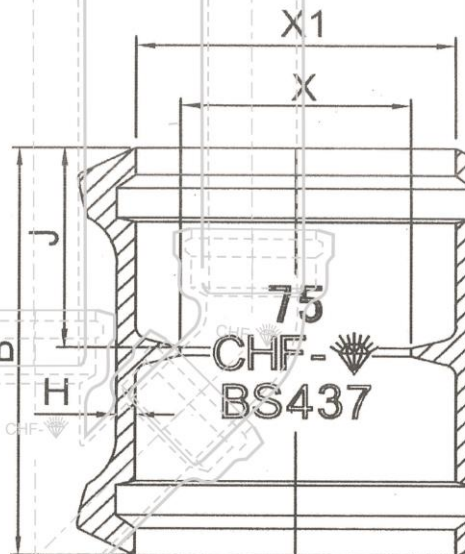


Test Report
Dimension and Mass of Cast Iron Drain Pipes, Fitting and Their Joints
(BS 437 : 2008 Annex A2 to A9 (Clause 4.3 & 4.4))

Page 2 of 2 page(s)

Castco LRN : 21043

Appendix

香港粉嶺安居街33號
香港粉嶺安全街29A號
E-mail: info@castco.com.hk33, On Kui Street, Fanling, Hong Kong. Tel: 2597 8333
29A, On Chuen Street, Fanling, Hong Kong. Fax: 2597 8399
Website: www.castco.com.hkTest Report
Dimension and Mass of Cast Iron Drain Pipes, Fitting and Their Joints
(BS 437 : 2008 Annex A2 to A9 (Clause 4.3 & 4.4))Date of issue : 06 May 2021
Page 1 of 2 page(s)

Castco LRN : 210430-2533-001 DIM

Details as supplied by customer

Customer : Cheung Hing Foundry (HK) Limited
Address : 299 Pak Sha Tsuen, Kung Um Road, Yuen Long, Hong Kong
Job title : --
Sample description : DN75 Socket with Flexible joint
Manufacturer : Cheung Hing Foundry (HK) Limited
Brand name : CHF
Nominal bore : 75 mm
Nominal Length : --
Nominal Mass : 5.5 kg
Type of joint : Flexible joint

Customer's ref. no. : --

Contract no. : --

Laboratory test result

Date sample received : 30 April 2021

Date of test : 04 May 2021

Dimensions Check

Specimen no. : 210430-2533-001

Dimensions	BS Requirement from figure --	Product requirement from code no. KAD075	Measured mean value
B	--	150 mm	152 mm
H	--	7 mm	6.92 mm
J	--	73 mm	75 mm
X	--	80 mm	80 mm
X1	--	113 mm	114 mm
Mass	5.5 (0.8) kg	5.5 kg	5.5 kg

Remarks : 1. Test result relates only to the specimen tested.
2. Compliance checked against BS 437 : 2008, Annex A2 to A9, Clause 4.3 & 4.4 was not possible as this pipe could not be found in the standard (effect of measurement uncertainty has not been taken into account).
3. Sample Submitted by : Asia Development (HK) Limited
4. Country of Origin : China

Form No. PIPE DIM437_2008 T1 d4 31/07/2019 /06

Test Certificate

Hydrostatic Test on Cast Iron Pipe

(In-house method based on BS 437 : 2008 Clause 1)

Signature :

WONG KA MAN
Senior Manager

As listed in the HOKLAS directory of accredited laboratories.
Original copy or the laboratory's certified true copy is valid.

Date of issue : 06 May 2021
Page 1 of 1 page

Castco LRN : 210430-2533-001 HYD

Details as supplied by client

Customer : Cheung Hing Foundry (HK) Limited
Address : 299 Pak Sha Tsuen, Kung Um Road, Yuen Long, Hong Kong
Job title : --
Sample description : DN75 Socket with Flexible Joint
Brand name : CHF
Manufacturer : Cheung Hing Foundry (HK) Limited

Customer's ref. no. : --

Contract no. : --

Laboratory Test Result

Date received : 30 April 2021

Date of test : 04 May 2021

Specimen no.	210430-2533-001
Actual internal hydrostatic pressure applied (Bar)	3.5
Sustain period (sec)	30
Test result	Passed

Remarks : 1. Test results relate only to the specimen tested (effect of measurement uncertainty has not been taken into account).
2. Sample Submitted by : Asia Development (HK) Limited.
3. Country of Origin : China

Checked by :

SIT KWAN NING
Senior Supervisor

Form No. PIPE HYD In-house_T1 d4 03/06/2020 /06

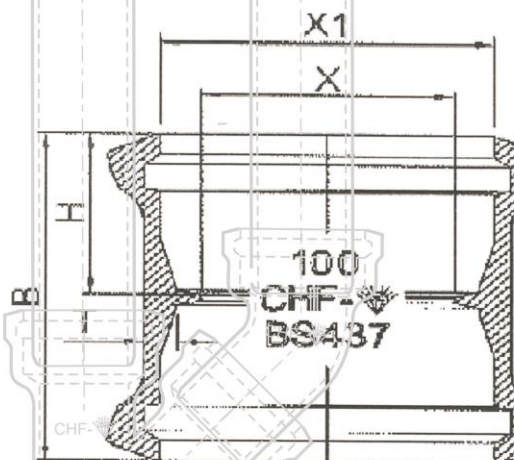
Certified by :
End of ReportWONG KA MAN
Senior Manager

Test Report
Dimension and Mass of Cast Iron Drain Pipes, Fitting and Their Joints
[BS 437 : 2008 Annex A2 to A9 (Clause 4.3 & 4.4)]

Page 2 of 2 page(s)

Castco LRN : DP02

Appendix

香港粉嶺安居街33號
29A, On Chuen Street, Fanling, Hong Kong
E-mail: info@castco.com.hk33, On Kui Street, Fanling, Hong Kong
29A, On Chuen Street, Fanling, Hong Kong
Tel: 2597 8333 Fax: 2597 8399
Website: www.castco.com.hkTest Report
Dimension and Mass of Cast Iron Drain Pipes, Fitting and Their Joints
[BS 437 : 2008 Annex A2 to A9 (Clause 4.3 & 4.4)]

Date of issue : 13 November 2020

Page 1A of 2 page(s)

Castco LRN : DP0200910-056 DIM

Details as supplied by customer

Customer : Cheung Hing Foundry (HK) Limited

Address : 299 Pak Sha Tsuen, Kung Um Road, Yuen Long, Hong Kong

Job title : --

Sample description : DN100 Socket with Flexible Joint

Manufacturer : Cheung Hing Foundry (HK) Limited

Brand name : CHF

Nominal bore : 100 mm

Nominal Length : --

Nominal Mass : 7 kg

Type of joint : Flexible joint

Customer's ref. no. : --

Contract no. : --

Laboratory test result

Date sample received : 10 September 2020

Date of test : 21 September 2020

Dimensions Check

Specimen no. : DP0200910-056

Dimensions	BS requirement from figure --	Product requirement from code no. --	Measured mean value
B	--	165 mm	165 mm
H	--	75 mm	82 mm
T	--	14 mm	14.27 mm
X	--	102 mm	101 mm
X1	--	140 (±1) mm	139 mm
Mass	7(-1, +5) kg	7.0 kg	7.6 kg

- Remarks : 1. Test result relates only to the specimen tested.
2. Test results of the sample comply with the requirement of BS437 : 2008, Annex A2 to A9, Clause 4.3 & 4.4 (effect of measurement uncertainty has not been taken into account).
3. Samples Submitted by : Asia Development (HK) Limited
4. Country of Origin : China
5. This page no.1A of test report supersedes page no.1 of the previous test report of Castco LRN :

Test Certificate

Hydrostatic Test on Cast Iron Pipe

(In-house method based on BS 437 : 2008 Clause 1)

Date of issue : 09 November 2020

Page 1A of 1 page

Castco LRN : DP0200910-056 HYD

Details as supplied by client

Customer : Cheung Hing Foundry (HK) Limited

Customer's ref. no. : --

Address : 299 Pak Sha Tsuen, Kung Um Road, Yuen Long, Hong Kong

Job title : --

Contract no. : --

Sample description : DN100 Socket with Flexible Joint

Brand name : CHF

Manufacturer : Cheung Hing Foundry (HK) Limited

Laboratory Test Result

Date received : 10 September 2020

Date of test : 21 September 2020

Specimen no.	DP0200910-056	
Actual internal hydrostatic pressure apply	(Bar)	3.5
Sustain period	(sec)	30
Test result	Passed	

- Remark : 1. Test results relate only to the specimen tested (effect of measurement uncertainty has not been taken into account).
2. Samples Submitted by : Asia Development (HK) Limited
3. Country of Origin : China
4. This page no. 1A of test report supersedes page no. 1 of the previous test report of Castco LRN DP0200910-056 HYD issued on 21 October 2020.
5. Test report for (In-house method Base on BS 437 : 2008 Clause 1) is changed due to typographical error.

Checked by :

SUI KWAN NING
Senior Supervisor

Certified by :

End of Report

WONG KA MAN
Senior Manager

Form No. PIPE HYD In-house, T_d4 03/06/2020 /06

DIM

DIM

HYD

Test Report

Metallic Materials (Steel - Structural) - Brinell Hardness Test
(BS EN ISO 6506: Part 1: 1999)

Date of issue: 05 December 2020

Page 1A of 2 pages

Castco LRN: DP0200910-056 BH

Details as supplied by customer:

Customer: Cheung Hing Foundry (HK) Limited

Customer's ref. no.:

Address: 299 Pak Sha Tsuen, Kung Um Road, Yuen Long, Hong Kong

Contract no.:

Job title: --

Test piece description: DN100 Socket with Flexible Joint

Acceptance standard: BS 437: 2008 Clause 4.5 Table 4

Test piece no.: 1

Test results:

Date received: 10 September 2020

Date of test: 26 September 2020

Test specimen thickness: 7.34 mm

Test temperature: 28 °C

Sketch of Test locations



Test Report

Metallic Materials (Steel - Structural) - Brinell Hardness Test
(BS EN ISO 6506: Part 1: 1999)

Date of issue: 05 December 2020

Page 2A of 2 pages

Castco LRN: DP0200910-056 BH

Test results:

Indentation no.	Indentation diameter (2 directions) (mm)	Indentation means (n=2)	Corresponding hardness value (HB)	Results
1	4.19	4.2	205	Passed
2	4.22	4.24	203	Passed
3	4.16	4.2	209	Passed

Testing Technique: Brinell hardness

1. Hardness scale: HBW10/3000
2. Force/diameter ratio: 30
3. Load symbol: Newton
4. Hold time: 12S
5. Calibration with reference block prior to testing: Accept
6. Surface finish: clean, smooth

Remarks: 1. Test results relate only to the specimen tested (effect of measurement uncertainty has not been taken into account).
2. Samples Submitted by: Asia Development (HK) Limited.

Form No. ND7(ST) BH_MTL_T1 d 06/11/2018

Test Report

Metallic Materials - Tensile Test of Metallic Materials
(BS EN 10002-1: 2001)

Date of issue: 05 December 2020

Page 1A of 1 page

Castco LRN: DP0200910-056 TEN

Details as supplied by customer:

Customer: Cheung Hing Foundry (HK) Limited

Customer's Ref. No.:

Address: 299 Pak Sha Tsuen, Kung Um Road, Yuen Long, Hong Kong

Contract No.:

Job Title: --

Origin of copper tube: --

Supplier: --

Grade & Form of copper tube product: --

Location in workshop: --

No. of Type of specimen supplied: 1 no. DN100 Socket with Flexible joint

Nominal thickness: 9.51 mm

Acceptance standard: BS 437: 2008 Clause 4.5 Table 4

Laboratory Test Results

Date Received: 10 September 2020

Date Tested: 26 September 2020

Tensile Test

Specimen Identity	Grade	Type & Preparation	Width (mm)	Thickness (mm)	Area (mm ²)	Org. Gauge Length (mm)	Field Length (mm)	Tensile Strength (MPa)	Elongation (%)	Position of Fracture	Remark
DP0200910-056	--	--	8.03	9.31	74.71	--	--	19	--	Valid	--

Remarks:

1. Legend: A - Proportional; B - Non-proportional; M - Machined; N - Unmachined.
2. This measurement is 'invalid' which relates to the position of fracture only.
3. Test results relate only to the specimen tested.
4. Test results comply with BS 437: 2008 Clause 4.5 Table 4 (effect of measurement uncertainty has not been taken into account).
5. Samples Submitted by: Asia Development (HK) Limited.
6. Country of Origin: China
7. Manufacturer: Cheung Hing Foundry (HK) Ltd.
8. This page no. 1A of test report supersedes page no. 1 of the previous test report of Castco LRN: DP0200910-056 TEN issued on 21 October 2020.
9. Test report for Test piece description is changed due to typographical error.

Checked by:

SIT KWAN NING
Senior Supervisor

Approved Signatory:

End of Report

WONG KA MAN
Senior Manager

Form No. ST BSEN 10002-1:2001 T2 d 12/05/2017

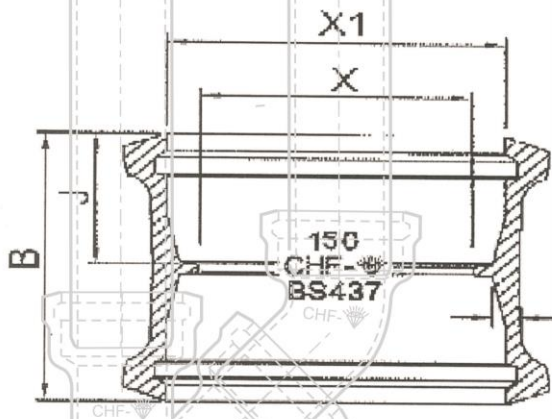
/06

Test Report
Dimension and Mass of Cast Iron Drain Pipes, Fitting and Their Joints
[BS 437 : 2008 Annex A2 to A9 (Clause 4.3 & 4.4)]

Page 2 of 2 page(s)

Castco LRN : DP02

Appendix



Form No. PIPE DIM437_2008 T1 d43 07/2019

香港粉嶺安居街33號得利中心6樓
香港粉嶺安居街30號新寧中心1樓
香港粉嶺安全街29A號
Tel: 2597 8333 Fax: 2597 8399香港粉嶺安居街33號
香港粉嶺安全街29A號
E-mail: info@castco.com.hk33, On Kui Street, Fanling, Hong Kong. Tel: 2597 8333
29A, On Chuen Street, Fanling, Hong Kong. Fax: 2597 8399
Website: www.castco.com.hkTest Report
Dimension and Mass of Cast Iron Drain Pipes, Fitting and Their Joints
[BS 437 : 2008 Annex A2 to A9 (Clause 4.3 & 4.4)]Date of issue : 13 November 2020
Page 1A of 2 page(s)

Castco LRN : DP0200910-057 DIM

Details as supplied by customer

Customer : Cheung Hing Foundry (HK) Limited
Address : 299 Pak Sha Tsuen, Kung Um Road, Yuen Long, Hong Kong
Job title : --
Sample description : DN150 Socket with Flexible Joint
Manufacturer : Cheung Hing Foundry (HK) Limited
Brand name : CHF
Nominal bore : 150 mm
Nominal Length : --
Nominal Mass : 10 kg
Type of joint : Flexible joint

Customer's ref. no. : --

Contract no. : --

Laboratory test result

Date sample received : 10 September 2020

Date of test : 21 September 2020

Dimensions Check

Specimen no. : DP0200910-057

Dimensions	BS Requirement from figure --	Product requirement from code no. --	Measured mean value
B	--	185 mm	188 mm
J	--	90 mm	90 mm
T	--	14 mm	10.96 mm
X	--	155 mm	153 mm
X1	--	191 (±1) mm	190 mm
Mass	10 (±1.5) kg	10.0 kg	9.8 kg

- Remarks : 1. Test result relates only to the specimen tested.
2. Test results of this sample comply with the requirement of BS437 : 2008 Annex A2 to A9 (Clause 4.3 & 4.4) (effect of measurement uncertainty has not been taken into account).
3. Samples Submitted by : Asia Development (HK) Limited
4. Country of Origin : China
5. This page no. 1A of test report supersedes page no. 1 of the previous test report of Castco LRN :

Test Certificate

Hydrostatic Test on Cast Iron Pipe

(In-house method based on BS 437 : 2008 Clause 1)

Signatory :

WONG KA MAN
Senior ManagerAs listed in the HKAS directory of accredited laboratories.
Original copy or the laboratory's certified true copy is valid.

Date of issue : 09 November 2020

Page 1A of 1 page

Castco LRN : DP0200910-057 HYD

Details as supplied by client

Customer : Cheung Hing Foundry (HK) Limited
Address : 299 Pak Sha Tsuen, Kung Um Road, Yuen Long, Hong Kong
Job title : --
Sample description : DN150 Socket with Flexible Joint
Brand name : CHF
Manufacturer : Cheung Hing Foundry (HK) Limited

Customer's ref. no. : --

Contract no. : --

Laboratory Test Result

Date received : 10 September 2020

Date of test : 21 September 2020

Specimen no.	DP0200910-057	
Actual internal hydrostatic pressure applied	(Bar)	3.5
Sustain period	(sec)	30
Test result	Passed	

- Remark : 1. Test results relate only to the specimen tested. (effect of measurement uncertainty has not been taken into account).
2. Samples Submitted by : Asia Development (HK) Limited
3. Country of Origin : China
4. This page no. 1A of test report supersedes page no. 1 of the previous test report of Castco LRN DP0200910-057 HYD issued on 21 October 2020.
5. Test report for (In-house method based on BS 437 : 2008 Clause 1) is changed due to typographical error.

Checked by :

SIU KWAN NING
Senior Supervisor

Certified by :

End of Report

WONG KA MAN
Senior Manager

Form No. PIPE HYD In-house_T d43 03/06/2020

Test Report

Metallic Materials (Steel - Structural) - Brinell Hardness Test
(BS EN ISO 6506: Part 1: 1999)

Date of issue: 05 December 2020

Page 1A of 2 pages

Castco LRN: DP0200910-057 BH

Details as supplied by customer:

Customer: Cheung Hing Foundry (HK) Limited

Customer's ref. no.

Address: 299 Pak Sha Tsuen, Kung Um Road, Yuen Long, Hong Kong

Contract no.: --

Job title: --

Test piece description: DN150 Socket with Flexible Joint

Acceptance standard: BS 437: 2008 Clause 4.5 Table 4

Test piece no.: 1

Test results:

Date received: 10 September 2020

Date of test: 25 September 2020

Test specimen thickness: 7.08 mm

Test temperature: 28 °C

Sketch of Test locations



Test Report

Metallic Materials (Steel - Structural) - Brinell Hardness Test
(BS EN ISO 6506: Part 1: 1999)

Date of issue: 05 December 2020

Page 2A of 2 pages

Castco LRN: DP0200910-057 BH

Test results:

Indentation no.	Indentation diameter (2 directions) (mm)	Indentation mean (n.m)	Corresponding hardness value (HB)	Results
1	4.30	4.3	194	Passed
2	4.24	4.2	204	Passed
3	4.21	4.2	204	Passed

Testing Technique: Brinell hardness

- Hardness scale: HBW10/3000
- Force/diameter ratio: 30
- Load symbol: Newton
- Hold time: 12S
- Calibration with reference block prior to testing: Accept
- Surface finish: clean, smooth

Remarks: 1. Test results relate only to the specimen tested (effect of measurement uncertainty has not been taken into account).
2. Samples Submitted by: Asia Development (HK) Limited.

Form No. NDT(ST) BH_MTL_T1 01/06/17/0318

Test Report

Metallic Materials - Tensile Test of Metallic Materials
(BS EN 10002-1: 2001)

Date of issue: 05 December 2020

Page 1A of 1 page

Castco LRN: DP0200910-057 TEN

Details as supplied by customer:

Customer: Cheung Hing Foundry (HK) Limited

Customer's Ref. No.: --

Address: 299 Pak Sha Tsuen, Kung Um Road, Yuen Long, Hong Kong

Contract No.

Job Title: --

Origin of copper tube: --

Supplier: --

Grade & Form of copper tube product: --

Location in workpiece: --

No. & Type of specimen supplied: 1 no. DN150 Socket with Flexible joint

Acceptance standard: BS 437: 2008 Clause 4.5 Table 4

Nominal thickness: 7.76 mm

Laboratory Test Results

Date Received: 10 September 2020

Date Tested: 26 September 2020

Tensile Test

Specimen Identity	Grade	Type & Preparation	Width (mm)	Thickness (mm)	Org. X-sect Area (mm ²)	Org. Gauge Length (mm)	Field Length (mm)	Tensile Strength (MPa)	Elongation (%)	Position of Fracture	Remark
DP0200910-057	--	--	8.34	7.76	64.72	--	--	1.2	--	Valid	--

Remarks:

- Legends: A - Proportional; B - Non-proportional; M - Machined; N - Unmachined;
+ This measurement is 'invalid' which relates to the position of fracture only.
- Test results relate only to the specimen tested.
- Test results comply with BS 437: 2008 Clause 4.5 Table 4 (effect of measurement uncertainty has not been taken into account).
- Samples Submitted by: Asia Development (HK) Limited.
- Country of Origin: China
- Manufacturer: Cheung Hing Foundry (HK) Ltd.
- This page no. 1A of test report supersedes page no. 1 of the previous test report of Castco LRN: DP0200910-057 TEN issued on 21 October 2020.
- Test report for Test piece description is changed due to typographical error.

Checked by:

SIT KWAN NING
Senior Supervisor

Approved Signatory:

End of Report

WONG KA MAN
Senior Manager

Form No. ST BSEN 10002-1:2001 T2 04/12/05/2017

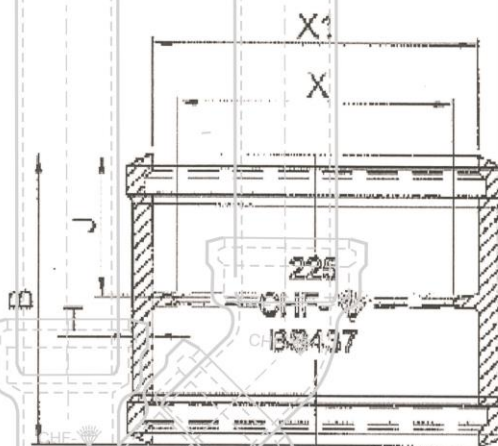
/06

Test Report
Dimension and Mass of Cast Iron Drain Pipes, Fitting and Their Joints
(BS 437 : 2008 Annex A2 to A9 (Clause 4.3 & 4.4))

Page 2 of 2 page(s)

Castco LRN : DP02

Appendix

香港粉嶺安居街33號
香港粉嶺安居街29A號
E-mail: info@castco.com.hk33, On Kui Street, Fanling, Hong Kong
29A, On Chuen Street, Fanling, Hong Kong
Fax: 2597 8399
Website: www.castco.com.hkTest Report
Dimension and Mass of Cast Iron Drain Pipes, Fitting and Their Joints
(BS 437 : 2008 Annex A2 to A9 (Clause 4.3 & 4.4))

Date of issue : 13 November 2020

Page 1A of 2 page(s)

Castco LRN : DP0200910-058 DIM

Details as supplied by customer

Customer : Cheung Hing Foundry (HK) Limited

Address : 299 Pak Sha Tsuen, Kung Um Road, Yuen Long, Hong Kong

Job title : --

Sample description : EN225 Socket with Flexible Joint

Manufacturer : Cheung Hing Foundry (HK) Limited

Brand name : CHF

Nominal bore : 225 mm

Nominal Length : --

Nominal Mass : 29.5 kg

Type of joint : Flexible joint

Laboratory test result

Date sample received : 10 September 2020

Date of test : 21 September 2020

Dimensions Check

Specimen no. : DP0200910-058

Dimensions	BS Requirement from figure --	Product requirement from code no. --	Measured mean value
B	--	238 mm	242 mm
J	--	115 mm	117 mm
T	--	17 mm	17.82 mm
X	--	227 mm	232 mm
X1	--	276 mm	275 mm
Mass	29.5 (4.43) kg	29.5 kg	30.4 kg

- Remarks :
1. Test result relates only to the specimen tested.
 2. Test results of this sample comply with the requirement of BS437 : 2008 Annex A2 to A9 Clause 4.3 & 4.4 (effect of measurement uncertainty has not been taken into account).
 3. Samples Submitted by : Asia Development (HK) Limited
 4. Country of Origin : China
 5. This page no. 1A of test report supersedes page no. 1 of the previous test report of Castco LRN :

Test Certificate

Hydrostatic Test on Cast Iron Pipe

(In-house method based on BS 437 : 2008 Clause 1)

Date of issue : 09 November 2020

Page 1A of 1 page

Castco LRN : DP0200910-058 HYD

Details as supplied by client

Customer : Cheung Hing Foundry (HK) Limited

Customer's ref. no. : --

Address : 299 Pak Sha Tsuen, Kung Um Road, Yuen Long, Hong Kong

Job title : --

Contract no. : --

Sample description : EN225 Socket with Flexible Joint

Brand name : CHF

Manufacturer : Cheung Hing Foundry (HK) Limited

Laboratory Test Result

Date received : 10 September 2020

Date of test : 21 September 2020

Specimen no.	DP0200910-058	
Actual internal hydrostatic pressure apply	(Bar)	3.5
Sustain period	(sec)	30
Test result	Passed	

- Remark :
1. Test results relate only to the specimen tested (effect of measurement uncertainty has not been taken into account).
 2. Samples Submitted by : Asia Development (HK) Limited
 3. Country of Origin : China
 4. This page no. 1A of test report supersedes page no. 1 of the previous test report of Castco LRN DP0200910-058 HYD issued on 21 October 2020.
 5. Test report for (In-house method Base on BS 437 : 2008 Clause 1) is changed due to typographical error.

Checked by:

SIT KWAN NING
Senior Supervisor

Certified by:

End of Report

WONG KA MAN
Senior Manager

Form No. PIPE HYD In-house, T dtd 03/06/2020 006

DIM

DIM

HYD

Test Report

Metallic Materials (Steel - Structural) - Brinell Hardness Test
(BS EN ISO 6506: Part 1: 1999)

Date of issue: 05 December 2020

Page 1A of 2 pages

Castco LRN: DP0200910-058 BH

Details as supplied by customer:

Customer: Cheung Hing Foundry (HK) Limited

Customer's ref. no.

Address: 299 Pak Sha Tsuen, Kung Um Road, Yuen Long, Hong Kong

Contract no.: --

Job title: --

Test piece description: DN225 Socket with Flexible Joint

Acceptance standard: BS 437: 2008 Clause 4.5 Table 4

Test piece no.: 1

Test results:

Date received: 10 September 2020

Date of test: 26 September 2020

Test specimen thickness: 8.60 mm

Test temperature: 28 °C

Sketch of Test locations



Test Report

Metallic Materials (Steel - Structural) - Brinell Hardness Test
(BS EN ISO 6506: Part 1: 1999)

Date of issue: 05 December 2020

Page 2A of 2 pages

Castco LRN: DP0200910-058 BH

Test results:

Indentation no.	Indentation diameter (2 directions) (mm)	Indentation means (H)	Corresponding hardness value (HB)	Results
1	4.24	4.2	203	Passed
2	4.20	4.27	202	Passed
3	4.24	4.3	199	Passed

Testing Technique: Brinell hardness

- Hardness scale: HBW10/3000
- Force/diameter ratio: 30
- Load symbol: Newton
- Hold time: 12S
- Calibration with reference block prior to testing: Accepted
- Surface finish: clean, smooth

Remark: 1. Test results relate only to the specimen tested (effect of measurement uncertainty has not been taken into account).
2. Samples Submitted by: Asia Development (HK) Limited.

Test Report

Metallic Materials - Tensile Test of Metallic Materials
(BS EN 10002-1: 2001)

Date of issue: 05 December 2020

Page 1A of 1 page

Castco LRN: DP0200910-058 TEN

Details as supplied by customer:

Customer: Cheung Hing Foundry (HK) Limited

Customer's Ref. No.: --

Address: 299 Pak Sha Tsuen, Kung Um Road, Yuen Long, Hong Kong

Contract No.:

Job Title: --

Origin of copper tube: --

Supplier: --

Grade & Form of copper tube product: --

Location in work:

No. & Type of specimen supplied: 1 no. DN225 Socket with Flexible joint

Acceptance standard: BS 437: 2008 Clause 4.5 Table 4

Nominal thickness: 10.43 mm

Laboratory Test Results

Date Received: 10 September 2020

Date Tested: 26 September 2020

Tensile Test

Specimen Identity	Grade	Type & Preparation	Width (mm)	Thickness (mm)	Org. X-section Area (mm ²)	Org. Gauge Length (mm)	Org. Gauge Length (mm)	Tensile Strength (MPa)	Elongation (%)	Position of Fracture	Remark
DP0200910-058	--	--	8.37	10.43	87.26	--	--	23	--	Valid	--

Remarks:

- Legends: A - Proportional; B - Non-proportional; M - Machined; N - Unmachined; + This measurement is 'valid' which relates to the position of fracture only.
- Test results relate only to the specimen tested.
- Test results comply with BS 437: 2008 Clause 4.5 Table 4 (effect of measurement uncertainty has not been taken into account).
- Samples Submitted by: Asia Development (HK) Limited.
- Country of Origin: China
- Manufacturer: Cheung Hing Foundry (HK) Ltd.
- This page no. 1A of test report supersedes page no. 1 of the previous test report of Castco LRN: DP0200910-058-TEN issued on 21 October 2020.
- Test report for Test piece description is changed due to typographical error.

Checked by:

SIT KWAN NING
Senior Supervisor

Approved Signatory:

End of Report

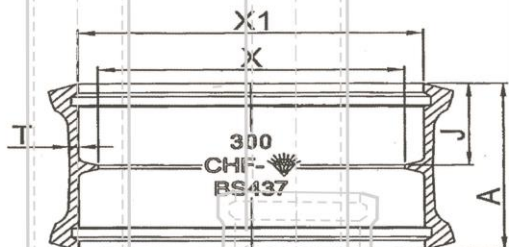
WONG KA MAN
Senior Manager

Test Report
Dimension and Mass of Cast Iron Drain Pipes, Fitting and Their Joints
[BS 437 : 2008 Annex A2 to A9 (Clause 4.3 & 4.4)]

Page 2 of 2 page(s)

Castco LRN : 21020

Appendix



Form No. PIPE DIM437_2008 T1 d4 13/02/2020

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Test Report
Dimension and Mass of Cast Iron Drain Pipes, Fitting and Their Joints
[BS 437 : 2008 Annex A2 to A9 (Clause 4.3 & 4.4)]

Date of issue : 29 April 2021
Page 1 of 2 page(s)

Castco LRN : 210209-2851-004 DIM

Details as supplied by customer

Customer : Cheung Hing Foundry (HK) Limited
Address : 299 Pak Sha Tsuen, Kung Um Road, Yuen Long, Hong Kong
Job title : --
Sample description : DN300 Socket with Flexible Joint
Manufacturer : Cheung Hing Foundry (HK) Limited
Brand name : CHF
Nominal bore : 300 mm
Nominal Length : --
Nominal Mass : 29.5 kg
Type of joint : Flexible joint

Customer's ref. no. : --

Contract no. : --

Laboratory test result

Date sample received : 09 February 2021

Date of test : 18 February 2021

Dimensions Check

Specimen no. : 210209-2851-004

Dimensions	BS Requirement from figure --	Product requirement from code no. KAD300	Measured mean value
A	--	225 mm	223 mm
J	--	105 mm	108 mm
T	--	9.5 mm	10.13 mm
X	--	300 mm	300 mm
X1	--	346 mm	345 mm
Mass	29.5 (±0.43) kg	29.5 kg	31.1 kg

- Remarks : 1. Test result relates only to the specimen tested.
2. Compliance checked against BS 437 : 2008, Annex A2 to A9, Clause 4.3 & 4.4 was not possible as this fitting could not be found in the standard (effect of measurement uncertainty has not been taken into account).
3. Sample Submitted by : Asia Development (HK) Limited
4. Country of Origin : China

Signature :

WONG KA MAN
Senior Manager

Details as listed in the HOKAS directory of accredited laboratories.
Original copy or the laboratory's certified true copy is valid.

Test Certificate

Hydrostatic Test on Cast Iron Pipe

(In-house method based on BS 437 : 2008 Clause 1)

Date of issue : 29 April 2021
Page 1 of 1 page

Castco LRN : 210209-2851-004 HYD

Details as supplied by client

Customer : Cheung Hing Foundry (HK) Limited
Address : 299 Pak Sha Tsuen, Kung Um Road, Yuen Long, Hong Kong
Job title : --
Sample description : DN300 Socket with Flexible Joint
Brand name : CHF
Manufacturer : Cheung Hing Foundry (HK) Limited

Customer's ref. no. : --

Contract no. : --

Laboratory Test Result

Date received : 09 February 2021

Date of test : 18 February 2021

Specimen no.	210209-2851-004
Actual internal hydrostatic pressure applied (Bar)	3.5
Sustain period (sec)	30
Test result	Passed

- Remarks : 1. Test results relate only to the specimen tested (effect of measurement uncertainty has not been taken into account).
2. Sample Submitted by : Asia Development (HK) Limited
3. Country of Origin : China

Checked by :

SIT KWAN NING
Senior Supervisor

Form No. PIPE HYD In-house_T d4 03/06/2020

Certified by :
End of ReportWONG KA MAN
Senior Manager

