M.E.G.A.

INSPECTION CERTIFICATE

Certificato d'ispezione

REPORT N. / Rapporto N.	TC-017374-16-0003	**Issued on** / Emesso il	10/06/2016	**Customer** / Cliente	PROVEEDORA DE MATERIALES ANCER SA DE CV, AV ADOLFO LOPEZ MATEOS 150, COL LAGRANGE, SAN NICOLAS DE LOS GARZA, N.L. - 66490, MEXICO
Revision / Revisione	0	**According to** / In accordo a	EN 10204:2004 UNI EN 10204:2005	**Type** / Tipo	3.1
Job n. / Com. n.	17374	**Page n.**/ Pagina n.	4 of 7		
Purchase order and project/Ordine e progetto	340				

DESCRIPTION / DESCRIZIONE

Test / Prova	Item / Pos.	Qty / Q.tà	Customer code / Codice cliente	Material / Materiale	Heat / Colata	Product / Prodotto
YFRC	49	100		A/SA105-14	13/77828	HEX. HEAD PLUG NPT A/SA105N 2.1/2
YLTU	50	750		A/SA105-14	13/77992	90 DEG. ELBOW S. 3000 SW A/SA105N 1.1/2
YNXN	51	900		A/SA105-14	15/77270	90 DEG. ELBOW S. 3000 SW A/SA105N 2
JUAX	55	250		A/SA105-14	13/77967	45 DEG. ELBOW S. 3000 SW A/SA105N 1.1/4
YLTD	56	250		A/SA105-14	P3131335953	45 DEG. ELBOW S. 3000 SW A/SA105N 2

Test / Prova	HEAT TREATMENT DATA AND REFERENCES TO OTHER CERTIFICATES / Dettagli di trattamento termico e riferimenti ad altri certificati	RAW AND FORGING MATERIAL CERTIFICATES / Certificati di acciaieria/forgia
YFRC	MATERIAL PRODUCED BY ELECT.FURNACE-NORMALIZED AT 880 C COOLED IN STILL AIR.	CERT.FC-005283-15-0005.MEGA/CERT.2486.MEGA*
YLTU	MATERIAL PRODUCED BY ELECT.FURNACE-NORMALIZED AT 880 C COOLED IN STILL AIR.	CERT.FC-005265-15-0022.MEGA/CERT.2147.MEGA*
YNXN	MATERIAL PRODUCED BY ELECT.FURNACE-NORMALIZED AT 880 C COOLED IN STILL AIR.	CERT.FC-005329-15-0018.MEGA/CERT.2564.MEGA*
JUAX	MATERIAL PRODUCED BY ELECT.FURNACE-NORMALIZED AT 880 C COOLED IN STILL AIR.	CERT.FC-004682-13-0021.MEGA/CERT.923.MEGA*
YLTD	MATERIAL PRODUCED BY ELECT.FURNACE-NORMALIZED AT 880 C COOLED IN STILL AIR.	CERT.FC-005265-15-0012.MEGA/CERT.2030.MEGA*

Test / Prova	Test loc. / Preso a	Orient. / Direz.	TENSILE TEST AT ROOM TEMPERATURE / Trazione a tempertura ambiente						CVN (KV) / Prova di resilienza					Bend [B] Flatt. [F] / Piega Schiacc.	Hardness / Durezza
			Specimen / Provino			Yield strength Snerv. [Mpa]	Tensile strength Rottura [Mpa]	Elongation Allung. [%]	Red. Of Area Contraz. [%]	Dimens. Dimens. [mm]	T Temp. [°C]	Abs. Energy Energia ass. [J]	Shear A Area d [%]	Lat Exp Esp. Lat. [mm]		
			Shape Forma	A [mm²] Sezione	L [mm] Lungh.	Min:	Min:	Min:	Min:							
YFRC	T/2	LONG	Round	30.000	25.000	296.900	489.000	30.000	60.400	10x10x55	-1	88-73-89	--	--		HBW 140-143
YLTU	T/2	LONG	Round	30.300	25.000	278.100	507.000	35.600	66.400	10x10x55	-1	106-82-68	--	--		HBW 147-149
YNXN	T/2	LONG	Round	59.700	35.000	295.800	508.400	33.900	66.100	10x10x55	-1	64-57-88	35-30-45	--		HBW 150-152
JUAX	T/2	LONG	Round	30.500	25.000	276.400	522.500	38.500	65.300	10x10x55	0	79-97-77	--	--		HBW 148-152
YLTD	T/2	LONG	Round	30.900	25.000	264.800	487.300	34.800	64.600	10x10x55	0	133-157-125	--	--		HBW 140-141

Test / Prova	C [%]	Si [%]	Mn [%]	S [%]	P [%]	Cr [%]	Ni [%]	Mo [%]	Ti [%]	Cu [%]	V [%]	Al [%]	H [%]	Nb [%]	N [%]	Sn [%]	O [%]	B [%]	Fe [%]	Zr [%]	CE[A]	PREN[B] [%]	X fact.[C] [%]	J fact.[D] [%]
YFRC	0.1900	0.1600	0.9500	0.0100	0.0120	0.1300	0.0800	0.0200	0.0150	0.1800	0.0030	0.0260	0.00021	0.0020	0.0102	0.0090	0.0018				0.3962			
YLTU	0.1950	0.2000	0.9500	0.0090	0.0150	0.1300	0.0500	0.0100	0.0220	0.1600	0.0020	0.0320	0.00024	0.0010	0.0092	0.0080	0.0017				0.3957			
YNXN	0.1850	0.1900	1.0400	0.0040	0.0150	0.1500	0.0600	0.0100	0.0190	0.2000	0.0020	0.0280	0.00021	0.0010	0.0090	0.0100	0.0012				0.4080			
JUAX	0.1950	0.2500	1.0100	0.0030	0.0150	0.1500	0.0800	0.0100	0.0200	0.1900	0.0020	0.0280		0.0010	0.0096	0.0090					0.4137			
YLTD	0.1700	0.2500	1.0700	0.0010	0.0090	0.1650	0.0220	0.0050		0.0440	0.0040	0.0250	0.00015	0.0031	0.0053		0.0011	0.0003			0.3875			

REMARKS / Note

1: MATERIAL ACCORDING TO NACE MR0175/ISO 15156-1-2-3 Ed.2009
2: MATERIAL ACCORDING TO ASME Sect. II Part. A 2015 Edition.
3: FULLY KILLED STEEL AND FINE GRAIN TREATED

A: CE = C + Mn/6 + (Cr+Mo+V)/5 + (Cu+Ni)/15 | B: PREN = Cr + 3.3Mo + 16N
C: X factor = (10P + 5Sb+4Sn+As)/100 - elements expressed in ppm
D: J factor = ((Mn + Si)(P + Sn)) x 10E4

Additional elements:

Quality inspector representative
Ispettore controllo qualità

Riccardo Scorsetti

This certificate is issued by a computerized system and it is valid with electronic signature. On the original certificate the trademark M.E.G.A. is printed in green color.

Form QC-01-01 Rev. 0 2013-03-15