



Test Report
No EC/TO 13921

LOADING TEST REPORT

ECCLES UK FOUNDRIES FE LTD

PORTLAND STREET

WALSALL

WEST MIDLANDS

WS2 8AA

eccles
(UK Foundries FE) Limited

REMIT

Eccles UK Foundries were requested to load test a TORiser 675 x 675 clear opening
Plus a TORiser 450 x 450 clear opening by Torrent Water Management

Criteria - BS5834 Grade A Heavy Duty (350KN Load) + BSEN124 Class D (400KN Load)

TORisers placed beneath an Eccles DU022 Wide Flange 675 x 675 x 150 deep D400
Ductile Iron Double Triangular Cover & Frame and a 450 x 450 D400 Grating

Test Block Size – 300mm as per BS5834/BESEN124

Test Machine – Hydraulic 600KN capacity Test Bed

Test Operative – Ross Thompson

Date of Test – Monday 13th September 2021

Witnessed by – A.Wilkins (TWM) C. Rothery (Eccles UK) A. Eccles (Eccles UK) S. Young (Eccles UK)



SET-UP 675 x 675

Cover positioned centrally on the test bed

300mm Circular test block positioned central on cover

Flange on the cover sat in a central position on the TORiser

mitted



SET-UP 450 x 450

450 x 450 TORiser shown sat on Eccles
450 x 450 D400 Ductile Iron Grating &
Frame

Centrally placed as the 675 x 675 cover

Cardboard placed under Test blocks to
ensure even distribution of load
(BSEN124 protocol)

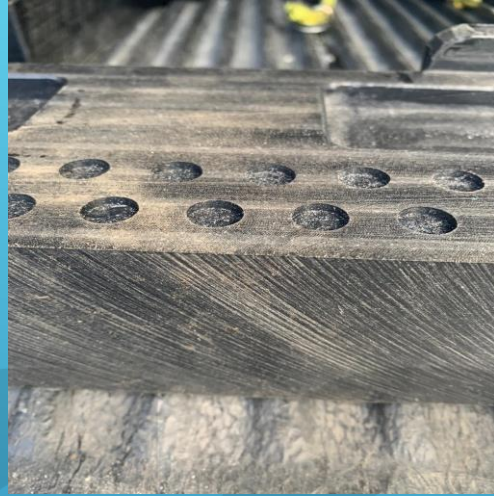


Load applied manually as per BSEN124 protocol

Load taken to 350KN (BS5834)
Held for 30 seconds
Result – Pass

Load then increased to 400KN
D400 as per BSEN124
Held for 30 seconds

Result 675 x 675 - Pass
450 x 450 - Pass



Both Units inspected post testing

No evidence of product failure

No cracking or splits in material





Certificate of Calibration
FORCE MEASUREMENT TEST MACHINE

CUSTOMER: Eccles Foundry UK Portland Street Walsall WS2 8AA	MACHINE DESCRIPTION: 50kN Secondary Loadcell on 600kN Frame MACHINE REF NUMBER: EG 400 MACHINE LOCATION: Walsall Certificate Number C6870
Method of Calibration: By Strain Gauge Loadcell[s] and associated Digital Indicator Certified BS EN ISO 376 : 2011	
Calibration Device Ref: 7	
Calibration Device Expires: 07/07/21	
Basis of Test: In accordance with International Standards ISO 7500-1:2018 Part 1: Tension/Compression Testing Machines-Verification and calibration of the force measuring system	
Loads Applied: 10, 15, 20, 25, 30, 35, 40 & 50 Kilonewtons	
Calibration Figure: N/A	
1st Range: 50 Kilonewtons down to 10 Kilonewtons	
Accuracy: ± 1% of Applied Load	
Grading: CLASS 1	
2nd Range: Accuracy: Grading:	 #N/A #N/A
Date of Calibration: 09th February 2021	
Validity of Certification: 12 Months	
Average ambient temperature at time of verification: 12°C	

Ian Gordon - MD Date: 15/02/21



Certificate of Calibration
FORCE MEASUREMENT TEST MACHINE

CUSTOMER: Eccles Foundry UK Portland Street Walsall WS2 8AA	MACHINE DESCRIPTION: 20kN Pull Out Test Loadcell MACHINE REF NUMBER: 17201569 MACHINE LOCATION: Walsall Certificate Number T9414
Method of Calibration: By Strain Gauge Loadcell[s] and associated Digital Indicator Certified BS EN ISO 376 : 2011	
Calibration Device Ref: 5	
Calibration Device Expires: 20/09/22	
Basis of Test: In accordance with International Standards ISO 7500-1:2018 Part 1: Tension/Compression Testing Machines-Verification and calibration of the force measuring system	
Loads Applied: 1, 4, 6, 10, 15 & 20 Kilonewtons	
Calibration Figure: N/A	
1st Range: 20 Kilonewtons down to 1 Kilonewton	
Accuracy: ± 1% of Applied Load	
Grading: CLASS 1	
2nd Range: Accuracy: Grading:	 #N/A #N/A
Date of Calibration: 9th February 2021	
Validity of Certification: 12 Months	
Average ambient temperature at time of verification: 10°C	

Ian Gordon - MD Date: 15/02/21



Certificate of Calibration
FORCE MEASUREMENT TEST MACHINE

CUSTOMER: Eccles Foundry UK Portland Street Walsall WS2 8AA	MACHINE DESCRIPTION: 600kN Vertical Digital Compression Test Rig EG 400 MACHINE LOCATION: Walsall Certificate Number C6871
Method of Calibration: By Strain Gauge Loadcell[s] and associated Digital Indicator Certified BS EN ISO 376 : 2011	
Calibration Device Ref: 7	
Calibration Device Expires: 07/07/21	
Basis of Test: In accordance with International Standards ISO 7500-1:2018 Part 1: Tension/Compression Testing Machines-Verification and calibration of the force measuring system	
Loads Applied: 10, 30, 60, 100, 200, 300, 400, 500 & 600 Kilonewtons	
Calibration Figure: N/A	
1st Range: 600 Kilonewtons down to 10 Kilonewtons	
Accuracy: ± 1% of Applied Load	
Grading: CLASS 1	
2nd Range: Accuracy: Grading:	 #N/A #N/A
Date of Calibration: 9th February 2021	
Validity of Certification: 12 Months	
Average ambient temperature at time of verification: 10°C	

Ian Gordon - MD Date: 15/02/21