MAANSHAN IRON AND STEEL CO., LTD.

CERTIFICATE OF PRODUCT QUALITY

Customer: TEWOO METAL (H.K.) LIMITED

Material description: HOT ROLLED STEEL H-BEAM.

Steel type: ALLOYED, HOT/COLD ROLLED NO ALLOYED, ETC

Specification: ASTM A6/A6M-2009 ASTM A572/A572M-2012
ASTM A992/A992M-2011(B:0.0008%-0.0040%)

ADD: NO.8 JIUHUA WEST ROAD,MAANSHAN
CITY, ANHUI PROVINCE,P.R.CHINA
POSTCODE: 243000 TEL: (0555)2877326
QUALITY DEPARTMENT :BILU YU
TEL: (0555)2877321

QUALITY NO.: QSR8132703406

CONTRACT NO.: 16MGE-B-9-100-1

DATE: 2016-7-6

LOT No.	Heat No.	Steel Grade	Size (INCH)	Length (M)	Pieces	Theoretical Weight (MT)	Chemical Composition (%)														Mechanical Properties			Yield Ratio
							C	Si	Mn	P	S	Cr	Ni	Cu	V	Mo	Nb	B	CEV	Sn	Yield Strength σ_s (Mpa)	Tensile Strength σ_b (Mpa)	Elongation δ 200 (%)	
216061064	16402754	MC345B	W10*26	12.192	48	22.512	0.17	0.24	1.28	0.023	0.018	0.03	0.01	0.02	0.030	0.002	0.003	0.0014	0.40		366	523	33.0	0.70
216061065	16402755	MC345B	W10*26	12.192	21	9.849	0.16	0.22	1.19	0.022	0.019	0.04	0.01	0.01	0.018	0.002	0.001	0.0015	0.37		370	526	33.5	0.70
216061080	16105611	MC345B	W10*30	12.192	60	32.76	0.16	0.24	1.24	0.023	0.022	0.02	0.01	0.02	0.048	0.002	0.001	0.0012	0.38		413	564	36.0	0.73
216060051	16104914	MC345B	W12*26	12.192	60	28.32	0.15	0.19	1.22	0.027	0.012	0.02	0.01	0.02	0.021	0.002	0.001	0.0021	0.36		419	523	30.0	0.80
216060065	16104915	MC345B	W12*30	12.192	40	21.72	0.17	0.24	1.26	0.026	0.013	0.03	0.01	0.02	0.021	0.003	0.002	0.0015	0.39		418	560	36.0	0.75
216060066	16304711	MC345B	W12*30	12.192	40	21.72	0.17	0.21	1.26	0.022	0.014	0.02	0.01	0.02	0.019	0.002	0.000	0.0014	0.39		406	567	34.0	0.72
216060082	16104931	MC345B	W12*35	12.192	39	24.726	0.17	0.25	1.28	0.029	0.014	0.03	0.01	0.01	0.048	0.002	0.002	0.0017	0.40		437	582	35.0	0.75
216060083	16104931	MC345B	W12*35	12.192	27	17.118	0.17	0.25	1.28	0.029	0.014	0.03	0.01	0.01	0.048	0.002	0.002	0.0017	0.40		443	605	35.5	0.73
116060229	16304753	MC345B	W14*120	12.192	8	17.456	0.17	0.30	1.25	0.028	0.013	0.03	0.02	0.02	0.024	0.007	0.003	0.0013	0.39		416	578	28.0	0.72
116060230	16304753	MC345B	W14*120	12.192	11	24.002	0.17	0.30	1.25	0.028	0.013	0.03	0.02	0.02	0.024	0.007	0.003	0.0013	0.39		407	555	27.0	0.73
116060221	16104930	MC345B	W14*132	12.192	3	7.17	0.16	0.27	1.35	0.035	0.013	0.04	0.01	0.01	0.047	0.003	0.001	0.0013	0.40		411	558	26.0	0.74
116060222	16104930	MC345B	W14*132	12.192	9	21.51	0.16	0.27	1.35	0.035	0.013	0.04	0.01	0.01	0.047	0.003	0.001	0.0013	0.40		414	557	26.5	0.74
216060694	16304723	MC345B	W14*30	12.192	57	30.552	0.17	0.24	1.21	0.026	0.015	0.01	0.02	0.02	0.046	0.002	0.001	0.0011	0.39		429	581	33.0	0.74
216060695	16304723	MC345B	W14*30	12.192	60	32.16	0.17	0.24	1.21	0.026	0.015	0.01	0.02	0.02	0.046	0.002	0.001	0.0011	0.39		410	549	34.0	0.75
216060708	16402246	MC345B	W14*34	12.192	24	14.928	0.17	0.24	1.29	0.026	0.011	0.02	0.02	0.01	0.048	0.007	0.002	0.0016	0.40		432	604	30.0	0.72
216060709	16104931	MC345B	W14*34	12.192	10	6.22	0.17	0.25	1.28	0.029	0.014	0.03	0.01	0.01	0.048	0.002	0.002	0.0017	0.40		435	602	29.5	0.72
216060710	16304151	MC345B	W14*34	12.192	24	14.928	0.17	0.30	1.24	0.030	0.014	0.02	0.01	0.01	0.046	0.002	0.002	0.0014	0.39		420	544	30.0	0.77
116060256	16104955	MC345B	W14*90	12.192	1	1.634	0.15	0.32	1.32	0.021	0.014	0.02	0.04	0.02	0.021	0.007	0.002	0.0015	0.38		387	520	26.0	0.74
116060257	16402249	MC345B	W14*90	12.192	16	26.144	0.16	0.28	1.24	0.029	0.013	0.03	0.02	0.02	0.023	0.002	0.001	0.0014	0.38		397	529	24.5	0.75
116060258	16402249	MC345B	W14*90	12.192	7	11.438	0.16	0.28	1.24	0.029	0.013	0.03	0.02	0.02	0.023	0.002	0.001	0.0014	0.38		384	528	27.0	0.73