Alcoa Fastening Systems

Aerospace Products
Carson Operations

900 Watson Center Road
Carson, CA 90745 USA
Tel: 1 310-830-3200
Fax: 1 310-830-1436

PACKING SLIP: 1686917

SALES ORDER NO.	RVSN	DATE SHIPPED	PAGE
72430	0	01/19/09	1

CUSTOMER ORDER NO.: OEM958

BILL OF LADING NO.:

DATE ORDERED: 01/25/08

SHIP VIA	F.O.B.	PPD.
<150FEDX>WATK	1	

S.A.				
C097				

TERMS: PER AGREEMENT

BILL TO
M & M AEROSPACE, INC.
P.O. BOX 025263

MIAMI, FLORIDA 33102

SHIP TO
M & M AEROSPACE HARDWARE INC.

10000 NW 15TH TERRACE
MIAMI, FL 33172

BILL TO CUSTOMER ▶ 999512

SHIP TO CUSTOMER ▶ 999512

PACKING LIST - ORIGINAL P.O. #: 1686917

PLANT CODE: CAR

ITEM	PRODUCT NUMBER	DESCRIPTION	WORK ORDER #/QUANTITY	CURR. QTY THIS ORD	QTY SHIPPED	NO. OF PACKAGES	SHIPPING WEIGHT
2	HL12VF6-7	M4-LOK TI ORIGINAL DATE: 01/29/09 ** REQUESTED DATE: 01/19/09 ** CUST. PART: HL12VF6-7 SCHEDULE B NO: 8108.90.8000 ECCN: 9A991 COUNTRY OF ORIGIN: UNITED STATES THE EXPORT CLASSIFICATION APPEARS ABOVE. YOU ARE RESPONSIBLE FOR ALL RELATED EXPORT LICENSE REQUIREMENTS. SALES ORDER SPECIAL INSTRUCTIONS: CHEMICAL AND PHYSICAL TEST REPORT REQUIRED WITH SHIPMENT DFAR 252.225-7014 ALT I APPLIES. CUSTOMER PART NUMBER MUST APPEAR ON ALL LABELS PREFERENCE FOR DOMESTIC CUSTOMER WILL ACCEPT -10% SHIPPING VARIANCE SPECIALITY METALS. WRITTEN ALL ITEMS ON THIS PURCHASE ORDER MUST BE NEW AND TO THE LATEST REVISION EVIDENCE OF COMPLIANCE IF UNDER 150 LBS - FED EX GROUND ACCT #0331-0149-0	226990 / 23599	23599 EA	23599 EA	4	106

TEST REPORTS INSPECTION APPROVED Huck International Inc. JAN 12 2009 By QE 01/12/09 FOR SHIPMENT ATTACHED

CARSON MFG. SERVICES

"ALL MATERIAL RETURNED TO ALCOA FASTENING SYSTEMS WITHOUT AN CRM # WILL BE REFUSED AND SENT BACK AT YOUR COST. PLEASE CALL CUSTOMER SERVICE FOR AN AUTHORIZATION NUMBER"

CERTIFICATION We hereby certify that the parts furnished comply with the applicable drawings and/or specifications.
Test reports and material certifications are on file subject to examination.

SU3102-3 5/95

Scott McComas, Manager, Quality Assurance

Huck International, Inc.

ALCOA
CARSON DIVISION

CERTIFIED TEST REPORT

CTR # 2008-106554-18

Alcoa Fastening Systems
Aerospace Products
Huck International, Inc.
900 Watsoncenter Road
Carson, CA 90745
(310) 830-8200
FAX: (310) 830-1436

The parts contained in this shipment have been manufactured and inspected in accordance with TSO-C148. The conditions and tests required for TSO approval of this article are minimum performance standards. Aircraft fasteners approved under this TSO are not necessarily interchangeable with other aircraft fasteners approved under this TSO. Fasteners of similar dimensional properties may have widely varying performance and metallurgical properties. Substitution of parts may only be done if acceptable to or approved by the Administrator.

CUSTOMER M & M AEROSPACE HARDWARE INC. 10000 NW 15TH TERRACE MIAMI FL 33172			MFG DATE 10/24/2008	SHIP DATE 01/12/2009
			P.O. NUMBER OEH958	S.O. NUMBER 72430
PART NUMBER HL12VF6-7	DRAWING (REV.) HL12(37)	PROCUREMENT SPEC. HS342(AG)	SHIPPER NO. 1686917	QUAN. THIS SHIPMENT 23,599
			W.O. (LOT NUMBER) 226990	ORIG. TOTAL QUAN. 25,000

MECHANICAL TEST RESULTS

DBL SHEAR STRENGTH
W-0512

#	POUNDS
1	5,839
2	5,726
3	5,785
4	5,766
5	5,768
6	5,811
7	5,825
8	5,742
9	5,779
10	5,753

Min. Req.: 5,380
Max. Req.:
$\bar{x}$ -KaS1≥ M:
Ka
Kt
Avg 5,779
Std Dev 36
CoVar% 1

ULT. TENSILE STRENGTH
W-0513

#	POUNDS	Fail Mode
1	3,641	THREADS
2	3,691	THREADS
3	3,677	THREADS
4	3,577	THREADS
5	3,537	THREADS
6	3,651	THREADS
7	3,649	THREADS
8	3,598	THREADS
9	3,676	THREADS
10	3,664	THREADS

Min. Req.: 3,180
Max. Req.:
$\bar{x}$ -KaS1≥ M:
Ka:
Kt:
Avg: 3,636
Std Dev: 50
Co Var%: 1

FATIGUE LIFE
W-0517

#	CYCLES	Fail Mode
1	60,000	NO FRACTURE
2	60,000	NO FRACTURE
3	60,000	NO FRACTURE
4	60,000	NO FRACTURE
5	60,000	NO FRACTURE
6	60,000	NO FRACTURE
7	60,000	NO FRACTURE
8	60,000	NO FRACTURE
9	60,000	NO FRACTURE
10	60,000	NO FRACTURE

Ave. Life: 60,000
Min Cycles: 15,000
Ave. Cycles: 30,000
High Load: 1,050
Low Load: 105
Avg 60,000
StdDev 0
CoVar% 0

METALLURGICAL TEST RESULTS W-0507

SAMPLE SIZE * GRAIN FLOW	W-0507 * HYDROGEN PPM	W-0510 * DISCONTINUITIES	W-0507 * ALLOY SEGREGATION	W-0507 *
10 Pass	85.1	.0017 crest laps- Pass	Pass (.000)	
ALPHA/SURFACE CONTAM W-0507 * GRIND BURNS	W-0507 * MICROSTRUCTURE	W-0507 *		
Pass (.002 O.D. & top of head) Pass (.000)	Pass			

CHEMICAL COMPOSITION OF MATERIAL BASED ON MILL REPORTS

COMPONENT/ W.O. LOT	HEAT/ALLOY	PRODUCER/ MATERIAL SPECS	PERCENT BY WEIGHT, OR ppm WHEN NOTED								
			Al	V	C	Fe	H	O	N	Y	Ti
	035687 6AL-4V Ti	DYNAMET INC. AMS 4967	6.32	3.94	.016	.18	.0028	.15	.008	.005	Bal.
8621606											

Country of Origin: United States

OTHER TEST DATA AND COMMENTS * **QA Lab #:** G42840

Anodize color blue per HS#306 Type. I (E/M Coating)
Fluorescent Penetrant Inspected per ASTM E 1417. (Acceptable)
Cetyl Alcohol per/MIL-L-87132 TY.I Grade B/ BPS171/ A/DET0013/ HS#305 (E/M Coating)
Heat Treat per AMS-H-81200, except for soak times and Inert atmospheres, which are in accordance with AMS 2801.
Rolled Threads Acceptable per AS8879 (MIL-S-8879) & Spec HS387
Alloy Verification has been Performed.
Raw material melt source complies with DFARS 252.225-7014 Alt 1

The fasteners in this lot were manufactured and processed together in one continuous run. Part examination, mechanical and metallurgical tests were conducted in accordance with applicable drawing and specifications. Objective evidence of compliance is on file and available for customer review. The test report shall not be reproduced except in full, without the written approval of the laboratory. The recording of false, fictitious, or fraudulent statements or entries on the certificate may be punished as a felony under federal law.

By Aida M Ejercito — Authorized QA Representative — 11/17/2008 Date

By Junior Partosa — Authorized Shipping Representative — 01/12/2009 Date

Revision Date: 01/12/2009

P.O. Box 025263, Miami, FL 33102-5263 • Tel: 305.925.2600 • Fax: 305.507.7191
Plant Location: 10000 N.W. 15th Terrace, Miami, FL 33172 • SITA: MIAMMCR
www.KLXaerospace.com

Shipped From: 10000 NW 15 TERRACE, MIAMI, FL 33172

Material Certification

The items set forth on the purchase order referred to below have been visually inspected and the dimensions thereof have been measured by us, and based on the aforesaid, as well as the representation made to us by the manufacturers of the items subject of such purchase order, we hereby certify that such items are in conformity with all current governmental and manufacturer's requirements, specifications, drawings, and conform to the purchase order requirements. Said items are in new condition and have not been obtained from any U.S. Government or Military source and are traceable to KLX Aerospace Solutions.

FIRM: AJ WALTER AVIATION LTD

PURCHASE ORDER#: CP16942

QUANTITY	U/M	PART-NUMBER	CUST REF#	LOT-NUMBER	Eff Date	EXP DATE
100	EA	HL12VF6-7	HL12VF6-7	226990		

01/19/17

Jason Lewis
Senior Director, Global Quality

Inv # 01/19/17