

# ROTech

LABORATORIES LIMITED

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## Test Report

Our Ref: RKP Number 69651/1 Issue 1 Date 21.03.2008 Page 1 of 7

A/C No: K004

Tested For:-

Kee Safety Ltd  
1 Boulton Road  
Reading  
Berks  
RG2 0NH

### LOAD TESTING OF 265-7 CASTINGS

#### RELEVANT INFORMATION

Description(s): Castings 265-7 (5 off)  
Submitted By: Mr T Smith  
Purchase Order No: STD 407131  
Date Received: 15/02/2008

#### EXPERIMENTAL PROCEDURE

The castings were tested with the grub screw locations at the 6 o/c position.  
The castings were secured to a support fixture by means of 1/2" UNC bolts  
The load was transmitted into the castings via a 44mm dia. solid steel bar, the loading point being 100mm from the centre of the bolt holes


#### RESULTS

PTO

REPORT COMPILED BY

  
R.K.PRATT

REPORT APPROVED BY

  
R.K.PRATT  
Technologist Supervisor

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### Load Tests

Fulcrum position 100 mm from the bolt hole centre line

Deflection (mm)	Casting No.1 (kN)	Casting No.2 (kN)	Casting No.3 (kN)	Casting No.4 (kN)	Casting No.5 (kN)
0	0.00	0.00	0.00	0.00	0.00
1	1.35	1.50	1.45	3.00	2.65
2	3.40	3.15	2.35	5.55	4.75
3	6.35	5.35	3.75	8.00	7.45
4	9.75	7.50	5.30	10.75	10.05
5	13.00	9.80	6.75	13.15	12.50
6	15.80	12.25	8.30	15.50	14.95
7	18.20	14.50	10.05	17.40	17.05
8	20.55	16.55	11.90	19.05	18.95
9	22.60	18.30	13.70	20.50	20.50
10	24.20	20.00	15.40	21.80	22.10
11	25.50	21.25	17.20	22.85	24.20
12	26.60	22.50	18.55	24.15	25.05
13	27.55	23.45	19.70	25.00	25.85
14	28.40	24.25	20.85	25.85	26.55
15	29.40	24.95	21.90	26.60	27.25
16	30.15	25.60	22.70	27.35	27.90
17	30.85	26.25	23.45	28.05	28.55
18	31.50	26.90	24.10	28.70	29.15
19	32.15	27.50	24.75	29.30	29.75
20	32.80	28.05	25.135	29.90	30.25
21	33.30	29.00	26.15	30.40	30.80
22	33.80	29.50	26.75	31.00	31.35
23	34.30	30.00	27.35	31.20	31.85
24		30.45	27.90	30.7	32.30
25		30.45	28.45	31.05	32.75
26		30.55	29.05	31.45	33.55
27		30.95	29.60	31.95	
28		31.10	30.15	32.45	
29			30.55	33.20	
30				33.35	
31				33.40	
32					
33					
34					
35					

### CONCLUSION

Evaluation of the test data revealed maximum bending moments of

Casting No: 1. 3.430 kNm

Casting No: 2. 3.110 kNm

Casting No: 3. 3.055 kNm

Casting No: 4. 3.340 kNm

Casting No: 5. 3.355 kNm

End of report