

AG570
TYCO VALVES & CONTROLS LP
STAFFORD DIVISION
ANDERSON GREENWOOD CROSEY

F U N C T I O N A L T E S T R E P O R T

SALES ORDER NO: D69886.001

DATE PRINTED: 11/03/11

CUSTOMER: FCX PERFORMANCE
PO NUMBER: 4150834

SHIP TO CUST: SIMCO CONTROLS
PRODUCT NUMBER: 810SSM04.06.402450GKTS
PART NBR: D69886.001

MARKS:

PAGE: 1

GAUGE NO: A5000-09

TESTER INITIALS: *KS*

SERIAL NO	TAG	PRIMARY PRESSURE PARTS TEST	ASSY TECH	BELLOWS OR O-RING TEST	SECONDARY PRESSURE ZONE TEST	NAMEPLATE SET COTP	SPECIFIED RESEAT	LEAK TEST TIME	FINAL TECH
11-45339		ASME	KS	UA	UA	2500	2280	0	<i>KS</i>
11-45340						2600	2300	0	<i>KS</i>
11-45341						2465	2290	0	<i>KS</i>
11-45342						2465	2300	0	<i>KS</i>
11-45343						2480	2200	0	<i>KS</i>

TRACEABILITY REQUIREMENTS - HEAT/CODE NUMBERS FOR TRACEABLE COMPONENTS

SERIAL NO	BODY/CYLINDER	BASE/BUSHING	BONNET	FLANGE IN	FLANGE OUT	NOZZLE	STUB IN	STUB OUT	DISC
11-45339	<i>Y0732</i>	<i>420946</i>							
11-45340									
11-45341									
11-45342									
11-45343									

Inspected By:
KIVEN BASANG

NOV 09 2011

Paul

TYCO VALVES & CONTROLS LP
STAFFORD DIVISION
ANDERSON GREENWOOD CROSBY

DATE PRINTED: 11/03/11

F U N C T I O N A L T E S T R E P O R T

PAGE: 2

MARKS:

SHIP TO CUST: SIMCO CONTROLS
PRODUCT NUMBER: 810SSM04...06...402450GKTS
PART NBR: D69886.001

GAUGE NO: A5000-09

SALES ORDER NO: D69886.001

CUSTOMER: FCX PERFORMANCE
PO NUMBER: 4150834

TESTER INITIALS: *AS*

SERIAL NO	TAG	PRIMARY PRESSURE PARTS TEST	ASSY TECH	BELLOWS OR O-RING TEST	SECONDARY PRESSURE ZONE TEST	NAMEPLATE SET COTP	SPECIFIED RESEAT	LEAK TEST TIME	FINAL TECH
11-45344		ASME	AS	NA	NA	2470	2280	0	AS
11-45345						2460	2300	0	AS
11-45346						2500	2300	0	AS
11-45347						2500	2300	0	AS
11-45348						2490	2300	0	AS

TRACEABILITY REQUIREMENTS - HEAT/CODE NUMBERS FOR TRACEABLE COMPONENTS

SERIAL NO	BODY/CYLINDER	BASE/BUSHING	BONNET	FLANGE IN	FLANGE OUT	NOZZLE	STUB IN	STUB OUT	DISC
11-45344	40738	420946							
11-45345									
11-45346									
11-45347	42122								
11-45348									

Inspected By:
KIVEN BASANG

NOV 09 2011

KL

TYCO VALVES & CONTROLS LP
STAFFORD DIVISION
ANDERSON GREENWOOD CROSBY

DATE PRINTED: 11/03/11

FUNCTIONAL TEST REPORT

SALES ORDER NO: D69886.001

CUSTOMER: FCX PERFORMANCE
PO NUMBER: 4150834

SHIP TO CUST: SIMCO CONTROLS
PRODUCT NUMBER: 810SSM04..06..402450GKTS
PART NBR: D69886.001

MARKS:

GAUGE NO: A6000-09

TESTER INITIALS: *AS*

2499

PAGE: 3

SERIAL NO	TAG	PRIMARY PRESSURE PARTS TEST	ASSY TECH	BELLOWS OR O-RING TEST	SECONDARY PRESSURE ZONE TEST	NAMEPLATE SET COTP	SPECIFIED RESEAT	LEAK TEST TIME	FINAL TECH
11-45349		ASMC	AS	NA	NA	2490	2280	0	AS
11-45350						2490	2300	0	AS
11-45351						2480	2300	0	AS
11-45352						2480	2290	0	AS
11-45353						2490	2220	0	AS

TRACEABILITY REQUIREMENTS - HEAT/CODE NUMBERS FOR TRACEABLE COMPONENTS

SERIAL NO	BODY/CYLINDER	BASE/BUSHING	BONNET	FLANGE IN	FLANGE OUT	NOZZLE	STUB IN	STUB OUT	DISC
11-45349	Y2122	Y20946							
11-45350	Y0701	Y20945							
11-45351									
11-45352									
11-45353	Y0730								

Inspected By:
KIVEN BASANG

NOV 09 2011

TYCO VALVES & CONTROLS LP
STAFFORD DIVISION
ANDERSON GREENWOOD CROSBY

AG570
SALES ORDER NO: D69886.001
FUNCTIONAL TEST REPORT
DATE PRINTED: 11/03/11

CUSTOMER: FCX PERFORMANCE
PO NUMBER: 4150834
SHIP TO CUST: SIMCO CONTROLS
PRODUCT NUMBER: 810SSM04.06.402450GKTS
PART NBR: D69886.001
TESTER INITIALS: **bs**
MARKS: **2499**
GAUGE NO: **A5000-09**
PAGE: 4

SERIAL NO	TAG	PRIMARY PRESSURE PARTS TEST	ASSY TECH	BELLOWS OR O-RING TEST	SECONDARY PRESSURE ZONE TEST	NAMEPLATE SET COTP	SPECIFIED RESEAT	LEAK TEST TIME	FINAL TECH
11-45354		ASME	bs	NA	NA	2485	2279	0	bs
11-45355						2450	2300	0	bs
11-45356						2460	2296	0	bs

TRACEABILITY REQUIREMENTS - HEAT/CODE NUMBERS FOR TRACEABLE COMPONENTS

SERIAL NO	BODY/CYLINDR	BASE/BUSHING	BONNET	FLANGE IN	FLANGE OUT	NOZZLE	STUB IN	STUB OUT	DISC
11-45354	Y 0733	470945							
11-45355	Y 2118	422909							
11-45356	Y 2120	422609							

CUSTOMER/DATE	UNITS OF MEASURE	TEST MEDIUM	VERIFIED/DATE				
	UNITS	PRES.	VAC.	AIR	H2O	STEAM	
	PSIG	✓		✓			
	"WC						

Inspected By:
KIVEN BASANG

NOV 09 2011

ASME Manufacturer's Certificate of Conformance for Pressure Relief Valves
Form UV-1 (Section VIII)

1. Manufactured by: Tyco Valves & Controls LP (dba Anderson Greenwood Crosby) - Stafford, Texas

2. Table of Code symbol stamped items:

ID (Serial No)	Year Built	NB Cert #	QTY	Type	Size, (NPS)	Set Pressure, psig (Nameplate)	Capacity	Test Fluid	Date	CI Name	CI Signature
11-45339	11/03/11	01089	18	81SM46-4	1/2"	02450 PSIG	1986 SCFM	Air	11/9/11	Karen Basang	<i>[Signature]</i>

3. Remarks: D69886.001

CERTIFICATE OF SHOP COMPLIANCE

By the signature of the Certified Individual (CI) noted above, we certify that the statements made in this report are correct and that all details for design, material, construction and workmanship of the pressure relief devices conform with the requirements of Section VIII, Division 1 of the ASME Boiler and Pressure Vessel Code.

UV Certificate of Authorization No. 3793 Expires December 31, 2013

Date: 11-9-2011

Signed:

Caroline Forts
(Responsible representative)

Name: Tyco Valves & Controls LP - Stafford, Texas
(Manufacturer)

Form 043 01/11

ANEJI WINGLIU ELECTROMECHANICAL CO.LTD.

CHEMICAL ANALYSIS AND MECHANICAL TEST TYPE 3.1 CERTIFICATE

ADD-N.26 QTYUN ROAD PRIVATE SCIENTIFIC TECHNICAL ECONOMIC PARK HEFEI ECONOMIC TECHNICAL DEVELOPMENT ZONE-ANHUI CHINA
TEL:0086-564-5036508 FAX:0086-564-5036500

Inspection Certificate

CUSTOMER:STAFFORD

MATERIAL SPECIFICATION: ASME SA351 CF8M-2007

Melting process-Heat Treatment:ST-1100°C-2.5h Water Quenching

A) Chemical analysis

Certificate-No.:2011-03-1240

Drawing-No.:03.0001.002

Order-No.:A28647 2

B) Mechanical Property

Heat No.	Test Temp	Part No.	Qty.	C %	Mn %	Si %	P %	S %	Cr %	Mo %	Ni %	Tensile Strength		Elongation %	Reduction %	Hardness HB
												Rp 0.2 (MPa)	Rm (MPa)			
SA351 CF8M	RT	03.0004.021	35	≤ 0.08	≤ 1.50	≤ 1.50	≤ 0.040	≤ 0.040	18.00-21.00	2.00-3.00	9.00-12.00	≥ 205	≥ 485	≥ 30		167
INSPECTED BY <i>[Signature]</i>																
MAY 17 2011																
<i>[Signature]</i>																
REMARK:																
C) Dimensional check and NDT																
Tenting																
Visual inspection																
MSS-SP-55																
Dimension inspection																
DWG																
D) Delivery Condition: ST																
Result																
OK																
OK																



We confirm that inspection, visual and nondestructive tests specified in the purchase order have been done and are in conformity with requirements and that the material was manufactured, sampled, tested, and inspected in accordance with the material specifications(ASME SA351 CF8M), and was found to meet the requirements. We confirm that the report is also in accordance with EN 10204 type 3.1 certificate.

Place:

Date: March 26, 2011

Work Inspector: *[Signature]*

上海英特立检测技术有限公司
 ANTECH INTERNATIONAL TESTING TECHNOLOGY CO., LTD.
 CHEMICAL ANALYSIS AND MECHANICAL TEST TYPE 3.1 CERTIFICATE
 ADD: N345 QUTIAN ROAD PRIVATE SUBURBAN ECONOMIC DEVELOPMENT ZONE SHANGHAI CHINA
 TEL: 021-5865-6644-5036508 FAX: 021-5865-6644-5036500

Certificate No.: 2011-04-0955
 Drawing No.: 03.0001.002
 Order No.: A28647 2

Inspection Certificate
 CUSTOMER: STAFFORD
 MATERIAL SPECIFICATION: ASME SA351 CF8M-2007
 Melting process-Heat Treatment: ST: 1100°C x 2.5h Water Quenching

A) Chemical analysis B) Mechanical Property

Heat No.	Test Temp	C %	Mn %	Si %	P %	S %	Cr %	Mo %	Ni %	Rp 0.2 Proof Strength	Tensile Strength		Elongation %	Reduction %	Hardness
											N/ma1 (Mpa)	N/ma2 (Mpa)			
SA351 CF8M	°C	≤ 0.08	≤ 1.50	≤ 1.50	≤ 0.040	≤ 0.040	18.00-21.00	2.00-3.00	9.00-12.00	≥ 205	≥ 485	≥ 30			HB
0730	RT	0.061	1.18	0.72	0.025	0.009	18.10	2.13	9.20	260	550	48			174
INSPECTED BY <i>[Signature]</i> MAY 9, 2011															

REMARK:

C) Dimensional check and NDT	Testing	Details	Result
Visual inspection		MSS-SP-55	OK
Dimension inspection		DWG	OK

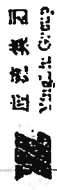
D) Delivery Condition: ST

We confirm that inspection, visual, and nondestructive tests specified in the purchase order have been done and are in conformity with requirements and that the material was manufactured, sampled, tested, and inspected in accordance with the material specification (ASME SA351 CF8M), and was found to meet the requirements. We confirm that the report is also in accordance with EN 10204 type 3.1 certificate.

Place: *[Signature]* Work Inspector: *[Signature]*

Date: April 11, 2011

ANEU YINGLIU ELECTROMECHANICAL CO.,LTD.



ADD: N.35 QTYUN ROAD PRIVATE SCIENTIFIC TECHNICAL ECONOMIC PARK HEFEI ECONOMIC TECHNICAL DEVELOPMENT ZONE-ANEUI CHINA
TEL: 0086-564-5036508 FAX: 0086-564-5036500

Certificate-No.: 2011-04-991

Drawing-No.: 03.0001.002
Order-No.: AJ0053 3

Inspection Certificate
CUSTOMER: STAFFORD

MATERIAL SPECIFICATION: ASME SA351 CF8M-2007

Melting process-Heat Treatment: ST: 1100°C x 2.5h Water Quenching

A) Chemical analysis

Heat No.	Test Temp °C	Part No.	Qty.	C %	Mn %	Si %	P %	S %	Cr %	Mo %	Ni %	B) Mechanical Property		Hardness HB	
												Rp 0.2 Proof Strength N/mm2 (Mpa)	Elongation %		Reduction %
SA351 CF8M				≤ 0.08	≤ 1.50	≤ 1.50	≤ 0.040	≤ 0.040	18.00-21.00	2.00-3.00	9.00-12.00	≥ 205	≥ 485	≥ 30	
0733	RT	03.0004.021	1	0.063	1.16	0.60	0.028	0.010	18.70	2.39	9.22	260	545	47	179
<p>INSPECTED BY <i>[Signature]</i> JUN 01 2011 <i>[Signature]</i></p>															

REMARK:

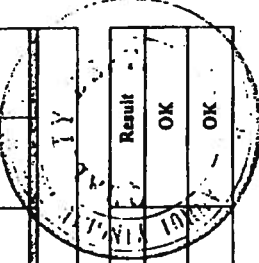
C) Dimensional check and NDT

Testing	Details	Result
Visual inspection	MSS-SP-35	OK
Dimension inspection	DWG	OK

D) Delivery Condition: ST

We confirm that inspection, visual and nondestructive tests specified in the purchase order have been done and are in conformity with requirements and that the material was manufactured, sampled, tested, and inspected in accordance with the material specification (ASME SA351 CF8M), and was found to meet the requirements. We confirm that the report is also in accordance with EN 10204 type 3.1 certificate.

Place: *[Signature]* Date: April 23, 2011 Work inspector: *Yang fangbin*



00187



VALBRUNA
SLATER STAINLESS, INC.
 2400 Taylor Street West, P.O. Box 630
 Peru, Indiana, USA 46881
 Phone: 200-434-3882 Fax: 200-434-3808

Product Certification Report

Report Number: **4584490**

Certified on Sep 28, 2010 Page 1 of 1

Order ID: 1002540 004		Order Date: 9/20/10		Customer Order:	
Dim 1: 1.2500	Dim 2: .0000	Dim 3: .0000	Heat ID: 420945	Customer ID: 002475	Creation or Purchase Order: 28244
Product Shape: Cold Drawn Hex			Product Surface: Cold Drawn Finish		Customer Group: 316/316L
Length (Inches): 132.000 Min. 156.000 Max.			Mill of Casting #: 412733	Weight:	

Customer Name: Tyco
 P.O. Number: A28517
 Our Order Number: 17716
 Date: 1/7/11 TR Reviewed: [Signature]

UNITED METALS

PN-05.0011.066

Life: 0123

CONDITION A

ASTMA 182-09a Chem Only

ASTMA 479-08

ASTMA 370-08A

SAE-AMS QQ-S-763F

QQ-S-763F

ASTMA 262-02a Re08

ASTMA 484-08

AMS 5648K

ASTMA 276-08a

ASHESA 479-07

AMS 5653F

CHEMICAL ANALYSIS

C	Mn	P	S	Si	Cr	Ni	Mo	Cu	Co	N
.022	1.50	.027	.029	.57	16.68	10.09	2.02	.48	.08	.06

BRINELL HARDNESS ASTM E10-08

HBW

215

TENSILE PROPERTIES ASTM E8-08

TS (PSI) .2XYS (PSI) YEL(2") XRA

100300 75600 43.0 66.1

MACRO ASTM E340-00/E381-01

MACRO

OK

OK

GRAIN SIZE ASTM E112-96

GRAIN SIZE

7

ASTMA 262-10 PR E(A Utilized)

OXALIC

OK

No mercury or low melting alloy contamination. Continuous carbide and intergranular corrosion test OK.

No welding or weld repair done.

Chemical testing performed to one or more of the following ASTM methods: E415-08, E572-02a, E1019-08, E1085-95,

Location of tensile fracture: inside middle of gage length.

Chemical Analysis performed at Acciaierie Valbruna, Italy.

No mercury or low melting alloy contamination. No weld repair.

Material melted in Italy, manufactured in the United States.

Material conforms to listed specifications and is DFARS compliant.

Quality system is compliant with ISO 9001:2000. Produced in accordance with EN 10204 3.1.

Results relate only to the items tested. Certification shall not be reproduced except in full, without written approval of Valbruna Stainless Inc. The recording of false, fictitious, or fraudulent statements on this document may be punished as a felony under federal statutes, including Federal law, Title 18, Chapter 47. Consult material safety data sheet (MSDS) for hazard info.

I hereby certify that the reported figures are correct as contained in the records of the corporation.

Manager Laboratory Services

[Signature]

Dennis Hackett

INSPECTED BY
[Signature]

JAN 20 2011

X2H.CY.Y

0101010



VALBRUNA
SLATER STAINLESS, INC.
 2408 Taylor Street West, P.O. Box 630
 Fort Wayne, Indiana USA 46801
 Phone: 200-434-2882 Fax: 200-434-2888

Product Certification Report

Report Number: **4605310**

Certified on Nov 30, 2010 Page 1 of 1

Order LB.	Order Date	Commodity Code
1003071 003	11/15/10	
Dim 1	Dim 2	Dim 3
1.2500	.0000	.0000
Heat LB.	Customer LB.	Customer Purchase Order
422909	002475	28770
Product Shape	Product Surface	Customer Grade
Cold Drawn Hex	Cold Drawn Finish	316/316L
Length (Minimum)	Length (Maximum)	Mill of Lading #
132.000 Min.	156.000 Max.	413341

Customer Name Tyco
 P.O. Number A30593
 Our Order Number 18017
 Date 4/7/11 TR Reviewed [Signature]

UNITED METALS

P/N 05.0011.066

Lifts: 0004 0016 0017 0018 0019
 CONDITION A QQ-5-763F
 ASTM 182-09a Chem Only ASTM 262-10
 ASTM 479-08 ASTM 484-09
 ASTM 370-08A AMS 5648K
 SAR-AMS QQ-5-763B
 ASTM 276-08a
 ASTM 479-07
 AMS 5653F

CHEMICAL ANALYSIS

C	Mn	P	S	Si	Cr	Ni	Mo	Cu	Co	N
0.22	1.66	0.29	0.030	0.57	16.85	10.20	2.03	0.59	0.08	0.06

BRINELL HARDNESS ASTM E10-08
 HBW
 209

TENSILE PROPERTIES ASTM E8-08
 TS (PSI) .2KYS (PSI) KEL(2") XRA
 97400 68000 46.8 74.3

MACRO ASTM E340-00/E381-01
 MACRO
 OK
 OK

GRAIN SIZE ASTM E112-96
 GRAIN SIZE
 8

ASTM 262-10 PR E(A Utilized)
 OXALIC
 OK

No mercury or low melting alloy contamination. Continuous carbide and intergranular corrosion test OK.
 No welding or weld repair done.
 Chemical testing performed to one or more of the following ASTM methods: E415-08, E572-02a, E1019-08, E1085-95,
 Location of tensile fracture: inside middle of gage length.
 Chemical Analysis performed at Acciaierie Valbruna, Italy.
 No mercury or low melting alloy contamination. No weld repair.
 Material melted in Italy, manufactured in the United States.
 Material conforms to listed specifications and is DFARS compliant.
 Quality system is compliant with ISO 9001:2000. Produced in accordance with EN 10204 3.1.

Results relate only to the items tested. Certification shall not be reproduced except in full, without written approval of Valbruna Stainless Inc. The recording of false, fictitious, or fraudulent statements on this document may be punished as a felony under federal statutes, including Federal law, Title 18, Chapter 47. Consult material safety data sheet (MSDS) for hazard info. I hereby certify that the reported figures are correct as contained in the records of the corporation.

Manager Laboratory Services [Signature]
 Dennis Hackett

INSPECTED BY

[Signature]
 APR 18 2011
 Inspector

288.15

1:25 27X

11/11/11

101129X



VALBRUNA

SLATER STAINLESS, INC.
2400 Taylor Street West, P.O. Box 630
Fort Wayne, Indiana USA 46801
Phone: 260-434-2882 Fax: 260-434-2908

Product Certification Report

Report Number: **4589880**

Certified on Oct 12, 2010 Page 1 of 1

Order I.D. 1002709 001		Order Date 10/06/10		Consistency Code	
Dim 1 1.2500	Dim 2 .0000	Dim 3 .0000	Heat I.D. 420946	Customer I.D. 002475	Customer Purchase Order 28406
Product Shape Cold Drawn Hex			Product Finish Cold Drawn Finish		Customer Grade 316/316L
Length (Inches) 132.000 Min. 156.000 Max.			Bill of Lading # 412973	Weight	

PN-05, 0011, 066

Customer Name Tyco
P.O. Number A33393
Our Order Number 18176
Date Sept 11 TR Reviewed [Signature]

UNITED METALS

Lifts: 0099 0102 0106

CONDITION A	QQ-S-763F	
ASTMA 182-09a Chem Only	ASTMA 262-02a Re08	ASTMA 276-08a
ASTMA 479-08	ASTMA 484-08	ASHESA 479-07
ASTMA 370-08A	AMS 5648K	AMS 5653F
SAR-AMS QQ-S-763F		

CHEMICAL ANALYSIS

C	Mn	P	S	Si	Cr	Ni	Mo	Cu	Co	N
.013	1.53	.028	.028	.60	16.89	10.28	2.08	.47	.08	.06

BRINELL HARDNESS ASTM E10-08

HBW
206

TENSILE PROPERTIES ASTM E8-08

TS (PSI)	2KYS (PSI)	YKL(2°)	YRA
99200	77600	42.5	67.0

MACRO ASTM E340-00/E381-01

MACRO
OK
OK

GRAIN SIZE ASTM E112-96

GRAIN SIZE
6

ASTMA 262-10 FR E(A Utilized)

OXALIC
OK

INSPECTED BY
[Signature]

JUN 02 2011
[Signature]

No mercury or low melting alloy contamination. Continuous carbide and intergranular corrosion test OK.
No welding or weld repair done.
Chemical testing performed to one or more of the following ASTM methods: E415-08, E572-02a, E1019-08, E1085-95.
Location of tensile fracture: inside middle of gage length.
Chemical Analysis performed at Acciaierie Valbruna, Italy.
No mercury or low melting alloy contamination. No weld repair.
Material melted in Italy, manufactured in the United States.
Material conforms to listed specifications and is DFARS compliant.
Quality system is compliant with ISO 9001:2000. Produced in accordance with EN 10204 3.1.

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Manager Laboratory Services

[Signature]
Dennis Hacken

1.00 11/11/10

101129X