

## 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

<b>Order:</b>	5544
<b>Invoice:</b>	39073
<b>Date:</b>	17/10/2022
<b>Certificate No:</b>	220301HESNZ

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

SIZE:	WLL	REQUIRED	ACTUAL		BATCH ID
	TON	BS (TON)	AVERAGE		
BOW TYPE	0.5	3	3.6		D201
	0.75	4.5	5.0		D202
	1	6	6.5		D202/3
	1.5	9	9.5		D202
	2	12	13.0		D205
	3.25	19.5	20.0		D203
	4.75	28.5	32.5		D203
	6.5	39	40		D203
	8.5	51	53		D203
	9.5	57	58		D202
	12	72	73		D201
	13.5	81	82		D202
	17	102	103		D202
	25	150	155		D202
BOW SAFETY	1	6	7.0		D115/117
	1.5	9	10.0		D116
	2	12	14.5		D201
	3.25	19.5	20.0		D203
	4.75	28.5	32.5		D201/202
	6.5	39	40		D201/202/203
	8.5	51	53		D201
	12	72	73		D201
	17	102	103		D116/8
	25	150	155		D202
DEE TYPE	0.75	4.5	5.7		D201
	1	6	8		D201
	1.5	9	11		D115/7
	8.5	51	53		D117

TRAILER SHACKLE DEE TYPE

SIZE:	WLL	REQUIRED	ACTUAL	ORDER	BATCH ID
	TON	BS (TON)	AVERAGE	QUANTITY	
2.5T	2.5	7.5	8.5	4940	AMG07

All shackles are tested as per samples by HESNZ.

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 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): 31, 32, 31, 30, 32, 31, 31, 30, 31, 32

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

Manufactured, Inspected and Tested for and on behalf of: