



# MAANSHAN IRON AND STEEL CO., LTD.

Customer: TEWOO METAL (H.K.) LTD.

Commodity: NEWLY HOT ROLLED STEEL H-BEAMS

Specification: ASTM A616M-13 ASTM A572/A572M-2012

ASTM A992/A992M-2011(B:0.0008%-0.0040%)

## CERTIFICATE OF PRODUCT QUALITY

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

QSR8132703406



DATE: 2017-5-3

LOT No.	HEAT No.	STEEL GRADE	Size (INCH)	Length (M)	Pieces	Theoretical Weight (MT)	Chemical Composition (%)											Mechanical Properties						
							C	Si	Mn	P	S	Cr	Ni	Cu	V	Mo	Nb	B	Sn	CEV	Yield Strength $\sigma_s$ (Mpa)	Tensile Strength $\sigma_b$ (Mpa)	Elongation $\delta_{200}$ (%)	Yield Ratio
217040870	17403379	MC345B	W12*40	12.192	2	1.464	0.16	0.24	1.29	0.027	0.018	0.02	0.01	0.01	0.052	0.003	0.0013		0.39	382	531	34.5	0.72	
217040871	17403379	MC345B	W12*40	12.192	30	21.96	0.16	0.24	1.29	0.027	0.018	0.02	0.01	0.01	0.052	0.003	0.0013		0.39	400	555	32.5	0.72	
217040880	17403531	MC345B	W12*45	12.192	5	4.085	0.17	0.22	1.22	0.023	0.012	0.03	0.01	0.02	0.047	0.002	0.0013		0.39	395	545	31.5	0.72	
217040881	17403531	MC345B	W12*45	12.192	9	7.353	0.17	0.22	1.22	0.023	0.012	0.03	0.01	0.02	0.047	0.002	0.0013		0.39	392	539	32.0	0.73	
217040882	17303643	MC345B	W12*45	12.192	24	19.608	0.17	0.17	1.17	0.022	0.018	0.02	0.01	0.01	0.046	0.002	0.0012		0.38	407	563	34.5	0.72	
217040883	17303645	MC345B	W12*45	12.192	15	12.255	0.18	0.20	1.23	0.021	0.020	0.02	0.01	0.02	0.046	0.004	0.0015		0.40	400	557	32.5	0.72	
217040889	17403532	MC345B	W12*50	12.192	22	19.844	0.18	0.24	1.32	0.023	0.016	0.03	0.01	0.02	0.048	0.003	0.0013		0.42	399	560	31.0	0.71	
217040890	17403532	MC345B	W12*50	12.192	18	16.236	0.18	0.24	1.32	0.023	0.016	0.03	0.01	0.02	0.048	0.003	0.0013		0.42	399	560	31.5	0.71	
<b>TOTAL:</b>					<b>125</b>	<b>102.805</b>																		

EXPLAINS: 1. THE DUPLICATE SHOULD NOT BE EQUALLY AUTHENTIC AS THE ORIGINAL INSPECTION CERTIFICATE

2. THE STEEL GRADE IS SUBJECT TO THE INSPECTION CERTIFICATE'S

0.0040%=>B=>0.0008%, OTHERS ACCO. TO ASTM A572 GR50/A572M-2012,

A992/A992M-2011, ASTM A616M-2009

Consignor:

Quality Control center Auditor: