

Test Report
Chemical Analysis of Steel

Date of issue: 15-09-2020

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Castco LRN: MS0200827-35

Details as supplied by customer

Name of Customer : Gate Way Valve & Fitting Limited

Address : Flat A1, 4/F, Galaxy Fty Bldg, 25-27 Luk Hop Street, San Po Kong, Kowloon, Hong Kong

Job Title : --

Contract No. : --

Customer's Ref. No. : --

Sample details as supplied by customer

Date Sampled : --

Date of Sample Received : 27-08-2020

Test Period : 08-09-2020 to 11-09-2020

Sample Description : DN20 Stainless Steel Ball Float Valve (Body)

Specification : BS EN 10088-1:2014, Table 2, Grade 1.4401 (316)

Location of Work : -- / Brand Name: VALVULAS CT

Specimen No. : BC0200811-002-MISL / Origin: Spain

Sample Identification No. : -- / Model No.: 200A-RPH

Manufacturer : GENWEC WASHROOM, S.L.

Test Method(s):-

- 1) BS EN ISO 15350 : 2010
- 2) In House Method: ST-Multi-1(ICP-OES)
- 3) BS EN ISO 15351: 2010

Remark:

- I. Test results only relate to the specimen tested.

Checked by :


Lau Hiu Yat
Assistant Technical Manager

Approved Signatory :


Cheng Chi Fai
Senior Manager



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Chemical Analysis of Steel

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Castco LRN: MS0200827-35

Chemical Analysis		Result
¹⁾ Total Carbon Content	C %	0.028
¹⁾ Total Sulfur Content	S %	<0.0020
²⁾ Chromium	Cr %	16.91
²⁾ Manganese	Mn %	1.37
²⁾ Molybdenum	Mo %	2.12
²⁾ Nickel	Ni %	10.05
²⁾ Phosphorus	P %	0.034
²⁾ Silicon	Si %	0.393
³⁾ Nitrogen	N %	0.039

End of Report

Form No.: CHM Steel-1 T dd 16/12/2015

Appendix A**Summary of Chemical Analysis of Steel**

Date of issue: 15-09-2020

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Castco LRN: MS0200827-35

Name of Customer: Gate Way Valve & Fitting Limited

Job Title: --

Contract No.: --

Customer's Ref. No.: --

Date of Received by Lab.: 27-08-2020

Testing Period: 08-09-2020 to 11-09-2020

Castco LRN:	MS0200827-35			
Sample I.D. No.:	-- / Model No.: 200A-RPH			
Sample Description :	DN20 Stainless Steel Ball Float Valve (Body)			
Location of Work :	-- / Brand Name: VALVULAS CT			
Specimen No. :	BC0200811-002-MISL / Origin: Spain			
Manufacturer :	GENWEC WASHROOM, S.L.			
Specification: BS EN 10088-1:2014, Table 2, Grade 1.4401(316)	Test Results		Within / Exceed limit	
Carbon C 0.07 max. %	0.028		Within limit	
Sulfur S 0.015 max. %	<0.0020		Within limit	
Chromium Cr 16.5 to 18.5 %	16.91		Within limit	
Manganese Mn 2.00 max. %	1.37		Within limit	
Molybdenum Mo 2.00 to 2.50 %	2.12		Within limit	
Nickel Ni 10.0 to 13.0 %	10.05		Within limit	
Phosphorus P 0.045 max. %	0.034		Within limit	
Silicon Si 1.00 max. %	0.393		Within limit	
Nitrogen N 0.10 max. %	0.039		Within limit	

Remarks:

- I. Test results only relate to the specimen tested.
- II. Test results of the specimen are in compliance with the chemical requirements of BS EN 10088-1:2014, Table 2, Grade 1.4401(316).

**Test Report
Chemical Analysis of Steel**

Date of issue: 15-09-2020

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Castco LRN: MS0200827-36

Details as supplied by customer

Name of Customer : Gate Way Valve & Fitting Limited

Address : Flat A1, 4/F, Galaxy Fty Bldg, 25-27 Luk Hop Street, San Po Kong, Kowloon, Hong Kong

Job Title : --

Contract No. : --

Customer's Ref. No. : --

Sample details as supplied by customer

Date Sampled : --

Date of Sample Received : 27-08-2020

Test Period : 08-09-2020 to 11-09-2020

Sample Description : DN20 Stainless Steel Ball Float Valve (Seat(Piston))

Specification : BS EN 10088-1:2014, Table 2, Grade 1.4401 (316)

Location of Work : -- / Brand Name: VALVULAS CT

Specimen No. : BC0200811-002-MISL / Origin: Spain

Sample Identification No. : -- / Model No.: 200A-RPH

Manufacturer : GENWEC WASHROOM, S.L.

Test Method(s):-

- 1) BS EN ISO 15350 : 2010
- 2) In House Method: ST-Multi-1(ICP-OES)
- 3) BS EN ISO 15351: 2010

Remark:

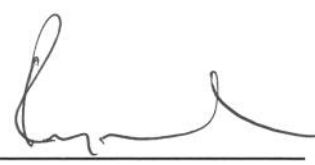
- I. Test results only relate to the specimen tested.

Checked by :



Lau Hiu Yat
Assistant Technical Manager

Approved Signatory :



Cheng Chi Fai
Senior Manager

Test Report
Chemical Analysis of Steel

Date of issue: 15-09-2020

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Castco LRN: MS0200827-36

Chemical Analysis		Result
¹⁾ Total Carbon Content	C %	0.026
¹⁾ Total Sulfur Content	S %	<0.0020
²⁾ Chromium	Cr %	16.95
²⁾ Manganese	Mn %	1.38
²⁾ Molybdenum	Mo %	2.04
²⁾ Nickel	Ni %	10.08
²⁾ Phosphorus	P %	0.033
²⁾ Silicon	Si %	0.385
³⁾ Nitrogen	N %	0.038

End of Report

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Appendix A

Summary of Chemical Analysis of Steel

Date of issue: 15-09-2020

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Castco LRN: MS0200827-36

Name of Customer: Gate Way Valve & Fitting Limited

Job Title: --

Contract No.: --

Customer's Ref. No.: --

Date of Received by Lab.: 27-08-2020

Testing Period: 08-09-2020 to 11-09-2020

Castco LRN:	MS0200827-36			
Sample I.D. No.:	-- / Model No.: 200A-RPH			
Sample Description :	DN20 Stainless Steel Ball Float Valve (Seat(Piston))			
Location of Work :	-- / Brand Name: VALVULAS CT			
Specimen No. :	BC0200811-002-MISL / Origin: Spain			
Manufacturer :	GENWEC WASHROOM, S.L.			
Specification: BS EN 10088-1:2014, Table 2, Grade 1.4401(316)	Test Results		Within / Exceed limit	
Carbon C 0.07 max. %	0.026		Within limit	
Sulfur S 0.015 max. %	<0.0020		Within limit	
Chromium Cr 16.5 to 18.5 %	16.95		Within limit	
Manganese Mn 2.00 max. %	1.38		Within limit	
Molybdenum Mo 2.00 to 2.50 %	2.04		Within limit	
Nickel Ni 10.0 to 13.0 %	10.08		Within limit	
Phosphorus P 0.045 max. %	0.033		Within limit	
Silicon Si 1.00 max. %	0.385		Within limit	
Nitrogen N 0.10 max. %	0.038		Within limit	

Remarks:

- I. Test results only relate to the specimen tested.
- II.



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Chemical Analysis of Steel

Date of issue: 15-09-2020

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Castco LRN: MS0200827-37

Details as supplied by customer

Name of Customer : Gate Way Valve & Fitting Limited
Address : Flat A1, 4/F, Galaxy Fty Bldg, 25-27 Luk Hop Street, San Po Kong, Kowloon, Hong Kong
Job Title : --
Contract No. : --
Customer's Ref. No. : --

Sample details as supplied by customer

Date Sampled : --
Date of Sample Received : 27-08-2020
Test Period : 08-09-2020 to 11-09-2020
Sample Description : DN20 Stainless Steel Ball Float Valve (Lever)
Specification : BS EN 10088-1:2014, Table 2, Grade 1.4401 (316)
Location of Work : -- / Brand Name: VALVULAS CT
Specimen No. : BC0200811-002-MISL / Origin: Spain
Sample Identification No. : -- / Model No.: 200A-RPH
Manufacturer : GENWEC WASHROOM, S.L.

Test Method(s):-

- 1) BS EN ISO 15350 : 2010
- 2) In House Method: ST-Multi-1(ICP-OES)
- 3) BS EN ISO 15351: 2010

Remark:

- I. Test results only relate to the specimen tested.

Checked by :

Lau Hui Yat
Assistant Technical Manager

Approved Signatory :

Cheng Chi Fai
Senior Manager



Test Report
Chemical Analysis of Steel

Date of issue: 15-09-2020

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Castco LRN: MS0200827-37

Chemical Analysis		Result
¹⁾ Total Carbon Content	C %	0.028
¹⁾ Total Sulfur Content	S %	<0.0020
²⁾ Chromium	Cr %	17.09
²⁾ Manganese	Mn %	1.39
²⁾ Molybdenum	Mo %	2.08
²⁾ Nickel	Ni %	10.17
²⁾ Phosphorus	P %	0.033
²⁾ Silicon	Si %	0.387
³⁾ Nitrogen	N %	0.038

End of Report

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Appendix A

Summary of Chemical Analysis of Steel

Date of issue: 15-09-2020

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Castco LRN: MS0200827-37

Name of Customer: Gate Way Valve & Fitting Limited

Job Title: --

Contract No.: --

Customer's Ref. No.: --

Date of Received by Lab.: 27-08-2020

Testing Period: 08-09-2020 to 11-09-2020

Castco LRN:	MS0200827-37			
Sample I.D. No.:	-- / Model No.: 200A-RPH			
Sample Description :	DN20 Stainless Steel Ball Float Valve (Lever)			
Location of Work :	-- / Brand Name: VALVULAS CT			
Specimen No. :	BC0200811-002-MISL / Origin: Spain			
Manufacturer :	GENWEC WASHROOM, S.L.			
Specification: BS EN 10088-1:2014, Table 2, Grade 1.4401(316)	Test Results		Within / Exceed limit	
Carbon C 0.07 max. %	0.028		Within limit	
Sulfur S 0.015 max. %	<0.0020		Within limit	
Chromium Cr 16.5 to 18.5 %	17.09		Within limit	
Manganese Mn 2.00 max. %	1.39		Within limit	
Molybdenum Mo 2.00 to 2.50 %	2.08		Within limit	
Nickel Ni 10.0 to 13.0 %	10.17		Within limit	
Phosphorus P 0.045 max. %	0.033		Within limit	
Silicon Si 1.00 max. %	0.387		Within limit	
Nitrogen N 0.10 max. %	0.038		Within limit	

Remarks:

- I. Test results only relate to the specimen tested.
- II. Test results of the specimen are in compliance with the chemical requirements of BS EN 10088-1:2014, Table 2, Grade 1.4401(316).

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Chemical Analysis of Steel

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Castco LRN: MS0200827-38

Details as supplied by customer

Name of Customer : Gate Way Valve & Fitting Limited

Address : Flat A1, 4/F, Galaxy Fty Bldg, 25-27 Luk Hop Street, San Po Kong, Kowloon, Hong Kong

Job Title : --

Contract No. : --

Customer's Ref. No. : --

Sample details as supplied by customer

Date Sampled : --

Date of Sample Received : 27-08-2020

Test Period : 08-09-2020 to 11-09-2020

Sample Description : DN20 Stainless Steel Ball Float Valve (Float Ball)

Specification : BS EN 10088-1:2014, Table 2, Grade 1.4401 (316)

Location of Work : -- / Brand Name: VALVULAS CT

Specimen No. : BC0200811-002-MISL / Origin: Spain

Sample Identification No. : -- / Model No.: 200A-RPH

Manufacturer : GENWEC WASHROOM, S.L.

Test Method(s):-

- 1) BS EN ISO 15350 : 2010
- 2) In House Method: ST-Multi-1(ICP-OES)
- 3) BS EN ISO 15351: 2010

Remark:

I. Test results only relate to the specimen tested.

Checked by :


Lau Hin Yat
Assistant Technical Manager

Approved Signatory :


Cheng Chi Fai
Senior Manager



Test Report
Chemical Analysis of Steel

Date of issue: 15-09-2020

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Castco LRN: MS0200827-38

Chemical Analysis		Result
¹⁾ Total Carbon Content	C %	0.029
¹⁾ Total Sulfur Content	S %	<0.0020
²⁾ Chromium	Cr %	16.93
²⁾ Manganese	Mn %	1.38
²⁾ Molybdenum	Mo %	2.03
²⁾ Nickel	Ni %	10.07
²⁾ Phosphorus	P %	0.034
²⁾ Silicon	Si %	0.390
³⁾ Nitrogen	N %	0.037

End of Report

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Appendix A**Summary of Chemical Analysis of Steel**

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Castco LRN: MS0200827-38

Name of Customer: Gate Way Valve & Fitting Limited

Job Title: --

Contract No.: --

Customer's Ref. No.: --

Date of Received by Lab.: 27-08-2020

Testing Period: 08-09-2020 to 11-09-2020

Castco LRN:	MS0200827-38			
Sample I.D. No.:	-- / Model No.: 200A-RPH			
Sample Description :	DN20 Stainless Steel Ball Float Valve (Float Ball)			
Location of Work :	-- / Brand Name: VALVULAS CT			
Specimen No. :	BC0200811-002-MISL / Origin: Spain			
Manufacturer :	GENWEC WASHROOM, S.L.			
Specification: BS EN 10088-1:2014, Table 2, Grade 1.4401(316)	Test Results		Within / Exceed limit	
Carbon C 0.07 max. %	0.029		Within limit	
Sulfur S 0.015 max. %	<0.0020		Within limit	
Chromium Cr 16.5 to 18.5 %	16.93		Within limit	
Manganese Mn 2.00 max. %	1.38		Within limit	
Molybdenum Mo 2.00 to 2.50 %	2.03		Within limit	
Nickel Ni 10.0 to 13.0 %	10.07		Within limit	
Phosphorus P 0.045 max. %	0.034		Within limit	
Silicon Si 1.00 max. %	0.390		Within limit	
Nitrogen N 0.10 max. %	0.037		Within limit	

Remarks:

- I. Test results only relate to the specimen tested.
- II. Test results of the specimen are in compliance with the chemical requirements of BS EN 10088-1:2014, Table 2, Grade 1.4401(316).



Test Report
Chemical Analysis of Steel

Date of issue: 15-09-2020

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Castco LRN: MS0200827-39

Details as supplied by customer

Name of Customer : Gate Way Valve & Fitting Limited
Address : Flat A1, 4/F, Galaxy Fty Bldg, 25-27 Luk Hop Street, San Po Kong, Kowloon, Hong Kong
Job Title : --
Contract No. : --
Customer's Ref. No. : --

Sample details as supplied by customer

Date Sampled : --
Date of Sample Received : 27-08-2020
Test Period : 08-09-2020 to 11-09-2020
Sample Description : DN32 Stainless Steel Ball Float Valve (Body)
Specification : BS EN 10088-1:2014, Table 2, Grade 1.4401 (316)
Location of Work : -- / Brand Name: VALVULAS CT
Specimen No. : BC0200811-004-MISL / Origin: Spain
Sample Identification No. : -- / Model No.: 200A-RPH
Manufacturer : GENWEC WASHROOM, S.L.

Test Method(s):-

- 1) BS EN ISO 15350 : 2010
- 2) In House Method: ST-Multi-1(ICP-OES)
- 3) BS EN ISO 15351: 2010

Remark:

I. Test results only relate to the specimen tested.

Checked by :

Lau Hin Yat
Assistant Technical Manager

Approved Signatory :

Cheng Chi Fai
Senior Manager



Test Report
Chemical Analysis of Steel

Date of issue: 15-09-2020

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Castco LRN: MS0200827-39

Chemical Analysis		Result
¹⁾ Total Carbon Content	C %	0.027
¹⁾ Total Sulfur Content	S %	<0.0020
²⁾ Chromium	Cr %	16.92
²⁾ Manganese	Mn %	1.38
²⁾ Molybdenum	Mo %	2.03
²⁾ Nickel	Ni %	10.07
²⁾ Phosphorus	P %	0.034
²⁾ Silicon	Si %	0.386
³⁾ Nitrogen	N %	0.037

End of Report

Form No.: CHM Steel-1 T dd 16/12/2015

Appendix A**Summary of Chemical Analysis of Steel**

Date of issue: 15-09-2020

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Castco LRN: MS0200827-39

Name of Customer: Gate Way Valve & Fitting Limited

Job Title: --

Contract No.: --

Customer's Ref. No.: --

Date of Received by Lab.: 27-08-2020

Testing Period: 08-09-2020 to 11-09-2020

Castco LRN:	MS0200827-39			
Sample I.D. No.:	-- / Model No.: 200A-RPH			
Sample Description :	DN32 Stainless Steel Ball Float Valve (Body)			
Location of Work :	-- / Brand Name: VALVULAS CT			
Specimen No. :	BC0200811-004-MISL / Origin: Spain			
Manufacturer :	GENWEC WASHROOM, S.L.			
Specification: BS EN 10088-1:2014, Table 2, Grade 1.4401(316)	Test Results		Within / Exceed limit	
Carbon C 0.07 max. %	0.027		Within limit	
Sulfur S 0.015 max. %	<0.0020		Within limit	
Chromium Cr 16.5 to 18.5 %	16.92		Within limit	
Manganese Mn 2.00 max. %	1.38		Within limit	
Molybdenum Mo 2.00 to 2.50 %	2.03		Within limit	
Nickel Ni 10.0 to 13.0 %	10.07		Within limit	
Phosphorus P 0.045 max. %	0.034		Within limit	
Silicon Si 1.00 max. %	0.386		Within limit	
Nitrogen N 0.10 max. %	0.037		Within limit	

Remarks:

- I. Test results only relate to the specimen tested.
- II. Test results of the specimen are in compliance with the chemical requirements of BS EN 10088-1:2014, Table 2, Grade 1.4401(316).

**Test Report
Chemical Analysis of Steel**

Date of issue: 15-09-2020

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Castco LRN: MS0200827-40

Details as supplied by customer

Name of Customer : Gate Way Valve & Fitting Limited

Address : Flat A1, 4/F, Galaxy Fty Bldg, 25-27 Luk Hop Street, San Po Kong, Kowloon, Hong Kong

Job Title : --

Contract No. : --

Customer's Ref. No. : --

Sample details as supplied by customer

Date Sampled : --

Date of Sample Received : 27-08-2020

Test Period : 08-09-2020 to 11-09-2020

Sample Description : DN32 Stainless Steel Ball Float Valve (Seat(Piston))

Specification : BS EN 10088-1:2014, Table 2, Grade 1.4401 (316)

Location of Work : -- / Brand Name: VALVULAS CT

Specimen No. : BC0200811-004-MISL / Origin: Spain

Sample Identification No. : -- / Model No.: 200A-RPH

Manufacturer : GENWEC WASHROOM, S.L.

Test Method(s):-

- 1) BS EN ISO 15350 : 2010
- 2) In House Method: ST-Multi-1(ICP-OES)
- 3) BS EN ISO 15351: 2010

Remark:

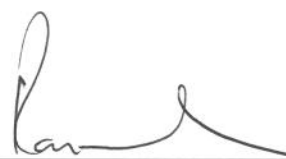
I. Test results only relate to the specimen tested.

Checked by :


Lau Hiu Yat

Assistant Technical Manager

Approved Signatory :


Cheng Chi Fai

Senior Manager



Test Report
Chemical Analysis of Steel

Date of issue: 15-09-2020

Page 2 of 2

Castco LRN: MS0200827-40

Chemical Analysis		Result
1) Total Carbon Content	C %	0.027
1) Total Sulfur Content	S %	<0.0020
2) Chromium	Cr %	17.37
2) Manganese	Mn %	1.42
2) Molybdenum	Mo %	2.06
2) Nickel	Ni %	10.30
2) Phosphorus	P %	0.033
2) Silicon	Si %	0.378
3) Nitrogen	N %	0.038

End of Report

Form No.: CHM Steel-1 T dd 16/12/2015

Appendix A

Summary of Chemical Analysis of Steel

Date of issue: 15-09-2020

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Castco LRN: MS0200827-40

Name of Customer: Gate Way Valve & Fitting Limited

Job Title: --

Contract No.: --

Customer's Ref. No.: --

Date of Received by Lab.: 27-08-2020

Testing Period: 08-09-2020 to 11-09-2020

Castco LRN:	MS0200827-40			
Sample I.D. No.:	-- / Model No.: 200A-RPH			
Sample Description :	DN32 Stainless Steel Ball Float Valve (Seat(Piston))			
Location of Work :	-- / Brand Name: VALVULAS CT			
Specimen No. :	BC0200811-004-MISL / Origin: Spain			
Manufacturer :	GENWEC WASHROOM, S.L.			
Specification: BS EN 10088-1:2014, Table 2, Grade 1.4401(316)	Test Results		Within / Exceed limit	
Carbon C 0.07 max. %	0.027		Within limit	
Sulfur S 0.015 max. %	<0.0020		Within limit	
Chromium Cr 16.5 to 18.5 %	17.37		Within limit	
Manganese Mn 2.00 max. %	1.42		Within limit	
Molybdenum Mo 2.00 to 2.50 %	2.06		Within limit	
Nickel Ni 10.0 to 13.0 %	10.30		Within limit	
Phosphorus P 0.045 max. %	0.033		Within limit	
Silicon Si 1.00 max. %	0.378		Within limit	
Nitrogen N 0.10 max. %	0.038		Within limit	

Remarks:

- I. Test results only relate to the specimen tested.
- II. Test results of the specimen are in compliance with the chemical requirements of BS EN 10088-1:2014, Table 2, Grade 1.4401(316).

Test Report
Chemical Analysis of Steel

Date of issue: 15-09-2020

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Castco LRN: MS0200827-41

Details as supplied by customer

Name of Customer : Gate Way Valve & Fitting Limited

Address : Flat A1, 4/F, Galaxy Fty Bldg, 25-27 Luk Hop Street, San Po Kong, Kowloon, Hong Kong

Job Title : --

Contract No. : --

Customer's Ref. No. : --

Sample details as supplied by customer

Date Sampled : --

Date of Sample Received : 27-08-2020

Test Period : 08-09-2020 to 11-09-2020

Sample Description : DN32 Stainless Steel Ball Float Valve (Lever)

Specification : BS EN 10088-1:2014, Table 2, Grade 1.4401 (316)

Location of Work : -- / Brand Name: VALVULAS CT

Specimen No. : BC0200811-004-MISL / Origin: Spain

Sample Identification No. : -- / Model No.: 200A-RPH

Manufacturer : GENWEC WASHROOM, S.L.

Test Method(s):-

- 1) BS EN ISO 15350 : 2010
- 2) In House Method: ST-Multi-1(ICP-OES)
- 3) BS EN ISO 15351: 2010


Remark:

- I. Test results only relate to the specimen tested.

Checked by :


Lau Hiu Yat
Assistant Technical Manager

Approved Signatory :


Cheng Chi Fai
Senior Manager



Test Report
Chemical Analysis of Steel

Date of issue: 15-09-2020

Page 2 of 2

Castco LRN: MS0200827-41

Chemical Analysis		Result
¹⁾ Total Carbon Content	C %	0.026
¹⁾ Total Sulfur Content	S %	<0.0020
²⁾ Chromium	Cr %	16.90
²⁾ Manganese	Mn %	1.38
²⁾ Molybdenum	Mo %	2.03
²⁾ Nickel	Ni %	10.07
²⁾ Phosphorus	P %	0.034
²⁾ Silicon	Si %	0.390
³⁾ Nitrogen	N %	0.038

End of Report

Form No.: CHM Steel-1 T dd 16/12/2015

Appendix A**Summary of Chemical Analysis of Steel**

Date of issue: 15-09-2020

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Castco LRN: MS0200827-41

Name of Customer: Gate Way Valve & Fitting Limited

Job Title: --

Contract No.: --

Customer's Ref. No.: --

Date of Received by Lab.: 27-08-2020

Testing Period: 08-09-2020 to 11-09-2020

Castco LRN:	MS0200827-41			
Sample I.D. No.:	-- / Model No.: 200A-RPH			
Sample Description :	DN32 Stainless Steel Ball Float Valve (Lever)			
Location of Work :	-- / Brand Name: VALVULAS CT			
Specimen No. :	BC0200811-004-MISL / Origin: Spain			
Manufacturer :	GENWEC WASHROOM, S.L.			
Specification: BS EN 10088-1:2014, Table 2, Grade 1.4401(316)	Test Results		Within / Exceed limit	
Carbon C 0.07 max. %	0.026		Within limit	
Sulfur S 0.015 max. %	<0.0020		Within limit	
Chromium Cr 16.5 to 18.5 %	16.90		Within limit	
Manganese Mn 2.00 max. %	1.38		Within limit	
Molybdenum Mo 2.00 to 2.50 %	2.03		Within limit	
Nickel Ni 10.0 to 13.0 %	10.07		Within limit	
Phosphorus P 0.045 max. %	0.034		Within limit	
Silicon Si 1.00 max. %	0.390		Within limit	
Nitrogen N 0.10 max. %	0.038		Within limit	

Remarks:

- I. Test results only relate to the specimen tested.
- II. Test results of the specimen are in compliance with the chemical requirements of BS EN 10088-1:2014, Table 2, Grade 1.4401(316).

**Test Report
Chemical Analysis of Steel**

Date of issue: 15-09-2020

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Castco LRN: MS0200827-42

Details as supplied by customer

Name of Customer : Gate Way Valve & Fitting Limited

Address : Flat A1, 4/F, Galaxy Fty Bldg, 25-27 Luk Hop Street, San Po Kong, Kowloon, Hong Kong

Job Title : --

Contract No. : --

Customer's Ref. No. : --

Sample details as supplied by customer

Date Sampled : --

Date of Sample Received : 27-08-2020

Test Period : 08-09-2020 to 11-09-2020

Sample Description : DN32 Stainless Steel Ball Float Valve (Float Ball)

Specification : BS EN 10088-1:2014, Table 2, Grade 1.4401 (316)

Location of Work : -- / Brand Name: VALVULAS CT

Specimen No. : BC0200811-004-MISL / Origin: Spain

Sample Identification No. : -- / Model No.: 200A-RPH

Manufacturer : GENWEC WASHROOM, S.L.

Test Method(s):-

- 1) BS EN ISO 15350 : 2010
- 2) In House Method: ST-Multi-1(ICP-OES)
- 3) BS EN ISO 15351: 2010

Remark:

I. Test results only relate to the specimen tested.

Checked by :


Lau Hiu Yat
Assistant Technical Manager

Approved Signatory :


Cheng Chi Fai
Senior Manager



Test Report
Chemical Analysis of Steel

Date of issue: 15-09-2020

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Castco LRN: MS0200827-42

Chemical Analysis		Result
¹⁾ Total Carbon Content	C %	0.027
¹⁾ Total Sulfur Content	S %	<0.0020
²⁾ Chromium	Cr %	16.98
²⁾ Manganese	Mn %	1.39
²⁾ Molybdenum	Mo %	2.02
²⁾ Nickel	Ni %	10.09
²⁾ Phosphorus	P %	0.034
²⁾ Silicon	Si %	0.387
³⁾ Nitrogen	N %	0.037

End of Report

Form No.: CHM Steel-1 T dd 16/12/2015

Appendix A
Summary of Chemical Analysis of Steel

Date of issue: 15-09-2020

Page 1 of 1

Castco LRN: MS0200827-42

Name of Customer: Gate Way Valve & Fitting Limited

Job Title: --

Contract No.: --

Customer's Ref. No.: --

Date of Received by Lab.: 27-08-2020

Testing Period: 08-09-2020 to 11-09-2020

Castco LRN:	MS0200827-42				
Sample I.D. No.:	-- / Model No.: 200A-RPH				
Sample Description :	DN32 Stainless Steel Ball Float Valve (Float Ball)				
Location of Work :	-- / Brand Name: VALVULAS CT				
Specimen No. :	BC0200811-004-MISL / Origin: Spain				
Manufacturer :	GENWEC WASHROOM, S.L.				
Specification: BS EN 10088-1:2014, Table 2, Grade 1.4401(316)			Test Results	Within / Exceed limit	
Carbon	C	0.07 max.	%	0.027	Within limit
Sulfur	S	0.015 max.	%	<0.0020	Within limit
Chromium	Cr	16.5 to 18.5	%	16.98	Within limit
Manganese	Mn	2.00 max.	%	1.39	Within limit
Molybdenum	Mo	2.00 to 2.50	%	2.02	Within limit
Nickel	Ni	10.0 to 13.0	%	10.09	Within limit
Phosphorus	P	0.045 max.	%	0.034	Within limit
Silicon	Si	1.00 max.	%	0.387	Within limit
Nitrogen	N	0.10 max.	%	0.037	Within limit

Remarks:

- I. Test results only relate to the specimen tested.
- II. Test results of the specimen are in compliance with the chemical requirements of BS EN 10088-1:2014, Table 2, Grade 1.4401(316).

**Test Report
Chemical Analysis of Steel**

Date of issue: 15-09-2020

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Castco LRN: MS0200827-43

Details as supplied by customer

Name of Customer : Gate Way Valve & Fitting Limited

Address : Flat A1, 4/F, Galaxy Fty Bldg, 25-27 Luk Hop Street, San Po Kong, Kowloon, Hong Kong

Job Title : --

Contract No. : --

Customer's Ref. No. : --

Sample details as supplied by customer

Date Sampled : --

Date of Sample Received : 27-08-2020

Test Period : 08-09-2020 to 11-09-2020

Sample Description : DN50 Stainless Steel Ball Float Valve (Body)

Specification : BS EN 10088-1:2014, Table 2, Grade 1.4401 (316)

Location of Work : -- / Brand Name: VALVULAS CT

Specimen No. : BC0200811-006-MISL / Origin: Spain

Sample Identification No. : -- / Model No.: 200A-RPH

Manufacturer : GENWEC WASHROOM, S.L.

Test Method(s):-

- 1) BS EN ISO 15350 : 2010
- 2) In House Method: ST-Multi-1(ICP-OES)
- 3) BS EN ISO 15351: 2010

Remark:

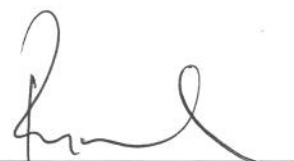
I. Test results only relate to the specimen tested.

Checked by :

**Lau Hiu Yat**

Assistant Technical Manager

Approved Signatory :

**Cheng Chi Fai**

Senior Manager



Test Report
Chemical Analysis of Steel

Date of issue: 15-09-2020

Page 2 of 2

Castco LRN: MS0200827-43

Chemical Analysis		Result
¹⁾ Total Carbon Content	C %	0.028
¹⁾ Total Sulfur Content	S %	<0.0020
²⁾ Chromium	Cr %	17.11
²⁾ Manganese	Mn %	1.40
²⁾ Molybdenum	Mo %	2.04
²⁾ Nickel	Ni %	10.16
²⁾ Phosphorus	P %	0.034
²⁾ Silicon	Si %	0.389
³⁾ Nitrogen	N %	0.037

End of Report

Form No.: CHM Steel-1 T dd 16/12/2015

Appendix A

Summary of Chemical Analysis of Steel

Date of issue: 15-09-2020

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Castco LRN: MS0200827-43

Name of Customer: Gate Way Valve & Fitting Limited

Job Title: --

Contract No.: --

Customer's Ref. No.: --

Date of Received by Lab.: 27-08-2020

Testing Period: 08-09-2020 to 11-09-2020

Castco LRN:	MS0200827-43			
Sample I.D. No.:	-- / Model No.: 200A-RPH			
Sample Description :	DN50 Stainless Steel Ball Float Valve (Body)			
Location of Work :	-- / Brand Name: VALVULAS CT			
Specimen No. :	BC0200811-006-MISL / Origin: Spain			
Manufacturer :	GENWEC WASHROOM, S.L.			
Specification: BS EN 10088-1:2014, Table 2, Grade 1.4401(316)	Test Results		Within / Exceed limit	
Carbon C 0.07 max. %	0.028		Within limit	
Sulfur S 0.015 max. %	<0.0020		Within limit	
Chromium Cr 16.5 to 18.5 %	17.11		Within limit	
Manganese Mn 2.00 max. %	1.40		Within limit	
Molybdenum Mo 2.00 to 2.50 %	2.04		Within limit	
Nickel Ni 10.0 to 13.0 %	10.16		Within limit	
Phosphorus P 0.045 max. %	0.034		Within limit	
Silicon Si 1.00 max. %	0.389		Within limit	
Nitrogen N 0.10 max. %	0.037		Within limit	

Remarks:

- I. Test results only relate to the specimen tested.
- II. Test results of the specimen are in compliance with the chemical requirements of BS EN 10088-1:2014, Table 2, Grade 1.4401(316).

**Test Report
Chemical Analysis of Steel**

Date of issue: 15-09-2020

Page 1 of 2

Castco LRN: MS0200827-44

Details as supplied by customer

Name of Customer : Gate Way Valve & Fitting Limited
Address : Flat A1, 4/F, Galaxy Fty Bldg, 25-27 Luk Hop Street, San Po Kong, Kowloon, Hong Kong
Job Title : --
Contract No. : --
Customer's Ref. No. : --

Sample details as supplied by customer

Date Sampled : --
Date of Sample Received : 27-08-2020
Test Period : 08-09-2020 to 11-09-2020
Sample Description : DN50 Stainless Steel Ball Float Valve (Seat(Piston))
Specification : BS EN 10088-1:2014, Table 2, Grade 1.4401 (316)
Location of Work : -- / Brand Name: VALVULAS CT
Specimen No. : BC0200811-006-MISL / Origin: Spain
Sample Identification No. : -- / Model No.: 200A-RPH
Manufacturer : GENWEC WASHROOM, S.L.

Test Method(s):-

- 1) BS EN ISO 15350 : 2010
- 2) In House Method: ST-Multi-1(ICP-OES)
- 3) BS EN ISO 15351: 2010

Remark:

- I. Test results only relate to the specimen tested.

Checked by :



Lau Hiu Yat
Assistant Technical Manager

Approved Signatory :



Cheng Chi Fai
Senior Manager

**Test Report
Chemical Analysis of Steel**

Date of issue: 15-09-2020

Page 2 of 2

Castco LRN: MS0200827-44

Chemical Analysis		Result
¹⁾ Total Carbon Content	C %	0.026
¹⁾ Total Sulfur Content	S %	<0.0020
²⁾ Chromium	Cr %	17.02
²⁾ Manganese	Mn %	1.38
²⁾ Molybdenum	Mo %	2.03
²⁾ Nickel	Ni %	10.09
²⁾ Phosphorus	P %	0.034
²⁾ Silicon	Si %	0.386
³⁾ Nitrogen	N %	0.036

End of Report

Form No.: CHM Steel-1 T dd 16/12/2015

Appendix A**Summary of Chemical Analysis of Steel**

Date of issue: 15-09-2020

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Castco LRN: MS0200827-44

Name of Customer: Gate Way Valve & Fitting Limited

Job Title: --

Contract No.: --

Customer's Ref. No.: --

Date of Received by Lab.: 27-08-2020

Testing Period: 08-09-2020 to 11-09-2020

Castco LRN:	MS0200827-44			
Sample I.D. No.:	-- / Model No.: 200A-RPH			
Sample Description :	DN50 Stainless Steel Ball Float Valve (Seat(Piston))			
Location of Work :	-- / Brand Name: VALVULAS CT			
Specimen No. :	BC0200811-006-MISL / Origin: Spain			
Manufacturer :	GENWEC WASHROOM, S.L.			
Specification: BS EN 10088-1:2014, Table 2, Grade 1.4401(316)	Test Results		Within / Exceed limit	
Carbon C 0.07 max. %	0.026		Within limit	
Sulfur S 0.015 max. %	<0.0020		Within limit	
Chromium Cr 16.5 to 18.5 %	17.02		Within limit	
Manganese Mn 2.00 max. %	1.38		Within limit	
Molybdenum Mo 2.00 to 2.50 %	2.03		Within limit	
Nickel Ni 10.0 to 13.0 %	10.09		Within limit	
Phosphorus P 0.045 max. %	0.034		Within limit	
Silicon Si 1.00 max. %	0.386		Within limit	
Nitrogen N 0.10 max. %	0.036		Within limit	

Remarks:

- I. Test results only relate to the specimen tested.
- II. Test results of the specimen are in compliance with the chemical requirements of BS EN 10088-1:2014, Table 2, Grade 1.4401(316).

**Test Report
Chemical Analysis of Steel**

Date of issue: 15-09-2020

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Castco LRN: MS0200827-45

Details as supplied by customer

Name of Customer : Gate Way Valve & Fitting Limited

Address : Flat A1, 4/F, Galaxy Fty Bldg, 25-27 Luk Hop Street, San Po Kong, Kowloon, Hong Kong

Job Title : --

Contract No. : --

Customer's Ref. No. : --

Sample details as supplied by customer

Date Sampled : --

Date of Sample Received : 27-08-2020

Test Period : 08-09-2020 to 11-09-2020

Sample Description : DN50 Stainless Steel Ball Float Valve (Lever)

Specification : BS EN 10088-1:2014, Table 2, Grade 1.4401 (316)

Location of Work : -- / Brand Name: VALVULAS CT

Specimen No. : BC0200811-006-MISL / Origin: Spain

Sample Identification No. : -- / Model No.: 200A-RPH

Manufacturer : GENWEC WASHROOM, S.L.

Test Method(s):-

- 1) BS EN ISO 15350 : 2010
- 2) In House Method: ST-Multi-1(ICP-OES)
- 3) BS EN ISO 15351: 2010

Remark:

- I. Test results only relate to the specimen tested.

Checked by :

Lau Hiu Yat
Assistant Technical Manager

Approved Signatory :

Cheng Chi Fai
Senior Manager

**Test Report
Chemical Analysis of Steel**

Date of issue: 15-09-2020

Page 2 of 2

Castco LRN: MS0200827-45

Chemical Analysis		Result
¹⁾ Total Carbon Content	C %	0.027
¹⁾ Total Sulfur Content	S %	<0.0020
²⁾ Chromium	Cr %	17.13
²⁾ Manganese	Mn %	1.39
²⁾ Molybdenum	Mo %	2.04
²⁾ Nickel	Ni %	10.16
²⁾ Phosphorus	P %	0.034
²⁾ Silicon	Si %	0.395
³⁾ Nitrogen	N %	0.036

End of Report

Form No.: CHM Steel-1 T dd 16/12/2015

Appendix A**Summary of Chemical Analysis of Steel**

Date of issue: 15-09-2020

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Castco LRN: MS0200827-45

Name of Customer: Gate Way Valve & Fitting Limited

Job Title: --

Contract No.: --

Customer's Ref. No.: --

Date of Received by Lab.: 27-08-2020

Testing Period: 08-09-2020 to 11-09-2020

Castco LRN:	MS0200827-45			
Sample I.D. No.:	-- / Model No.: 200A-RPH			
Sample Description :	DN50 Stainless Steel Ball Float Valve (Lever)			
Location of Work :	-- / Brand Name: VALVULAS CT			
Specimen No. :	BC0200811-006-MISL / Origin: Spain			
Manufacturer :	GENWEC WASHROOM, S.L.			
Specification: BS EN 10088-1:2014, Table 2, Grade 1.4401(316)	Test Results		Within / Exceed limit	
Carbon C 0.07 max. %	0.027		Within limit	
Sulfur S 0.015 max. %	<0.0020		Within limit	
Chromium Cr 16.5 to 18.5 %	17.13		Within limit	
Manganese Mn 2.00 max. %	1.39		Within limit	
Molybdenum Mo 2.00 to 2.50 %	2.04		Within limit	
Nickel Ni 10.0 to 13.0 %	10.16		Within limit	
Phosphorus P 0.045 max. %	0.034		Within limit	
Silicon Si 1.00 max. %	0.395		Within limit	
Nitrogen N 0.10 max. %	0.036		Within limit	

Remarks:

- I. Test results only relate to the specimen tested.
- II. Test results of the specimen are in compliance with the chemical requirements of BS EN 10088-1:2014, Table 2, Grade 1.4401(316).

**Test Report
Chemical Analysis of Steel**

Date of issue: 15-09-2020

Page 1 of 2

Castco LRN: MS0200827-46

Details as supplied by customer

Name of Customer : Gate Way Valve & Fitting Limited

Address : Flat A1, 4/F, Galaxy Fty Bldg, 25-27 Luk Hop Street, San Po Kong, Kowloon, Hong Kong

Job Title : --

Contract No. : --

Customer's Ref. No. : --

Sample details as supplied by customer

Date Sampled : --

Date of Sample Received : 27-08-2020

Test Period : 08-09-2020 to 11-09-2020

Sample Description : DN50 Stainless Steel Ball Float Valve (Float Ball)

Specification : BS EN 10088-1:2014, Table 2, Grade 1.4401 (316)

Location of Work : -- / Brand Name: VALVULAS CT

Specimen No. : BC0200811-006-MISL / Origin: Spain

Sample Identification No. : -- / Model No.: 200A-RPH

Manufacturer : GENWEC WASHROOM, S.L.

Test Method(s):-

- 1) BS EN ISO 15350 : 2010
- 2) In House Method: ST-Multi-1(ICP-OES)
- 3) BS EN ISO 15351: 2010

Remark:

- I. Test results only relate to the specimen tested.

Checked by :


Lau Hing Yat
Assistant Technical Manager

Approved Signatory :


Cheng Chi Fai
Senior Manager



Test Report
Chemical Analysis of Steel

Date of issue: 15-09-2020

Page 2 of 2

Castco LRN: MS0200827-46

Chemical Analysis		Result
¹⁾ Total Carbon Content	C %	0.025
¹⁾ Total Sulfur Content	S %	<0.0020
²⁾ Chromium	Cr %	16.90
²⁾ Manganese	Mn %	1.38
²⁾ Molybdenum	Mo %	2.02
²⁾ Nickel	Ni %	10.05
²⁾ Phosphorus	P %	0.034
²⁾ Silicon	Si %	0.393
³⁾ Nitrogen	N %	0.038

End of Report

Form No.: CHM Steel-1 T dd 16/12/2015

Appendix A**Summary of Chemical Analysis of Steel**

Date of issue: 15-09-2020

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Castco LRN: MS0200827-46

Name of Customer: Gate Way Valve & Fitting Limited

Job Title: --

Contract No.: --

Customer's Ref. No.: --

Date of Received by Lab.: 27-08-2020

Testing Period: 08-09-2020 to 11-09-2020

Castco LRN:	MS0200827-46			
Sample I.D. No.:	-- / Model No.: 200A-RPH			
Sample Description :	DN50 Stainless Steel Ball Float Valve (Float Ball)			
Location of Work :	-- / Brand Name: VALVULAS CT			
Specimen No. :	BC0200811-006-MISL / Origin: Spain			
Manufacturer :	GENWEC WASHROOM, S.L.			
Specification: BS EN 10088-1:2014, Table 2, Grade 1.4401(316)	Test Results		Within / Exceed limit	
Carbon C 0.07 max. %	0.025		Within limit	
Sulfur S 0.015 max. %	<0.0020		Within limit	
Chromium Cr 16.5 to 18.5 %	16.90		Within limit	
Manganese Mn 2.00 max. %	1.38		Within limit	
Molybdenum Mo 2.00 to 2.50 %	2.02		Within limit	
Nickel Ni 10.0 to 13.0 %	10.05		Within limit	
Phosphorus P 0.045 max. %	0.034		Within limit	
Silicon Si 1.00 max. %	0.393		Within limit	
Nitrogen N 0.10 max. %	0.038		Within limit	

Remarks:

- I. Test results only relate to the specimen tested.
- II. Test results of the specimen are in compliance with the chemical requirements of BS EN 10088-1:2014, Table 2, Grade 1.4401(316).