M.E.G.A.

INSPECTION CERTIFICATE

Certificato d'Ispezione

REPORT N. / Rapporto N.	TC-013344-14-0001	Issued on / Emesso il	29/07/2014	Customer / Cliente	THE GLOBAL GROUP	Job n. / Com. n. 13344	Page n./ Pagina n. 15 of 19
Revision / Revisione	0	According to / In accordo a	EN 10204:2005	Type / Tipo	3.1	8900 RAILWOOD DRIVE, HOUSTON, TX 77078 - UNITED STATES	Purchase order and project/Ordine e progetto 202532

DESCRIPTION / DESCRIZIONE

Test / Prova	Item / Pos.	Qty / Q.tà	Customer code / Codice cliente	Material / Materiale	Heat / Colata	Product / Prodotto
JBAU	87	125		A/SA105-13	13/75437	COUPLING S. 6000 SW A/SA105N 1.1/2
VRSR	88	324		A/SA105-13	12/73665	TEE S. 6000 SW A/SA105N 1x3/4
PKXU	89	17		A/SA105-13	P4101045368	TEE S. 6000 SW A/SA105N 1.1/2x1/2
VXCB	89	85		A/SA105-13	12/73575	TEE S. 6000 SW A/SA105N 1.1/2x1/2
JCTF	90	132		A/SA105-13	P4111148676	TEE S. 6000 SW A/SA105N 1.1/2x3/4

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
JBAU	MATERIAL PRODUCED BY ELECT.FURNACE-NORMALIZED AT 900 C COOLED IN STILL AIR.	CERT.15874.RIVA*593115MEGA*
VRSR	MATERIAL PRODUCED BY ELECT.FURNACE-NORMALIZED AT 900 C COOLED IN STILL AIR.	CERT.16.EVASI*591488MEGA
PKXU	MATERIAL PRODUCED BY ELECT.FURNACE-NORMALIZED AT 900 C COOLED IN STILL AIR.	CERT.11403.MEGA/I*577413MEGA
VXCB	MATERIAL PRODUCED BY ELECT.FURNACE-NORMALIZED AT 920 C COOLED IN STILL AIR.	CERT.121+153+159.CARLOTTO*591724MEGA
JCTF	MATERIAL PRODUCED BY ELECT.FURNACE-NORMALIZED AT 880 C COOLED IN STILL AIR.	CERT.4310-12-16.MEGA/I*0006MEGA

Test / Prova	Test loc. / Preso a	Orient. / Direz.	TENSILE TEST / Trazione: Specimen / Provino: Shape / Forma	A [mm²] / Sezione	L [mm] / Lungh.	Yield strength / Snerv. [Mpa] Min:	Tensile strength / Rottura [Mpa] Min:	Elongation / Allung. [%] Min:	Red. Of Area / Contraz. [%] Min:	CVN (KV) / Prova di resilienza: Dimens. / Dimens. [mm]	T / Temp. [°C]	Abs. Energy / Energia ass. [J]	Shear A / Area d [%]	Lat Exp / Esp. Lat. [mm]	Bend / Piega	Flatten. / Schiacc.	Hardness / Durezza [HBN]
JBAU	T/2	LONG	Round	124.300	50.000	348.400	530.300	31.900	53.600	10x10x55	0	141-130-120	--	--			150-152
VRSR	T/2	LONG	Round	60.500	35.000	334.100	511.200	38.100	55.400	10x10x55	0	70-88-81	--	--			150-152
PKXU	T/2	LONG	Round	122.700	50.000	326.500	499.500	33.000	62.400	10x10x55	-50	146-128-105	--	--	OK		156-160
VXCB	T/2	LONG	Round	59.500	35.000	305.000	511.600	38.600	68.400	10x10x55	0	102-89-88	--	--			150-152
JCTF	T/2	LONG	Round	121.900	50.000	306.300	500.800	38.800	67.600	10x10x55	0	116-129-109	--	--			144-146

Test / Prova	C [%]	Si [%]	Mn [%]	S [%]	P [%]	Cr [%]	Ni [%]	Mo [%]	Ti [%]	Cu [%]	V [%]	Al [%]	Co [%]	Nb [%]	N [%]	Sn [%]	W [%]	B [%]	Fe [%]	Zr [%]	CE[A] [%]	PREN[B] [%]	X fact.[C] [%]	J fact.[D] [%]
JBAU	0.1800	0.2000	0.9000	0.0100	0.0130	0.1700	0.0900	0.0200	0.0170	0.2000	0.0030	0.0280				0.0110					0.3879			
VRSR	0.1650	0.2200	0.9500	0.0100	0.0120	0.1100	0.0600	0.0200	0.0170	0.2300	0.0200	0.0250				0.0120					0.3726			
PKXU	0.1900	0.2200	1.1000	0.0040	0.0150	0.1200	0.0150	0.0020		0.0230	0.0060	0.0320									0.4014			
VXCB	0.1900	0.2100	0.8500	0.0100	0.0100	0.1000	0.0600	0.0200	0.0150	0.1700	0.0160	0.0320				0.0180					0.3741			
JCTF	0.1750	0.2300	1.0800	0.0050	0.0150	0.1600	0.0370	0.1200		0.0470	0.0050	0.0280						0.0003			0.4176			

REMARKS / Note

1: MATERIAL ACCORDING TO NACE MR0175/ISO 15156-1-2-3 Ed.2009
2: Material according to ASME Sect. II Part. A 2013 Edition.

A: CE = C + Mn/6 + (Cr+Mo+V)/5 + (Cu+Ni)/15 | B: PREN = Cr + 3.3Mo + 16N
C: X factor = (10P + 55Sb+45n+As)/100 - elements expressed in ppm
D: J factor = ((Mn + Si)(P + Sn)) x 104

Quality Inspector representative / Ispettore controllo qualità: Emmanuel Centemori

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