Alcoa Fastening Systems
ALCOA
Aerospace Products
Hildesheim Operations

aerospace sector certification scheme

Nadcap PRI PERFORMANCE REVIEW INSTITUTE - Accredited -

Steven 3
D-31135 Hildesheim
Tel.: 49 5121 7624 0
Fax: 49 5121 7624 54

EN 9100:2003, AS9100 Rev.B
BS EN ISO 9001:2000 Certificate NoFM500730

LIEFERSCHEIN A0177962

BE Aerospace Consumables
Nordportbogen 6
22848 Norderstedt, D
Deutschland

Rechnungsanschrift:
B/E Aerospace, Inc.
Consumables Management
10000 NW 15th Terrace
Miami, FL, USA 33172
USA

Datum: 31.Okt.2013
Seite: 1

Ihre EB-Nr: 0NFB16
Bemerkung: UPS Account 69A081
Versandart: unfrei UPS Acc. 69A081
Zahl.-Bed.:
Lieferbed.: Ab Werk
Spediteur:
SLB-Nr:
Vers. an: 00010556 **Abladeort:**

Bei Korrespondenz und Rückfragen bitte immer mit angeben

LS-Nr.: **A0177962**

Kundennr.: 20211121
Auftrags-Nr.: VS64018
Auftrags-Dat.: 15/03/13
USt.-ID: DE276905993

Pos	Artikelnummer	Charge/Serie	Menge	ME	Liefertermin	Nettogewicht
14	HL112VF8-12 HI-LOK DAN7-8-12X	HS342, THREADS PER HS387 16647885	930 930	St		0,000 kg
					Summe Netto:	0,000 kg

Abmessungen Länge	Breite	Höhe	Paket Nummer	Bruttogewicht
28,00	20,00	20,00	7825	04,90
1Z6758276854601618/UPS				

CERTIFICATION OF CONFORMANCE AND AFFIDAVIT

Seller hereby certifies that the raw materials used in the performance of this contract meet the chemical and physical requirements of applicable material and/or procurement specifications.

Seller further certifies that metallurgical examinations and physical tests of finished product, when required by contract, are reported. Metallurgical and physical test reports are on file and available for examination by customer.

For actual individual physical and chemical test results, identifiable by part number, inspection lot number and material supplier's heat number for the inspection lot from which shipment was made, refer to seller's certified test report, if applicable.

Seller further certifies that dimensional, fluorescent penetrant or magnetic particle inspections have been performed as required by applicable drawings and/or specification requirements. Records of such inspections are available upon request.

The Quality Management System arrangements in respect of these supplies comply with the requirements of BAE SYSTEMS, Approval No. RALOA/00186/3 and BAE/AG/30117/MAA and Airbus SAS, Approval No. 90972 and Saab AB ISO 9002, Approval No. 2001-G.113. Fairchild Fasteners Europe - VSD GmbH holds ISO 9001:2008; EN 9100:2009 Certification and PRI/NADCAP SAE AS 7003 for Materials Testing, Approval No. 117033.

Fairchild Fasteners Europe - VSD GmbH
Quality Assurance

Sämtliche Verkäufe und Lieferungen erfolgen ausschließlich nach Maßgabe der Allgemeinen Verkaufs- und Lieferbedingungen der Fairchild Fasteners Europe - VSD GmbH

Alcoa Fastening Systems
ALCOA

Aerospace Products
Hildesheim Operations

Steven 3
D-31135 Hildesheim
Tel.: 49 5121 7624 0
Fax: 49 5121 7624 54

Attention: The copying of extracts of this certificate is inadmissible!
Falsified, fictitious or fraudulent statements or entries may be punished as a felony under United States federal law.

Laboratory Test Report No.: B201315172 LOT NO.: 16647885

The parts contained in this shipment meet the requirements of the applicable drawings and specifications.

Inspection records are on file and are available on request of the procuring agency.

Negatives of metallurgical mounts are retained 10 years for review.

Reviewed by i.A. Jaeckle Date 30.10.2013
Setup Date 30.10.2013

Customer:	**BE Aerospace Consumables**	Material:	**TI6AL-4V SMART COIL**
P.O.NO.:	**0NFB16**	Mat'l Spec.:	**AMS4928S/AMS4967K/ VSM1365L**
Part Number:	**HL112VF8-12 Rev.24 28.05.1992 DAN7-8-12X**	Prod. Spec.:	**HS342, Rev. 01.07.03 AG;**
Quantity:	**930**	NDT:	**ASTM E 1417/E1417M, Rev.11**
Lot Quantity:	**3960**	Threads:	**AS8879, Rev. 01.08.04 D**
		Heat. No.:	**PVD2231**
Request for Deviation No.:		HeatTreatment Spec.:	**AMS2801**
Remarks:	**VS64018**	Raw Material Lot. No.:	**R780667**

Surface:

Cetyl alcohol HS305

Surface coating per HS306,Type I, colour blue

Alcoa Fastening Systems
ALCOA
Aerospace Products
Hildesheim Operations

Steven 3
D-31135 Hildesheim
Tel.: 49 5121 7624 0
Fax: 49 5121 7624 54

Attention: The copying of extracts of this certificate is inadmissible!
Falsified, fictitious or fraudulent statements or entries may be punished as a felony under Unites States federal law.

Laboratory Test Report No.: B201315172 LOT NO.: 16647885

Micro Examination

Sample Size	5
Material Type	TI6AL-4V SMART COIL
Surface Contamination	conform
Grain Size	NA
Macro Structure	conform
Micro Structure	conform
Magnification	100x
Etching Solution:	5% HF, 95% H2O dest.
Discontinuities	conform
Broach Cracks	none
IGC	none

Plate Thickness conform per Spec.
see surface page 1

Torque

Req. Value NA
Sample Size
Analyses

Hardness ()

Req. Value NA
Sample Size
Analyses
Max.
Min.
∅ =
σ_{n-1} =
Remark:

Hydrogen (ASTM E 1447, Rev. 05)
Max. per Spec.: 125 ppm
Actual: 34 ppm

Fatigue

High=8674N,Low=867N

Req. Cycles
15000,30000,60000

60025 cycl. NF
60019 cycl. NF
60027 cycl. NF
60027 cycl. NF
60030 cycl. NF
Ø: 60025,6 cycl.
d: 4,099

Specification:
NASM1312-11, Rev.
01.08.97 New

Machine / Model: 1427

Visa:
829

Remark:
Mean Stress: 4,77 KN
Frequenz: 82 Hz
Temp.: 20,2 °C

Tensile

Req. Value
25889 N

N/DIA/N/mm²/Loc.
1100MPa

32051 N Thread
32051 N Head
31186 N Head
31173 N Head
31221 N Head
Ø: 31536,4 N
d: 470,091

Specification:
NASM1312-8, Rev.
01.04.01 1

Machine / Model: 1292

Visa:
F.Topp

Remark:

Shear

Req. Value
46662 N

N/DIA/N/mm²
655MPa

49128 N
49336 N
49817 N
49661 N
49128 N
Ø: 49414 N
d: 313,486

Specification:
NASM1312-13, Rev.
01.02.03 1

Machine / Model: 1292

Visa:
F.Topp

Remark:

Stress Durability: / NA /

Salt Spray Testing: (NA /) Sample Size: