

MEGA

CLIENTE Customer/Client
 PROVIDEDORA DE MATERIALES ANGER
 SA DE CV, AV ADOLFO LOPEZ
 MATEOS 150, COL LAGRANGE,
 SAN NICOLAS DE LOS GARZA, N.L.

CERTIFICATO N. 588306 FOLIO 1
 Certificate N. 588306 Sheet 1
 DATA/Date 03/09/12

CERTIFICATO DI COLLAUDO
 TEST CERTIFICATE
 CERTIFICAT DE CONTROLE

COMPANY
 WITH QUALITY SYSTEM
 CERTIFIED BY DNV
 ISO 9001

ORDINE Purchase order/Commande
 257

COMMESSA Job N.
 Confirmation de commande
 95504

PROVA Test/Epreuve	MATERIALE Material/AluMat	COLATA Heat/Coûlée	C %	SI %	Mn %	S %	P %	Cr %	NI %	Mo %	Ti %	Cu %	V %	Al %	CEX
UXFT	ASTM A105/10	11/77092	0.180	0.210	0.850	0.008	0.012	00.12	00.05	0.010	0.016	0.180	0.016	0.020	0.366
			--->	Nb% = 0.001	0.001			Sn% = 0.011	B % = 0.000						CEs = 0.3217
PLDA	ASTM A105/05	04/77593	0.185	0.200	0.920	0.023	0.015	00.09	00.05	0.010	0.007	0.140	0.003	0.005	0.371
			--->	Nb% = 0.001	0.001			Sn% = 0.008	B % = 0.000						CEs = 2.000
UFAS	ASTM A105/09	55957/01	0.210	0.230	0.980	0.008	0.015	00.16	00.10	0.031	0.015	0.100	0.001	0.014	0.420
			--->	Nb% = 0.001	As% = 0.001			N % = 0.0089	B % = 0.000						CEs = 0.3733
UNND	ASTM A105/10	710706	0.120	0.190	0.940	0.003	0.014	00.09	00.12	0.020	0.000	0.160	0.002	0.000	0.317
			--->	Nb% = 0.002	0.002			B % = 0.000							CEs = 0.2767
UJCL	ASTM A105/10	11/78477	0.195	0.240	0.910	0.010	0.011	00.14	00.05	0.010	0.023	0.150	0.017	0.022	0.393
			--->	Nb% = 0.001	B % = 0.000			Sn% = 0.009				B % = 0.000			CEs = 0.3467
PLDD	ASTM A105/05	08/74333	0.195	0.250	0.980	0.009	0.014	00.11	00.05	0.010	0.017	0.180	0.002	0.017	0.398
			--->	Nb% = 0.000	B % = 0.000										CEs = 0.3583

PROVA Test/Epreuve	PROFETTA Test specimen / Epreuve		ZINNAMENTO MPa Yield strength / Limite d'élasticité	POTATURA MPa Tensile strength / Rupture	ALLUNGAMENTO % Elongation / Allongement	CONTRAZIONE % Reduction of area / Striction	DUREZZA HB Hardness / Dureté	PIEGA Bend test / Pliage	SCHIACC. Flat. test / Aplatis.	RESILLENZA Impact test / Résilience			
	REGIONE Shoulder / Écrou	LUNGHEZZA Length / Longueur								UNI (A MIN. UM)	IMP Type	T. °C Test temp	VALORE / Value / Dornées
UXFT	1	30.6	25.0	318.2	532.4	30.2	68.4	150-155		J	KV	0	96-82-74
PLDA	1	30.6	25.0	321.0	537.0	32.3	67.1	155-160		J	KV	0	18-50-54
UFAS	1	30.6	25.0	327.0	541.0	29.3	67.7	153-159		J	KV	0	18-60-58
UNND	1	59.4	35.0	329.5	501.1	40.2	71.4	150-152		J	KV	0	218-209-217
UJCL	1	58.2	35.0	355.2	539.1	35.8	66.5	148-146		J	KV	0	138-139-161
PLDD	1	30.6	25.0	339.0	542.0	28.3	64.1	163-170		J	KV	0	60-62-58

PROVA Test/Epreuve
 NOTE / Remarks / Notes
 EN10204-2005/3.1

UXFT	ELECT. FURNACE-NORMALIZED AT 900 C COOLED IN STILL AIR. /CERT.292+312.EVASI*581180MEGA
PLDA	ELECT. FURNACE-NORMALIZED AT 900 C COOLED IN STILL AIR. /CERT.10086.FEAT*564384 MEGA
UFAS	ELECT. FURNACE-NORMALIZED AT 900 C COOLED IN STILL AIR. /CERT.10054+10055.MET.LOMBARDA*576474MEGA
UNND	ELECT. FURNACE-NORMALIZED AT 900 C COOLED IN STILL AIR. /CERT.11/11792.TENARIS*578712MEGA*
UJCL	ELECT. FURNACE-NORMALIZED AT 900 C COOLED IN STILL AIR. /CERT.33702.RIVA*581179MEGA*
PLDD	ELECT. FURNACE-NORMALIZED AT 900 C COOLED IN STILL AIR. /CERT.10169.METALMECCANICA LOMBARDA*566925MEGA*

PROVA Test/Epreuve	POS. Item Pos.	QUANTITÀ Quantity / Quantité	CODICE CLIENTE Customer code / Code client	DESCRIZIONE / Description / Description	VISUAL AND DIMENSIONAL
UXFT	018	880		TEE S. 3000 NPT A/SA105N 1/2	OK
PLDA	024	5000		UNION S. 3000 NPT A/SA105N 1/2	nut OK
UFAS	024	10000		UNION S. 3000 NPT A/SA105N 1/2	male+female OK
UNND	046	500		HALF COUPLING S. 3000 NPT A/SA105N 1.1/2	OK
UJCL	051	1000		CAP S. 3000 NPT A/SA105N 1	OK
PLDD	060	2000		BUSHING M/F NPT A/SA105N 1x1/2	OK

NOTE / Remarks / Notes
 MATERIAL ACCORDING TO NACE MR0175 / ISO 15156-1-2-3 Ed.2009

ENTE UFFICIALE DI COLLAUDO Inspection Authority / Service Inspection Official

CAPO COLLAUDO (C.A.) Inspection OPI / Responsable Mesures de qualité

4800 CERT / M.E.G.A.
 Centemeri

MEGIA

CEDENTE
Customer
Client

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

CERTIFICATO N. 592975 FOLIO 2
Certificato N. Sheet
Certificat N. Feuille
DATA / Date 23/04/13

CERTIFICATO DI COLLAUDO
TEST CERTIFICATE
CERTIFICAT DE CONTROLE

COMPANY
WITH QUALITY SYSTEM
CERTIFIED BY DNV
ISO 9001

ORDINE
Purchase order
Comanda 257

CONMESSA 95504
Job N.
Confirmation de commande

PROVA Test Epreuve	MATERIALE Material Materiale	COLATA Heat / Cooled	C %	SI %	Mn %	S %	P %	Cr %	Mo %	Ni %	Co %	V %	Al %	CE %	
NNCX	ASTM A105/05	005094	0.160	0.210	1.200	0.003	0.008	00.10	00.08	0.020	0.000	0.090	0.001	0.000	0.395
			--->	Nb % =	0.006	N % =	0.000								CEs = 0.360
UDSS	ASTM A105/10	11/35257	0.220	0.230	0.960	0.013	0.016	00.14	00.07	0.010	0.009	0.180	0.000	0.010	0.426
			--->	Nb % =	0.000	B % =	0.000	Sn % =	0.015						CEs = 0.380
VTSS	ASTM A105/11	12/72372	0.190	0.220	0.880	0.009	0.015	00.10	00.04	0.010	0.019	0.160	0.017	0.017	0.375
			--->	Nb % =	0.002	B % =	0.000	Sn % =	0.009						CEs = 0.3367
VNBX	ASTM A105/11	12/31598	0.195	0.230	0.970	0.010	0.013	00.08	00.03	0.010	0.020	0.110	0.020	0.024	0.387
			--->	Nb % =	0.001	B % =	0.000	Sn % =	0.006						CEs = 0.3567
VNFD	ASTM A105/11	12/70055	0.195	0.200	0.970	0.005	0.013	00.09	00.04	0.010	0.019	0.130	0.001	0.027	0.388
			--->	Nb % =	0.002	B % =	0.000	Sn % =	0.008	N % =	0.0099				CEs = 0.3567
UHRL	ASTM A105/11	14092	0.180	0.220	0.920	0.005	0.007	00.16	00.22	0.070	0.000	0.260	0.002	0.020	0.411
			--->	Nb % =	0.001	B % =	0.000	Sn % =	0.012						CEs = 0.3333

PROVA Test Epreuve	PROVETTA Test specimen / Epreuve		SOLLECAMENTO MPa	RITURNA MPa	ALLUNGAMENTO % ≥	CONTRAZIONE % ≥	DUREZZA HB	PESA Bond test	SCROCCO Flat. test	RESISTENZA Impact test / Résistance			
	SEZIONE Section / Sect.	LUNGHEZZA Length / Longueur								VALORE / Value / Donnée	UNITA' MIB. UM	TIP. TYPE	T. °C Test temp
NNCX	1	122.6	50.0	288.0	485.0	31.1	67.6	142-158		J	KV	0	48-52-58
UDSS	1	25.8	25.0	303.6	501.0	30.8	51.4	147-149		J	KV	0	54-42-46
VTSS	1	60.3	35.0	303.9	498.5	36.3	62.7	148-150		J	KV	0	69-63-105
VNBX	1	122.6	50.0	354.0	590.0	30.0	52.0	149-156		J	KV	0	86-92-96
VNFD	1	121.0	50.0	306.3	497.3	33.0	63.7	148-150		J	KV	0	71-66-59
UHRL	1	60.4	35.0	289.6	514.5	38.1	65.9	148-150		J	KV	0	124-105-89

PROVA Test Epreuve NOTE / Remarks / Notes EN10204-2005/3.1

FORMA Shape / Forma : 1 = Ø 2 = □

NNCX	ELECT. FURNACE-NORMALIZED AT 900 C COOLED IN STILL AIR.	/CERT.627969.06 ASF0*535583 MEGA*
UDSS	ELECT. FURNACE-NORMALIZED AT 920 C COOLED IN STILL AIR.	/CERT.260+284.CARLOTTO*578403MEGA
VTSS	ELECT. FURNACE-NORMALIZED AT 880 C COOLED IN STILL AIR.	/CERT.12672.MEGA/I*591431MEGA
VNBX	ELECT. FURNACE-NORMALIZED AT 900 C COOLED IN STILL AIR.	/CERT.12303.MEGA/I*587499MEGA
VNFD	ELECT. FURNACE-NORMALIZED AT 920 C COOLED IN STILL AIR.	/CERT.933+942.CARLOTTO*588659MEGA
UHRL	ELECT. FURNACE-NORMALIZED AT 920 C COOLED IN STILL AIR.	/CERT.285.CARLOTTO*586197MEGA

PROVA Test Epreuve	POS. Item Pos.	QUANTITA' Quantity Quantité	CODICE CLIENTE Customer code Code client	DESCRIZIONE / Description / Description	VISUAL AND DIMENSIONAL
NNCX	008	281	*	90 DEG. ELBOW S. 3000 NPT A/SA105N 2.	OK
UDSS	008	39	*	90 DEG. ELBOW S. 3000 NPT A/SA105N 2	OK
VTSS	008	280	*	90 DEG. ELBOW S. 3000 NPT A/SA105N 2	OK
VNBX	010	168	*	90 DEG. ELBOW S. 3000 NPT A/SA105N 3	OK
VNFD	010	162	*	90 DEG. ELBOW S. 3000 NPT A/SA105N 3	OK
UHRL	011	39	*	90 DEG. ELBOW S. 3000 NPT A/SA105N 4	OK

NOTE / Remarks / Notes

ENTE UFFICIALE DI COLLAUDO
Inspection Authority
Service Inspection Officiel

CAPO COLLAUDO
Chief Inspection Off.
Responsable assurance qualité

MATERIAL ACCORDING TO NACE MR0175 /
ISO 15186-1-2-3 Ed.2009

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

FORMA P.N.C. 01/15-05/2002

M.E.G.A.

CLIENTE
Customer
Civita

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.

586344

FOLIO 3
Sheet
Folio

DATA/Date

18/05/12

COMMESSA
Job N.
Confirmation de commande

95504

CERTIFICATO DI COLLAUDO
TEST CERTIFICATE
CERTIFICAT DE CONTROLE

COMPANY
WITH QUALITY SYSTEM
CERTIFIED BY DNV
ISO 9001

GRUPPE
Purchase order
Commande

257

PROVA Test Epreuve	MATERIALE Material / Matériau	COLATA Heat / Coulee	C %	SI %	Mn %	S %	P %	Cr %	Mo %	Co %	Ni %	Al %	CE %	Al %	CE %
UBLF	ASTM A105/09	P3111135731	0.180	0.170	1.060	0.003	0.015	00.11	00.01	0.004	0.000	0.023	0.003	0.031	0.383
			---	Nb % = 0.0017		B % = 0.0001								CE % = 0.3567	
ULBB	ASTM A105/10	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 % = 0.0002				CE % = 0.330	
UHXC	ASTM A105/10	10/74261	0.180	0.200	0.940	0.009	0.014	00.15	00.07	0.020	0.015	0.160	0.017	0.028	0.389
			---	Nb % = 0.003		B % = 0.000		Sn % = 0.008						CE % = 0.3367	
UKDA	ASTM A105/10	10/74261	0.180	0.200	0.940	0.009	0.014	00.15	00.07	0.020	0.015	0.160	0.017	0.028	0.389
			---	Nb % = 0.003		B % = 0.000		Sn % = 0.008						CE % = 0.3367	
UZBA	ASTM A105/10	P4111147366	0.180	0.210	1.070	0.005	0.015	00.12	00.04	0.008	0.000	0.185	0.005	0.026	0.400
			---	Nb % = 0.0034		B % = 0.0002								CE % = 0.3583	
UZBX	ASTM A105/10	P4111147368	0.180	0.235	1.070	0.006	0.012	00.12	00.02	0.001	0.000	0.042	0.003	0.030	0.388
			---	Nb % = 0.0016		B % = 0.0001								CE % = 0.3583	

PROVA Test Epreuve	PROVETTA Test specimen / Epreuve		ENERGIAMENTO JAP: J Voids strength Limite d'élasticité	ROTTURA MPa: R Tensile strength Rupture	ALLUNGAMENTO %: E Elongation Allongement	CONTRAZIONE %: Z Reduction of area Striction	DUREZZA HV: H Hardness Dureté	PIEDA Bend test Pliage	SCHIACCI. Flatt. test Ap/Press.	RESILIENZA Impact test / Résilience			
	SEZIONE Section / Sect.	LUNGHEZZA Length / Longueur								UNITÀ MIS. Unit	TPO Type	T °C Test temp	VALORE / Value / Donnée
URLF	1	124.1	50.0	299.4	494.0	35.8	70.7	141-143		J	KV	0	184-186-188
ULBB	1	122.8	50.0	370.3	542.2	30.4	65.3	165-170		J	KV	0	144-153-172
UHXC	1	30.6	25.0	301.0	523.0	31.3	68.9	149-152		J	KV	0	46-56-58
UKDA	1	30.6	25.0	311.0	534.0	29.2	66.8	149-156		J	KV	0	46-56-58
UZBA	1	30.9	25.0	309.5	518.5	37.1	67.5	144-146		J	KV	0	122-131-146
UZBX	1	30.5	25.0	290.8	493.1	32.9	68.4	143-147		J	KV	0	129-96-97

PROVA
Test
Epreuve

NOTE / Remarks / Notes

EN10204-2004/3.1

FORMA
Shape / Forme

1 = Ø 2 = □

UBLF	ELECT. FURNACE-NORMALIZED AT 900 C COOLED IN STILL AIR.	/CERT. 2011-100000021386.LUCCHINI*576654MEGA*
ULBB	ELECT. FURNACE-NORMALIZED AT 900 C COOLED IN STILL AIR.	/CERT. AS10808:06 LEALI*578516*MEGA*
UHXC	ELECT. FURNACE-NORMALIZED AT 900 C COOLED IN STILL AIR.	/CERT. 11811.MEGA/I*581947MEGA
UKDA	ELECT. FURNACE-NORMALIZED AT 900 C COOLED IN STILL AIR.	/CERT. 11744.MEGA/I*581606MEGA
UZBA	ELECT. FURNACE-NORMALIZED AT 900 C COOLED IN STILL AIR.	/CERT. 11987.MEGA/I*584099MEGA
UZBX	ELECT. FURNACE-NORMALIZED AT 900 C COOLED IN STILL AIR.	/CERT. 11840.MEGA/I*582548MEGA

PROVA Test Epreuve	POS. Item Pos.	DIMENSIONI Dim. / Qty Dimension	CODICE CLIENTE Customer code Code client	DESCRIZIONE / Description / Description	VISUAL AND DIMENSIONAL
UBLF	055	30		CAP S. 3000 NPT A/SA105N 2.1/2	OK
ULBB	069	3000		HEX. HEAD PLUG NPT A/SA105N 1/4	OK
UHXC	079	2200		90 DEG. ELBOW S. 3000 SW A/SA105N 3/4	OK
UKDA	079	1900		90 DEG. ELBOW S. 3000 SW A/SA105N 3/4	OK
UZBA	083	1500		90 DEG. ELBOW S. 3000 SW A/SA105N 2	OK
UZBX	088	600		45 DEG. ELBOW S. 3000 SW A/SA105N 2	OK

NOTE / Remarks / Notes

MATERIAL ACCORDING TO NACE MR0175 / ISO 15156-1-2-3 Ed.2009

ENTE UFFICIALE DI COLLAUDO
Inspection Authority
Service Inspection Official

CAPO COLLAUDO
Chief Inspection OPI
Responsable d'assurance qualité

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