

INSPECTION CERTIFICATE

Report No.	2018110046
Order No.	012325
S/C No.	WSF-81431
Invoice No.	WSF-8081
Control Nos.	
Test Date	Nov/15/2018
Issue Date	Nov/29/2018
Ship Quantity	8100 Sets
Lot Quantity	8100 Sets

Customer	CHUN YU WORKS (USA) INC.
Description	ASTM F3125/F3125M-15a GRADE F2280 DOME HEAD TYPE 1
Size	1"-8 X 2-1/2"
Set Lot No.	A8143100209-11
Part No.	277777
Surface	PLAIN FINISHED.



CHUN YU WORKS & CO., LTD.

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TTQ05206



Quality Management
CC017



ISO 9001
IATF 02208 10



N° 201030522.4

Chemical Specification and Composition(%)

Division	Material	Heat No	C	Si	Mn	P	S	Cr	Mo	Ni	Cu	V	Ti	Al	B
			X100			X1000		X100			X1000			X10000	
Bolt	SAE 4140	Spec	30 48		60 Min	35 Max	40 Max								30 Max
	3DZ49	Heat	40	20	83	10	11	82	17	2			2	35	1
Nut	S45C	Spec	18 58		57 Min	48 Max	58 Max								
	JE218	Heat	45	21	70	14	4	3		1	3			2	
Washer	10B20	Spec				50 Max	60 Max								
	1NH32	Heat	20	4	37	24	6							30	18

Mechanical Properties - Bolt

Lot No:	8143100209-11			
Grade	ASTM F3125/F3125M-15a GRADE F2280 TYPE 1			
	Spec.	Unit	Meas	Avg
Tensile Test under Wedge Loading(4°)	90900 104850	Lbf	97500 99000	98500
Proof Load	72700 Min	Lbf	73000 73500	73000
Hardness	38 Max	HRC	35 36	36

Mechanical Properties- Nut

Lot No:	8143101202-11			
Grade	ASTM A563-07 DH			
	Spec.	Unit	Meas	Avg
Proof Load	175 Min	ksi	177 177	177
Hardness	24 38	HRC	25 27	26

Mechanical Properties- Washer

Lot No:	8143101101-11			
Grade	ASTM F436-07 TYPE1			
	Spec.	Unit	Meas	Avg
Washer Hardness	38 45	HRC	40 42	41

Assembly Lot Tension Test

	Spec.	Unit	Measurements				Avg	
Assembly Lot Tension Test	66800 Min	Lbf	79234	74936	74936	73724	74275	75421

Marking

Bolt		Nut		Washer	
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Visual, Dimensional, and Thread Inspections

	Bolt	Nut	Washer
Dimensions	OK	OK	OK
Visual	OK	OK	OK
Thread	OK	OK	---

Notes

We hereby certify that the above material has been satisfactorily tested in accordance with the material specifications.

S.M.CHANG

Authorized Signature
Manager of Q.A. Department

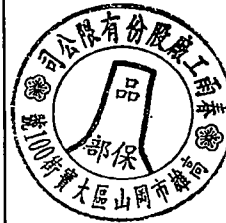
品質證明書
TEST CERTIFICATE

 中國鋼鐵股份有限公司
 CHINA STEEL CORPORATION
 中華民國高雄市小港區中鋼路1號
 1 CHUNG KANG ROAD HSIAO KANG, KAOHSIUNG 81223
 TAIWAN, REPUBLIC OF CHINA
 TEL: (07)802-1111 FAX: (07)802-2511, (07)801-9427
 E-mail: t211mae@mail.csc.com.tw
 COMPANY REGISTRATION NUMBER: 30414175 1260

客戶名稱 CUSTOMER	春雨工廠股份有限公司 CHUN YU WORKS		產品名稱 PRODUCT		BAR-CARBON STEEL	
			發票號碼 INVOICE NO.	ZQ40807537	證明書編號 CERTIFICATE NO.	070228B0397
規格名稱 SPEC	JIS G4051 S45C (DRQ)		客戶編號 CUSTOMER NO.		88187108	
			中鋼訂單編號 CSC ORDER NO.		DW2686J	
檢 驗 INSP.	CSC MILL INSPECTION		T/C		02	
			客戶訂單編號 CUST ORDER NO.		OWWW	

項目 ITEM NO.	產品序號 SEQ. NO.	尺 寸 DIMENSIONS			數量 QTY	質量 MASS kg	爐號 HEAT	化 學 成 分 CHEMICAL COMPOSITION %													備 註 REMARKS																		
		直徑/ DIA/TRICK mm	寬度 WIDTH	長度 LENGTH mm				C	Mn	P	S	Si	Cu	Ni	Cr	Al	NC																						
001	BM822 01	34.00		COIL	29	55.544	JE218																																
	BM822 02	"		"	19	36.474	JE224																																
			TOTAL:		48	92.018																																	

 $NC = Ni + CR$

 註釋
 NOTES

驗 訖

茲證明本表所列產品，均依材料規格製造及試驗，並符合規格之要求。

WE HEREBY CERTIFY THAT MATERIAL DESCRIBED HEREIN HAS BEEN MANUFACTURED AND TESTED WITH SATISFACTORY RESULTS IN ACCORDANCE WITH THE REQUIREMENT OF THE ABOVE MATERIAL SPECIFICATION.

Yong-Kuan Chen

 冶金技術處處長
 GENERAL MANAGER, METALLURGICAL DEPARTMENT

SURVEYED BY

