

## TEST CERTIFICATE

This is to certify that the nominated size and quality of the following product has been inspected and tested with following results.

**Customer Sold To:**  
HESNZ  
3 Heb Place  
Takanini, Auckland, New Zealand

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<b>Order:</b>	6017
<b>Invoice:</b>	46005
<b>Date:</b>	15/06/2024
<b>Certificate No:</b>	QYJ- 231212HESNZ

**GOODS: GRADE S SHACKLES**  
**SURFACE: HDG BODY & YELLOW PIN**

SIZE:	WLL TON	REQUIRED BS (TON)	ACTUAL AVERAGE	BATCH ID	BATCH QTTY
BOW TYPE	9.5	57	58.0	D202	200
	13.5	81	82.0	D202	100
	25.0	150	151.0	D202	40
	35.0	210	211.0	D204	20
BOW SAFETY	2.0	12	14.5	D201	200
	3.25	19.5	20.0	D202	200
	9.5	57	58.0	D202	40
	35.0	210	211.0	D202	16
	55.0	330	330.0	D201	10
	85.0	510	510.0	D201	12
DEE TYPE	2.0	12	12.5	D201	120
	4.75	28.5	33.0	D203	195
	6.5	39	43.0	D201	70
	12.0	72	75.0	D202	20
BOW TYPE	3.25	19.5	20.5	D201/2/3	60

CHEMICAL COMPOSITION		BODY: Chinese #45				
ELEMENTS	C	Si	Mn	S	P	Al
REQUIRED	<0.45	0.17-0.37	0.50-0.80	<0.03	<0.03	>0.025
ACTUAL	0.43	0.25	0.65	0.02	0.02	0.025

CHEMICAL COMPOSITION		NEW PIN: Chinese #CM690				
ELEMENTS	C	Si	Mn	S	P	Al
REQUIRED	< 0.45	0.15-0.55	1.3-1.9	< 0.03	< 0.03	> 0.025
ACTUAL	0.29	0.22	1.7	0.003	0.017	0.043

**Heat Treatment: Hardened & Tempered.**

HARDNESS(required not more than HRC32):  
BODY(actual HRC): 29, 28, 30, 28, 29, 28, 29, 30, 28, 29  
PIN(actual HRC): 32, 32, 31, 32, 32, 31, 31, 32, 31, 32

We hereby certify the above test is true and correct. All shackles are tested as per AS2741.



**Manufactured, Inspected and Tested for and on behalf of:**

42 Clements Avenue Bundoora Vic Aust  
Bundoora Victoria 3083 Australia

