-161 | | J | KV | 0 | 165-218-196 |
| VCRU | 1 | 30.2 | 25.0 | 310.1 | 494.9 | 34.7 | 59.0 | 142-144 | | J | KV | 0 | 122-101-94 |
| VXBF | 1 | 58.9 | 35.0 | 330.3 | 499.9 | 37.7 | 63.5 | 148-150 | | J | KV | 0 | 88-94-106 |
| VXCB | 1 | 59.5 | 35.0 | 305.0 | 511.6 | 38.6 | 68.4 | 150-152 | | J | KV | 0 | 102-89-88 |
| UNAC | 1 | 31.3 | 25.0 | 355.3 | 522.2 | 33.8 | 62.0 | 141-143 | | J | KV | 0 | 140-138-136 |

PROVA Test Epreuve

NOTE / Remarks / Notes

FN10204-2005/3.1

FORMA Shape / Forme : 1 = \emptyset 2 = \square

| | | | |
|------|--|--|---------------------------------------|
| VRNR | ELECT.FURNACE-NORMALIZED AT 900 C COOLED IN STILL AIR. | | /CERT.402.EVASI*590279MEGA |
| VRRN | ELECT.FURNACE-NORMALIZED AT 900 C COOLED IN STILL AIR. | | /CERT.418.EVASI*590367MEGA |
| VCRU | ELECT.FURNACE-NORMALIZED AT 900 C COOLED IN STILL AIR. | | /CERT.12608.MEGA/I*590973MEGA |
| VXBF | ELECT.FURNACE-NORMALIZED AT 920 C COOLED IN STILL AIR. | | /CERT.115+121.CARLOTTO*591724MEGA |
| VXCB | ELECT.FURNACE-NORMALIZED AT 920 C COOLED IN STILL AIR. | | /CERT.121+153+159.CARLOTTO*591724MEGA |
| UNAC | ELECT.FURNACE-NORMALIZED AT 900 C COOLED IN STILL AIR. | | /CERT.000139.EVASI*576041MEGA |

| PROVA Test Epreuve | POS. Item Pos. | QUANTITÀ Quantity Quantité | CODICE CLIENTE Customer code Code client | DESCRIZIONE / Description / Description | VISUAL AND DIMENSIONAL |
|--------------------------|----------------------|----------------------------------|--|---|---------------------------|
| VRNR | 097 | 870 | | 90 DEG. ELBOW S. 3000 SW A/SA105N 1 | OK |
| VRRN | 097 | 2985 | | 90 DEG. ELBOW S. 3000 SW A/SA105N 1 | OK |
| VCRU | 110 | 5005 | | TEE S. 3000 SW A/SA105N 3/4 | OK |
| VXBF | 114 | 895 | | TEE S. 3000 SW A/SA105N 2 | OK |
| VXCB | 114 | 47 | | TEE S. 3000 SW A/SA105N 2 | OK |
| UNAC | 137 | 100 | | 90 DEG. ELBOW S. 6000 NPT A/SA105N 1/2 | OK |

| | | | | |
|--|--|--|---|--|
| NOTE / Remarks / Notes | | | ENTE UFFICIALE DI COLLAUDO Inspection Authority Service Inspection Officiel | CAPO COLLAUDO Chief Inspection DPT Responsable assurance qualité |
| MATERIAL ACCORDING TO NACE MR0175 / ISO 15156-1-2-3 Ed.2009 | | | | DOC. CERT. M.E.G.A. Emmanuel Centemeri |