



BURST TEST CERTIFICATE & CERTIFICATE OF CONFORMANCE

BS&B SAFETY SYSTEMS, L.L.C.

DATE: 09/19/2016

CUSTOMER: BS&B DISTRIBUTION LTD.
CERTIFIED TO: BIMS INTERNATIONAL
C/O BS&B SAFETY SYSTEMS LTD.
RAHEEN BUSINESS PARK
LIMERICK, Co LIMERICK
IRELAND -

P.O. NUMBER: REPLENISHMENT
BS & B LOT: 16600206-1
SIZE: 0.500"
TYPE: S/K SPL FRB

QTY. OF UNITS SHIPPED: 300

QTY. OF UNITS TESTED: 10

DISK MATERIAL: 360-BRS/360-BRS/INC/300/TEF
HEAT NOS: 155360

We Certify that the Item described in this test certificate have been manufactured, inspected and tested in accordance with the standards applicable to our industry. The Original test data is on file and is available for your examination. CE Marked in accordance with the EU Pressure Equipment Directive.

NUMERICAL VALUE

23.5, 23.6, 23.6, 23.7, 23.6, 23.4,
23.4, 23.4, 23.4, 23.4

BURST TEST RESULTS

PRESSURE UNIT

bar(G)

@TEMPERATURE

20 °C

NUMERICAL VALUE

24 +/- 7%

RATED RUPTURE

PRESSURE UNIT

bar(G)

@TEMPERATURE

20 °C

OTHER DETAILS:-

Tab Marking: 19303610

QC Inspector: B.FARRIS
Attachments: MILL TEST REPORTS, 3.1
DECLARATION OF CONFORMITY

CHECKED

03 January 2017

BUBBLE LEAK TESTED AT 239 PSIG FOR 2 MINUTES EACH



* 1 6 6 0 0 2 0 6 - 1 *

BS&B Safety Systems, LLC

QA/QC DEPARTMENT

BS&B Safety Systems, L.L.C. • 7455 E. 46TH Street • P.O. Box 470590 • Tulsa, OK 74147-0590
Phone 918/622-5950 • Fax 918/665-3904
Email sales@bsbsystems.com • Website www.bsbsystems.com



MATERIAL CERTIFICATION

Disk

57 DODGE AVE.
NO. HAVEN, CT. 06473
AREA CODE 203 239-4481

FAX 203-239-7479
TELEX 160110

CUSTOMER NO.	DATE ORD.	ULBRICH STAINLESS STEELS	JOB NO.	CUST. P.O. NO.
3509860-17	07/12/06		3P9063	073970

OLD TO: B S & B SAFETY SYSTEMS
7455 EAST 46TH ST. SO
TULSA, OK 74145

SHIP TO: B S & B SAFETY SYSTEMS
7455 EAST 46TH ST SO
TULSA OK 74145

TYPE	GAGE	TEMPER	FINISH	WIDTH	LENGTH	EDGE	QTY. ORDERED	UM
I6000	.00900	AN	#2	1.2500	0.000	3S	50.000	LB
TOL. +	.00045	BSB 5	TOL. +	0.0050	.00000	CAMBER	FLATNESS	
-	.00045		-	0.0050	-	.250" IN 8'	NO	

MATERIAL TESTS NOT COVERED WITHIN NADCAP OR ISO/IEC 17025
SCOPE OF ACCREDITATION.
THE RECORDING OF FALSE, FICTITIOUS, OR FRAUDULENT STATEMENTS
OR ENTRIES ON THE CERTIFICATE MAY BE PUNISHABLE AS A FELONY
UNDER FEDERAL LAW.

CUST. P/N

CUST. SPEC. ASTM B 168

HEAT NO. 155360

CHEMICAL ANALYSIS

LCS:

CARBON : .017
MANGANESE : .27
SILICON : .21
PHOSPHORUS : .007
SULPHUR : .002
CHROMIUM : 16.38

NICKEL : 73.41
ALUMINUM : .18
COPPER : .01
TITANIUM : .25
IRON : 9.07
COBALT : .04

COLUMBIUM : .01
TANTALUM : .02

TENSILE (PSI): 97800
YIELD (PSI): 40000
ELONG (%): 38

MECHANICAL PROPERTIES AT ROOM TEMPERATURE

HARDNESS : 78-79 HRB
GRAIN SIZE:
HARDNBLTY :

BEND TEST:
ACCEPTABLE
EMBRITTLE:

TENSILE (PSI):
YIELD (PSI):
ELONG (%):
STRESS RUPTURE TEST:

MECHANICAL PROPERTIES AFTER HEAT TREATMENT

HARDNESS :

HARDNBLTY :

TENSILE (PSI):
YIELD (PSI):
ELONG (%):

MECHANICAL PROPERTIES AT

HARDNESS :

DEG. F

HARDNBLTY :

OTHER PROPERTIES

THIS MATERIAL IS FREE FROM MERCURY CONTAMINATION
MATERIAL CONFORMS TO ASTM B168
COMMENTS

CHECKED

03 January 2017

TESTED TO ULBRICH QUALITY PROCEDURES
CERTIFICATION CAN NOT BE COPIED EXCEPT IN FULL

SIGNED:

PATRICK ROBB

TITLE: GENERAL PROCESS/PRODUCT ASSURANCE MANAGER

DATE: 08/08/06

MA-001
9/01

TC

NET WEIGHT SHIPPED

60

CHECKED**03 January 2017**

Disk

**TÜVRheinland®**
Precisely Right.**Abnahmeprüfzeugnis**

EN 10 204 - 3.2

Inspection Certificate - Certificat de Réception**Besteller:** BS & B Safety Systems, Inc.
Customer 7455 East 46th Street
Acheteur Tulsa, OK 74145
USA**Hersteller:** Ulbrich
Manufacturer 57 Dodge Ave.
Fabricant N Haven, CT 06473
USA**Prüfgegenstand:** Alloy 600 Foil
Article
Produit**Prüf-Nr. - Inspection No - Certificat N°:** 441794-012**Teil - Part - Partie:** - -**Blatt-Nr. - Sheet No - Page-N°:** 1**Bestell-Nr. - Order No - N° de la commande:** - -**vom - dated - date:** 11/13/2014**Werks-Nr. - Works-No - N° usine:** 441794**Prüfgrundlagen/Anforderungen:** Single Material Appraisal for Specific Product Control acc. To PED
Technical requirements/Demand (97/23/EC); Annex 1.4.3
Spécifications techniques/Exigences**Werkstoff:** UNS N06600
Material
Matériau**entsprechend:** ASTM B168
according to (Chemistry & Bends Only)
suivant**Ausgabe:** 2011
Edition**Lieferzustand** Annealed
State of delivery
Etat de livraison**Kennzeichnung (Werkstoff):** Heat # 155360
Marking (Material)
Marquage (Matériau)**Erschmelzungsart:**
Melting process
Procédé d'élaboration**Herstellerzeichen:** See attached MTR
Brand of the manufacturer
Marque du fabricant**Stempel des Sachverständigen:**
Inspector's stamp
Poinçon de l'expert**Umfang der Lieferung - Extent of material delivery - Liste descriptive**

Pos. Nr. Item No Poste N°	Stückzahl Number of Nombre	Gegenstand Article Désignation du produit	Schmelze-Nr. Heat No N° Cotee	Probe-Nr. Test No N° d'éprouvette
1	1	0.009" N06600 Strip	155360	073970

Zusätzliche Angaben:
Additional remarks
Autres remarques

The Requirements are fulfilled as per Annex

Die gestellten Anforderungen sind lt. Anlage erfüllt.
The requirements are fulfilled as per annex
Les conditions imposées sont satisfaites annexes**Ort, Datum:** Houston, TX 13-Nov-14
Location, Date
Lieu, Date**Anlagen:** 1) Ergebnis der Prüfungen, weitere Anlagen in 1)
Annexes Test results, other annexes in 1)
Annexes Résultats des essais, autres annexes au 1)**Der Sachverständige - Inspector - L'expert**

Stephen Norris

TUV Rheinland Group
Industrie ServiceAm Grauen Stein
51105 Köln8181 Broadmore SE
Caledonia, MI 49316Telefon: 616-891-3570
Telefax: 616-891-3565

PO 73970

CHECKED

03 January 2017

Disk

**TÜVRheinland®**

Precisely Right.

Ergebnis der Prüfungen
Test Results
Resultats Essais

Prüf-Nr. 441794-012
Inspection No Work order# : 441794
Certificat N°

Teil
Part
Partie

Blatt-Nr. 2
Sheet No
Page N°

Mechanische Prüfungen - Mechanical tests - Essais mecaniques

Prüfart - Test type - Type d'essai **Chemical & Bends Only**

Probenart - Specimen type - Type de l'éprouvette **Per Specification**

Probenzustand - state of delivery - **Per Specification**
traitement de l'éprouvette

Zugversuch N/A
Rohrstreifenprobe
lösungsgeglüht

Kerbschlagbiegeversuch N/A
Charpy - V
lösungsgeglüht

Probe-Nr. Test No. N° d'éprouv.	Probenabmessg. Dim. of specimen Dim. d'éprouvette		Probenentnahme Specimen Prélèvement			Prüftemp. Test temp. Temp. d'essai °C	Streck-/ Dehngrenze Yield point/ proof stress MPa	Zugfestig- keit Tensile strength Resistance à la traction MPa	Bruch- dehnung Elon- gation Allonge- ment A L ₀ = 5 %	Bruch- schnü- rung Red. of area Striction Z %
Schmelz-Nr. Heat No. N° Cölée	Ø Breite Width Largeur	Dicke Thick- ness Épais- seur	Ort Loca- tion Lieu	Rich- tung Direc- tion	Lage Posi- tion					
155360	Inch						R _{p02}	R _m	A L ₀ = 5 %	Z
1	2	3	4	5	6		MPa	MPa		

1 = Schlagarbeit - Energy of impact - Energie de rupture [J]
2 = Kerbschlagzähigkeit - impact strength - Resilience [J/cm²]
3 = Krist. Bruchanteil - Cryst. proportion - Partie cristalline [%]
4 = Breitung - Expansion - Elargissement [mm. 10⁻²]
5 = Breitung - Expansion - Elargissement [%]
6 = Härte (Einheiten) - Hardness - Dureté
7 = Roughness : Transverse (T), Longitudinal (L)
8 = Bend Test
9 = Corrosion Test
10 = Elevated Temperature
11 = Grain Size

Anforderungen
Requirements
Exigences

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
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Weitere Prüfungen:

Chemische Analyse - Chemical analyse - Analyse chimique:

Schmelz-Nr. Cast No - N° Coulée	C %	Mn %	Ni %	S %	Si %	Cr %	Fe %									
Requirements UNS N06600	.15max	1.0max	72min	.015max	.5max	14 - 17	6.0-10.0	--	--	--	--	--	--	--	--	--
155360	.02	.38	Balance	<.005	.31	16.28	9.10	--	--	--	--	--	--	--	--	--
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Note: Test carried out under the control of TUV Rheinland.

Prüfart, Houston, TX 13-Nov-2014
Datum:
Location, Date
Lieu, Date

TUV Rheinland Group
Industrie Service

Am Grauen Stein
51105 Köln

8181 Broadmore SE
Caledonia, MI 49316

Telefon: 616-891-3570
Telefax: 616-891-3565

PO 73970



MUELLER BRASS CO.

LOCATIONS:

2199 LAPEER AVENUE
PORT HURON, MICHIGAN 48060

302 ASHFIELD STREET
BELDING, MICHIGAN 48809

Control No: 908397

CERTIFIED TEST REPORT

Sold: 00061711

To: COPPER & BRASS SALES
ATTN ACCOUNTS PAYABLE
P O BOX #5116

SOUTHFIELD, MI 48086-5116

Ship: 00060085

To: COPPER & BRASS SALES
3001 ALOUETTE DR
GRAND PRAIRIE, TX 75052

Cust PO: 5400282584

Cust Part: CUHEX00116

Type/Size: ROD HEX 1.1250

Cust Spec: ASTM B16/16M-10

MBCo SO: 429809 Ln 30 Cert Lvl: 4

Part Nbr: 3600129 FC

Qty Shpd: 2,941 UM: Lbs

BOL: 144013 Shpd: 11/25/15

Mechanical Properties

Lot Number: L646171

Temp r: HR02 1/2 H SRA

CDA Alloy: C36000

Yield Strength (Ksi)

35

Tensile Strength (Ksi)

53

Elongation % in 2 Inches

32

Hardness Rb

59

HgNO3: PASS per ASTM B154-12

Chemical Analysis (%)

	Cu	Pb	Fe	Zn				
ASTM B16/16M-10	60.0-63.0	2.5-3.0	0.35 Max	REM				
Lct Number: L646171	61.2	2.7	0.16	REM.				

TOTAL OTHER ELEMENT MAX: .50

We hereby certify to the chemical and mechanical properties reported herewith and to the fact that they were determined in conformance with the specification noted above or any exceptions to this specification we have granted. We also hereby certify that the material furnished on this order is free from mercury contamination and that no mercury bearing equipment was used in the manufacture of these items.

Melted and Manufactured in USA

Conflict Minerals Compliant

Produced in Compliance with:

EN10204 3.1

EU Directives:

2011/65/EU (RoHS 2 Compliant)

2000/53/EC

By: *Stephanie Goodell* 11/25/15
Stephanie Goodell
Metallurgist

From: ThyssenKrupp Materials NA

Cust. PREMCO

Del.: 2404241219

CstAr

CstOr 55320

Wgt.: 2,892.800 LB

Date 12/03/2015

Tomas Sanchez

CHECKED

03 January 2017



MUELLER BRASS CO.

Control No: 742055

Inlet

LOCATIONS

2199 LAPEER AVENUE
PORT HURON, MICHIGAN 48060

302 ASHFIELD STREET
BELDING, MICHIGAN 48809

CERTIFIED TEST REPORT

Sold: C0051254

Ship: C0059225

To: COPPER & BRASS SALES

To: COPPER & BRASS SALES-

ATTENTION: ACCOUNTS PAYABLE

8001 THYSSENKRUPP PARKWAY

P.O. BOX 95116

NORTHWOOD, OH 43619

SOUTHFIELD, MI 48066-5116

Cust PO: 5400169853

MBCo SO: 360051 Ln 10 Cert Lvl: 4

Cust Part: CUR000992

Part Nbr: 3600516 PC

Type: R02 Size: RND 1.125

Qty Shpd: 2,467 UM: lbs

st Spec: ASTM B16/16M-10

BOL: 128923 Shpd: 01/29/13

Mechanical Properties

Mechanical Properties			
Lot Number: L634883		Temper: PC R02 TRQ SRA	CDA Alloy: C36000
Yield Strength (Ksi)	Tensile Strength (Ksi)	Elongation % in 2 Inches	Hardness RB
33	53	32	61

HgNO3: Pass

Chemical Analysis (%)

	Cu	Pb	Fe	Zn				
ASTM B16/16M-10	80.0-83.0	2.5-3.0	0.35 Max	REM				
Heat Number: L634883	61.0	2.8	0.16	REM				

TOTAL OTHER ELEMENT MAX: .50

This material was produced in compliance with EN10204, sec 3.1b "Country of
alt USA" IF 3600 ALLOY MATERIAL IS TRQ

We hereby certify to the chemical and mechanical properties reported herewith and to the fact that they were determined in conformance with the specifications noted above or any exceptions to this specification we have granted. We also hereby certify that the material furnished on this order is free from mercury contamination and that no mercury bearing equipment was used in the manufacture of these items.

Melted and Manufactured in USA

Conflict Minerals Compliant

Produced in Compliance with:
EN10204 3.1
EU Directives:
2002/95/EC (RoHS Compliant)
2006/53/EC

By: *Stephanie Goodell* 01/29/13

Stephanie Goodell
Metallurgist

CHECKED

03 January 2017

[Signature]

From: ThyssenKrupp Materials NA

Dist. PREMCO

Del.: 2403751801

Star

CstOr 54262

Wgt.: 176 LB

Date 03/18/2015

John L. Zambelli



MUELLER BRASS CO.

Control No: 917905

LOCATIONS:

2199 LAPEER AVENUE
PORT HURON, MICHIGAN 48060302 ASHFIELD STREET
BELDING, MICHIGAN 48809

CERTIFIED TEST REPORT

Sold: 00051264

Ship: 00059225

To: COPPER & BRASS SALES
ATTENTION: ACCOUNTS PAYABLE
P.O. BOX #5116
SOUTHFIELD, MI 48086-5116To: COPPER & BRASS SALES-
8001 THYSSENKRUPP PARKWAY
NORTHWOOD, OH 43619Cat PO: 5400290380
Cus Part: CURD00992
Typ/Size: ROD RND 1.1250
CusSpec: ASTM B16/16M-10MBCo SO: 433597 Ln 10 Cert Lvl: 4
Part Nbr: 3600516 FC
Qty Shpd: 4,805 UM: Lbs
BOL: 145038 Shpd: 02/02/16

Mechanical Properties

Lot Number: 1646872

Temp r: HR02 1/2 H SRA

CDA Alloy: C36030

Yld Strength (Ksi)	Tensile Strength (Ksi)	Elongation % in 2 Inches	Hardness Rb
38	59	26	66

HgVO3 PASS per ASTM B154-12

Chemical Analysis (%)

	Cu	Pb	Fe	Zn				
ASTM B16/16M-10	60.0-63.0	2.5-3.0	0.35 Max	REM				
Heat Number: 1646872	61.4	2.7	0.14	REM.				

TOTAL OTHER ELEMENT MAX: .50

We hereby certify to the chemical and mechanical properties reported herewith and to the fact that they were determined in conformance with the specification noted above or any exceptions to this specification we have granted. We also hereby certify that the material furnished on this order is free from mercury contamination and that no mercury bearing equipment was used in the manufacture of these items.

Milled and Manufactured in USA

Conflict Minerals Compliant

Processed in Compliance with:

ENJ 1004.3.1

EUJ Directives

2011/65/EU (RoHS 2 Compliant)

2000/60/EC

By:

James Tremp
Metallurgist

02/02/16

CHECKED

03 January 2017

From: ThyssenKrupp Materials NA

CSTL: PREMCO

Del.: 2404350033

CSTAR

CstOr 55490

Wgt.: 4,805 LB

Date 02/05/2016



DECLARATION OF CONFORMITY

EC Pressure Equipment Directive 2014/68/EU (PED)

BS&B Safety Systems, L.L.C. confirm that the products described below have been assessed by the Notified Body, Det Norske Veritas (DNV), under conformity assessment Module B of the PED for Category IV safety accessories.

Bursting Disk Type	Bursting Disk Holder Type	EC Type Examination Certificate Number
S-90, RLS, JRS, FRS, MRB	SRB-7RS, S90-7R, SRB-7FS	PED-B-16
GFN, AV, AVV	NF-7R, NF-7RS	PED-B-145
B, Scored B, BR, BRR, BV, BRV, BSV, BRSV D, DR, DRR, DV, DRV, DSV, DRSV, PLD, FRB, PLDV, STA-KUL Assembly, Welded Assembly, Solder Type Extruder Assembly	FA, FF, SA, SF, UA, LO-TO-FLO Type Holders	PED-B-147
GCR-S, GCR-SS, GCR-SM, GCR-SMS, GCR-SE, GCR-N, GCR-NS	GR-C, FM-C	PED-B-151
HiLo, RLO, RLB, HiLo-S, RLO-S, RLB-S	HL-7RS, HL-7R, HL-C	PED-B-126
BPRV (Buckling Pin Relief Valve)	-	1367-2012-CE-NOR-DNV
ITC	-	1298-2012-CE-NOR-DNV
ECR, ECV, ECT, V/ECR, V/ECV, V/ECT, ECR-S, ECV-S, ECT-S, V/ECR-S, V/ECV-S, V/ECT-S	EC-7RS, EC-7FS, VEC-7RS, VEC-7FS, ER-C, VER-C	1601-2012-CE-NOR-DNV
GFR-S, GFR-SM, GFR-SE, GFR-SS, GFR-SMS	GR-C, FM-C, FT-C	1595-2012-CE-NOR-DNV
RB-90, CSI	RB-7R, RB-7F, RB-7FF, RB- 7FS, CSR-7RS, CSR-7FS	1425-2012-CE-NOR-DNV
DKB, P/DKB, VKB, P/VKB AVB, P/AVB, AVB-ST, P/AVB-ST, AVB-S AV-ST	KB-7R, PKB-7R, KB-C, PKB-C VB-7R, VB-C FF-C	1426-2012-CE-NOR-DNV

Harmonized standard is EN 4126-2 for rupture disk.

BS&B Safety Systems, L.L.C. confirm that our Quality System has been assessed by DNV under conformity assessment Module D of the PED and has been certified as conforming to Directive under certificate number 51026-2009-CE-HOU-DNV Rev. 5.0.

Signed on behalf of BS&B Safety Systems, L.L.C.,

Quality Manager
BS&B Safety Systems, L.L.C.

CHECKED

03 January 2017



BS&B Safety Systems, LLC.

7455 East 46th Street

Tulsa, OK 74145

U.S.A.

Tel : 918-622-5950

Fax : 918-665-3904

Email: sales@tul.bsbsystems.com

Notified Body 0575

DNV-GL

Veritasveien 1

N-1332 Høvik

Norway

Rev 12, 6 September 2016



BURST TEST CERTIFICATE
& CERTIFICATE OF CONFORMANCE

BS&B SAFETY SYSTEMS, L.L.C.

DATE: 09/03/2015

CUSTOMER: BS&B DISTRIBUTION LTD.
CERTIFIED TO: BIMS INTERNATIONAL
C/O BS&B SAFETY SYSTEMS LTD.
RAHEEN BUSINESS PARK
LIMERICK, Co LIMERICK
IRELAND -

P.O. NUMBER: REPLENISHMENT
BS & B LOT: 15600248-1
SIZE: 0.500"
TYPE: S/K SPL FRB

QTY. OF UNITS SHIPPED: 300

QTY. OF UNITS TESTED: 9

DISK MATERIAL: 360-BRS/360-BRS/INC/300/TEF
HEAT NOs: 520473

We Certify that the Item described in this test certificate have been manufactured, inspected and tested in accordance with the standards applicable to our industry. The Original test data is on file and is available for your examination. CE Marked in accordance with the EU Pressure Equipment Directive.

BURST TEST RESULTS

NUMERICAL VALUE

23.9, 23.4, 24.3, 23.9, 24.0, 24.1, 24.2,
23.8, 23.9

PRESSURE UNIT

barg

@TEMPERATURE

22 °C

RATED RUPTURE

NUMERICAL VALUE

24 +/-7%

PRESSURE UNIT

barg

@TEMPERATURE

20 °C

OTHER DETAILS:-

Tab Marking: 19303610

CHECKED

03 January 2017

QC Inspector: L.SOOK

Attachments: MILL TEST REPORT
DECLARATION OF CONFORMITY

EN ISO 4126-2, YR2015 0575

S/K SPL FRB IS IDENTICAL IN DESIGN TO THE S/K A-6 FRB WITH THREADS BEING 1/2" BSPT INSTEAD OF 1/2" NPT.

15600248-1

BS&B Safety Systems, LLC

QA/QC DEPARTMENT



PRECISION ROLLED STRIP® PRODUCTS
8570 MERCURY LANE
PICO RIVERA, CA 90660
Tel: 800-285-3321 Fax: 562-654-3924

CERTIFICATE OF CONFORMANCE

CERT NO
31749

CUST. ORD. NO. 162989 CERT DATE 11/25/2013 CUST. CODE 9809 SALES ORDER NO. 32369-001 BILL OF LADING 42486-001 DATE SHIPPED 11/25/2013 SHIPPING LOCATION PICO RIVERA, CA CUST PART NO. 01-066-196-00

SOLD TO
BS & B SAFETY SYSTEMS LLC
ATTN ACCOUNTS PAYABLE
PO BOX 470590
TULSA, OK 74147-0590

SHIP TO
BS & B SAFETY SYSTEMS, L.L.C.
7455 E. 46TH STREET
TULSA, OKLAHOMA 74145

POES WIDTH GAUGE LENGTH WEIGHT SUPPLIER HEAT # MILL COIL # MASTER TAG # SHIP TAG #
2 1.2500 IN 0.0080 IN COIL 50LB AL 520473-01202535 05083N2368B AL11253 294186

TYPE HEAT/TEST --C-- --Mn-- --P-- --S-- --Ni-- --Al-- --Cu-- --Ch-- --Ta-- --Ti--
520473-01202535 0.0500 0.2100 0.0090 0.0002 0.1900 73.8400 0.2200 0.0500 0.0010 0.0100 0.2000

--Co--
0.0500 9.2300

MASTER YIELD TRAN TENSILE % ELONG VICKR BEND TRANS <PASS> MACROETCH <PASS> PROFIL-RA T MICRO-IN <6/6>
TAG# PSI 0.2% IN 2" HV0.5 162
AL11253 40100 93200

AL 600 4F (1BA) FINISH 0080 Nom X 1.2500"
(ASTM-B-168-11) (AMS 5540N)

THIS CERTIFICATE OF CONFORMANCE SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN APPROVAL OF THE COMPANY. THE RECORDING OF FALSE FICTITIOUS OR FRAUDULENT STATEMENTS OR ENTRIES ON THE CERTIFICATE MAY BE PUNISHED AS A FELONY UNDER FEDERAL LAW. MATERIAL WAS MANUFACTURED IN ACCORDANCE WITH THE ATI & ALC QUALITY MANUALS. THE ALC MFG PLANTS HOLD MANY QUALITY CERTIFICATIONS THAT INCLUDE ISO-9001, AD-MERK BLATT WO/TRD100, AND PRESSURE EQUIPMENT DIRECTIVE PED 97/23/EC. EN 10204 2005 - 3.1 (REFER TO WWW.ALLEGHENYLUDLUM.COM TO ACCESS THE CURRENT ALC QUALITY CERTIFICATIONS).

11/25/2013 4:04:44 PM EST

CONSUMER WARNING: This engagement and turning over to the consumer is a condition of sale. The consumer is responsible for loss or damage to the product. For your protection please examine shipment as it arrives. If any shortage or damage is discovered, have a full description made by transportation agent on waybill before signing.

Material Safety Data Sheets for this product have been supplied to your Purchasing Department. For an additional copy, please call 724-226-5340. CAUTION: Processing that in acid fumes, dust, or solutions may cause lung disease. See Material Safety Data Sheets for further information.

WARNING
Les fiches d'information-sécurité de ce produit ont été fournies à votre département chargé des achats. Pour obtenir des exemplaires supplémentaires, veuillez téléphoner au numéro ci-dessus 724-226-5340. Attention: les traitements entraînant la production de vapeurs, poussières, ou solutions résiduaires, risquent d'entraîner des maladies pulmonaires. Pour plus de renseignements, se référer aux fiches d'information-sécurité.

The above is a true copy of data on file. The material and test results conform to the sales contract and specifications as set forth in Allegheny Ludlum's Data Book.

Stephen Wright
Director, Corporate Quality Assurance

CHECKED

03 January 2017



DECLARATION OF CONFORMITY **EC Pressure Equipment Directive 97/23/EC (PED)**

BS&B Safety Systems, LLC. confirm that the products described below have been assessed by the Notified Body, Det Norske Veritas (DNV), under conformity assessment Module B of the PED and have been certified as conforming to the Directive 97/23/EC for Category IV safety accessories.

Bursting Disk Type	Bursting Disk Holder Type	EC Type Examination Certificate Number
S-90, RLS, JRS, FRS	SRB-7RS, S90-7R, SRB-7FS	PED-B-16
GFN, AV, AVV	NF-7R, NF-7RS	PED-B-145
B, Scored B, BR, BRR, BV, BRV, BSV, BRSV D, DR, DRR, DV, DRV, DSV, DRSV, PLD, FRB, PLDV, STA-KUL Assembly, Welded Assembly, Solder Type Extruder Assembly	FA, FF, SA, SF, UA, LO-TO-FLO Type Holders	PED-B-147
GCR-S, GCR-SS, GCR-SM, GCR-SMS, GCR-SE, GCR-N, GCR-NS	GR-C, FM-C	PED-B-151
BPRV (Buckling Pin Relief Valve)	-	1367-2012-CE-NOR-DNV
ECR, ECV, ECT, V/ECR, V/ECV, V/ECT, ECR-S, ECV-S, ECT-S, V/ECR-S, V/ECV-S, V/ECT-S	EC-7RS, EC-7FS, VEC-7RS, VEC-7FS, ER-C, VER-C	1601-2012-CE-NOR-DNV
GFR-S, GFR-SM, GFR-SE, GFR-SS, GFR-SMS	GR-C, FM-C, FT-C	1595-2012-CE-NOR-DNV
RB-90, CSI	RB-7R, RB-7F, RB-7FF, RB- 7FS, CSR-7RS, CSR-7FS	1425-2012-CE-NOR-DNV
DKB, P/DKB, VKB, P/VKB AVB, P/AVB, AVB-ST, P/AVB-ST, AVB-S AV-ST	KB-7R, PKB-7R, KB-C, PKB-C VB-7R, VB-C FF-C	1426-2012-CE-NOR-DNV

No harmonised standards available at this time.

BS&B Safety Systems, LLC. confirm that our Quality System has been assessed by DNV under conformity assessment Module D of the PED and has been certified as conforming to Directive 97/23/EC under certificate number 51026-2009-CE-USA-DNV Rev. 3.0.

Signed on behalf of BS&B Safety Systems, LLC.,

Quality Manager
BS&B Safety Systems, LLC.

CHECKED

03 January 2017



BS&B Safety Systems, LLC.

7455 East 46th Street
Tulsa, OK 74145
U.S.A.
Tel : 918-622-5950
Fax : 918-665-3904
Email: sales@tul.bsbsystems.com

Notified Body 0575

Det Norske Veritas

Veritasveien 1
N-1332 Hovik
Norway

Rev 10, 5 June 2015



NO. DE
SOC.:
217

IUSA, S.A. DE C.V. COBRE Y ALEACIONES

CERTIFICATE OF ANALYSIS

CUSTOMER: INSUMOS INDUSTRIALES DE COBRE Y LATON
SIZE: 1-1/8" HEX. CR
ALLOY: CDA-36000
TEMPER: HALF HARD
QUANTITY: 637 KGS.

DATE: 25-feb-14

BATCH #: 50384-50380

ASTM STANDARDS: ASTM-B-16/B-249
LOT: 40201
MACHINE: OCN-4
QUOTATION: 200099961
R-3: 805893668

TEST	SPECIFICATION	MÁX.	AVG.	MÍN.	STD. DEV.	DATA
CHEMICAL	% Cu 60.00-63.00	61.13	60.87	60.60	0.37	2
	% Pb 2.50-3.70	2.51	2.51	2.51	0.00	2
	% Fe 0.35 MAX.	0.13	0.13	0.12	0.01	2
	% Zn REMAINDER	REMAINDER	REMAINDER	REMAINDER	REMAINDER	2
DIMENSIONS	(DISTANCE BETWEEN P.S.) (in) 1.125" +/- 0.005"	1.1290	1.1285	1.1280	0.001	4
	LENGTH (3.66 Mts) + 1.000"	3.660	3.660	3.660	0.00	4
MECHANICAL	T.S. (Ksi) 45 MIN.	57.970	57.047	56.123	1.306	4
	Y.S (Ksi) 17 MIN.	43.159	42.125	41.091	1.462	4
	% El (2in) 15 % MIN.	20	20	19	0.707	4
	HR-B 45-80 MAX.	71	67	64	3.32	4

REMARKS:

This material was produced in compliance with EN10204 sec 3.1b
Hereby we certify that our products are free of Mercury and have been
produced in a Mercury free environment.

I 0217 P322 I012 - F036

QUALITY ASSURANCE

CHECKED

03 January 2017



NO. DE
SOC.
217

IUSA, S.A. DE C.V. COBRE Y ALEACIONES

CERTIFICATE OF ANALYSIS

CUSTOMER: INSUMOS INDUSTRIALES DE COBRE Y LATON DATE: 16-Oct-14
SIZE: 1-1/8" RED BATCH: 51490
ALLOY: CDA-36000 ASTM STANDARDS: ASTM B-16, B-249
TEMPER: HALF HARD LOT: 40861
QUANTITY: 872 KGS. MACHINE: QCNA
QUOTATION: 300096754
DELIVERY R-3: 805780046

TEST	SPECIFICATION	MAX.	AVG.	MIN.	STD. DEV.	DATA
CHEMICAL	% Cu 60.00 - 63.00	61.90	61.45	61.00	0.00	2
	% Pb 2.50 - 3.70	3.20	3.10	3.00	0.00	2
	% Fe 0.35 MAX.	0.24	0.23	0.22	0.00	2
	% Zn REMAINDER	REMAINDER	REMAINDER	REMAINDER	REMAINDER	2
DIMENSIONS	(DISTANCE BETWEEN P.S.) (in) 1.125" +/- 0.0025"	1.1250	1.1248	1.1245	0.000	4
	LENGTH (144in) + 1.000"	144.212	144.212	144.212	0.00	4
MECHANICAL	T.S. (Ksi) 50 MIN.	53.713	52.365	51.016	1.907	4
	Y.S (Ksi) 20 MIN.	42.823	42.223	41.622	0.849	4
	% El (2in) 15 % MIN.	21	21	20	0.707	4
	HR-B 55-75 MAX.	68	65	64	1.71	4

REMARKS:

This material was produced in compliance with EN10204 sec 3.1b
Hereby we certify that our products are free of Mercury and have been
produced in a Mercury free environment.

I 0217 P322 I012 - F036

QUALITY ASSURANCE

CHECKED

03 January 2017