

### Pack Slip

Date Page # Pack Slip # 9/27/2016 10688851 Ship To# Sales Order # 617872 10802652 SO

Customer PO#

CPE5571

Wesco Aircraft Hardware Corp. 27727 Avenue Scott; Valencia, CA 91355

PH: 661 / 775-7200 FAX: /

Quantities Item # Backorder U/M Shipped

Part Number / Description

Certifications

**Promise Date** 

US Harmonized Schedule Number: 8108.90.30.60 TITANIUM HILOK BOLT

210

EN6114K4X5

Cert-Mfr's C of C

9/23/2016

PIN, 100CSK, 1STOS, HK1/CT/WHT TI

Manufacturer's Lot #:

Manufacturer Name

Lot Qty

31686808 U832889

Air Industries

210 

Export Classification.

**EAR 99** 

Country Of Origin: US

US Harmonized Schedule Number: 8108.90.30.60 TITANIUM HILOK BOLT

635

EN6114K4X6

Cert-Mfr's C of C

9/23/2016

PIN,100CSK,1STOS,HK1/CT/WHT TI

Lot #

Manufacturer's Lot #:

Manufacturer Name

Lot Qty

31680812 U833148

Air Industries

635



Export Classification.

**EAR 99** 

**EAR 99** 

Country Of Origin: US

US Harmonized Schedule Number: 8108.90.30.60 TITANIUM HILOK BOLT

354

EA

EN6114K4X8

Cert-Mfr's C of C

9/23/2016

PIN,100CSK,1STOS,HK1/CT/WHT TI

Lot #

Manufacturer's Lot #:

Manufacturer Name

Lot Qty

31687885 U832890

Air Industries

354

Export Classification.

Country Of Origin: US

US Harmonized Schedule Number: 8108.90.30.60 TITANIUM HILOK BOLT

158

EN6114K4X9 EΑ

Cert-Mfr's C of C

9/23/2016

PIN,100CSK,1STOS,HK1/CT/WHT TI

Manufacturer's Lot #:

Manufacturer Name

Lot Qty

CERTIFIED TRUE COPY

EASYJET STORES DEPT. UK 145.01209



### Pack Slip

Wesco Aircraft Hardware Corp. 27727 Avenue Scott; Valencia, CA

PH: 661 / 775-7200 FAX: /

**Ouantities** Part Number / Description Shipped Backorder U/M

Pack Slip # Date Page # 9/27/2016 10688851 Sales Order # Ship To# 10802652 617872

**Customer PO#** 

CPE5571

Certifications **Promise Date** 

10

30538811 A000035130-0000

SPS Technologies Ltd

Export Classification.

EAR ECCN 9A991d

Country Of Origin: GB

US Harmonized Schedule Number: 8108.90.30.60 TITANIUM HILOK BOLT

21

Item #

630

EA

NSA5353-04A

Cert-Mfr's C of C

9/23/2016

METRIC TAPERLOK WASHER, CAD STL

Manufacturer's Lot #:

Manufacturer Name

Lot Qty

31372644 Y8822

Anillo

630

Export Classification. EAR ECCN 9A991d

Country Of Origin: US

US Harmonized Schedule Number: 7318.22.0000 WASHER STEEL

Comments:

\*\*\*\*\*Orders must be INVOICED PRIOR TO SHIPMENT\*\*\*\*\*

US FUNDS

Released in accordance with AS9120/ISO 9001:2008

requirements

FREIGHT ACCOUNT NUMBER: 124277507

### **Export Statement**

These commodities, technology or software were exported from the United States in accordance with the Export Administration Regulations. Diversion contrary to U.S. law is prohibited.

## CERTIFIED TRUE COPY

EASYJET STORES DEPT. UK 145.01209

### Certificate of Conformance:

Total Weight

**Total # Boxes** 

Wesco Aircraft certifies that all products are of new manufacture. Documentation from the manufacturer certifies that the product meets all applicable Government, Customer and/or Manufacture specifications and requirements. Wesco certifies that the whole of the supplies detailed hereon have been received under cover of the Release Certificate quoted above and are in the same conditions. when received. This documentation is maintained on file permanently and available upon request.

Benito Carlos Dominguez

We hereby certify that no returns will be accepted without WESCO Returned Material Authorization number. Only lot traceable material will be accepted for return.

Wesco's standard terms and conditions can be found at https://www.wescoair.com/eng/company/Downloads/Wesco\_Aircraft\_Terms\_and\_Conditions\_of\_Sale.pdf and, except as explicitly agree Wesco and the buyer in a writing signed by both parties, shall be applicable to, and deemed incorporated into this order. These terms and conditions shall govern the order notwithstanding any to and conditions that were included in the order by the buyer. Acceptance of the order shall be deemed an acceptance of these terms and conditions and, except as expressly agreed by Wesco and buyer in a writing signed by both parties, these terms and conditions shall supersede, nullify and void any other terms, conditions, representations, understandings, in oral or written form.

	Wesco Air	rcraft Hardwa	re Corp	•	Date - Time -	2/9/2015   Recei	ipt Date - 2/9/2015
			chase Recei		Page -	1	
Supplier -	593488			Receiver - 3377776-000			
g . 10				u			
Customer PO Ship From	Air Industries (AIC/WESCO 12570 Knott St		Ship To	Wesco Aircraft Hardware Corp. 27727 Avenue Scott		Not Rated	
	Garden Grove CA 92841			Valencia CA 91355			
Order Date	8/22/2014 Reference A	IC / WESCO PIN CAPACIT	Y OR SOONER	₹			
Requested	8/22/2014 Buyer Number	8079 PO Number	1626000		RUS	H/CONTRACT BAC	KORDER
WQR1-17,WQR **ANY OVER S WQR36,		R54-55 APPLY, (WQR41, V PROVED BY WESCO PRIC	VQR43, & WQR	45 IF APPLICABLE).			
Export Classi	fication: NC			Secondary Export Classific	cation:	PL9009A2A	
Requested	Manufacture		lanufacturer				
Manuf. # 105682 Air	Name Industries	0672	Cage Code				
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Wesco	Custo		Description		Cert Ordered	U Line
	Part #	Part	t#			Rqstd	<u>M</u>
EN6114K4X	8 <b>411 141 1414 14 14 14 14 14 1</b>	EN6114K4X8		PIN,100CSK,1STOS,HK1/CT/W	<b>УНТ</b> ТІ	240 15000	EA 1.000
Wesco Part #				(MAC)		Line #	
BRANCH QUAN	TITIES:			*3 <sub>2</sub>			
Branch/Plant:	2010 Valencia - Ma	ain	QOH:			ABC Ca	tegory; D
		Quant	tity Available	696-	U <b>NT!</b>	ABC Ca	9/15 / CANU
			Receipt Detai	ls			
Quantity	y UOM	Lot Number		Location		AIMS	Line Number
1352	5 EA 31137781 T	310992			-		
(	Ordered Cer	t		Rev Comments		Additions	ıl
EN6114K4X8	rt Number Rqst 240	Mfr's CofC, Test/Raw/Pro	ocess	Lvl		Comment	<u>s</u>
Total Quantity	this Receipt	13525					

Cert Level:

PMA \_\_\_

TSO [

Lube:

Certifications:

Certed To:

Certed To:

Rev Level:

### Wesco Aircraft Hardware Corp.

### **Purchase Receiver Print**

2/9/2015 13:31:27

| Receipt Date - 2/9/2015

Page -

Supplier -

593488

Receiver

3377776-000

Customer PO Ship From

Air Industries (AIC/WESCO PIN CAPACITY)

12570 Knott St

Garden Grove CA 92841

Ship To

Wesco Aircraft Hardware Corp.

27727 Avenue Scott

Valencia CA 91355

Not Rated

Order Date Requested

8/22/2014 Buyer Number

8/22/2014 Reference AIC / WESCO PIN CAPACITY OR SOONER

PO Number

1626000

RUSH/CONTRACT BACKORDER

			Receipt	Details					
Quantity	UOM	Lot Number			Location		AIMS	Line N	umber
Wesco			Customer		Description	Ce	nt Ordere	U	Line
Part #			Part #			Rq	<u>std</u>	<u>M</u>	
					ı				
rted To:		Rev Level:		Cert Level:		Manufacturer:			

### CONTRACT CUSTOMERS:

344527 Triumph Aerostructures Vought

Descriptive PN:



AIR INDUSTRIES COMPANY

A Company

# PACKING SLIP



MANUFACTURERS, DISTRIBUTORS • THREADED PRODUCTS 12570 KNOTT STREET, GARDEN GROVE, CALIFORNIA 92841 PHONE: (714) 892-5571 FAX: (714) 892-7904

**PACKING SLIP#** 

000000000462548

REMIT TO:

Air Industries Company 3032 Solutions Center, Box 773032 Chicago, IL 60677-3000

SHIP TO:

0077031

WESCO AIRCRAFT CAPACITY AGMT

27727 AVENUE SCOTT

VALENCIA, CA 91355

USA

**BILL TO:** 

CAPACITY AGMT WESCO AIRCRAFT

ATTN: ACCOUNTS PAYABLE

P.O. BOX 803010

91380-3010 SANTA CLARITA, CA

USA

SHIP VIA: WILL CALL

DATE PRINTED 2/7/2015 YOUR ORDER NUMBER

1626000

**BILL OF LADING** 

NET 45 DAYS

FEB 0.7 2014

و المحمد

2/1/2013		1626000	_
QUANTITY ORDERED	QUANTITY SHIPPED	PART NUMBER	UNIT
15,000	13,525	EN6114K4X8  100 DEG HI-LITE SHR 4  N/A  LOT # T310992  ITEM #1  SHIP DATE 12/31/2014  RAW MATL & PROCESS CERTS REQD  WQR1-17,39,42,47-49, 54-55 APPLY  (WQR 41,43,45 IF APPLICABLE)  WQR 36 APPLY AND DFAR REQUIRED  AIRBUS DSQR INSPECTION REQD  AIRBUS APPROVAL NO. REQD  FOR FURTHERANCE OF AIRBUS UK.  THE PRODUCTS SUPPLIES HAVE BEEN  MANUFACTURED, INSPECTED AND  TESTED TO THE REQUIREMENTS OF	EA
		AUK/SA/001-3 (AIRBUS SAS APPROVAL No. 100048)	AN

- 8"x6"x4" - 725 EA

12"x8"x4" - 3200 EA

TYPE OF CONTAINER

4-12"x8"x4",1-8"x6"x4" NUMBER OF CONTAINERS

5

93.7 LBS SHIPPED BY

**GROSS WEIGHT** 

**SALES ORDER** 394899

S.E.

**DUE DATE** 10/4/2014

THE PRODUCTS THAT ARE COVERED BY THIS AGREEMENT ARE OF U.S. ORIGIN OR OTHERWISE SUBJECT TO U.S. EXPORT AND OTHER FOREIGN TRADE CONTROLS. THE EXPORT, DEEMED EXPORT, RE-EXPORT, OR RELEASE OF THESE PRODUCTS TO OTHER COUNTRIES OR PARTIES MAY REQUIRE THE PRIOR APPROVAL OF THE U.S. GOVERNMENT. DIVERSION OF THESE PRODUCTS FROM THE AUTHORIZED DESTINATION CONTRARY TO U.S. AND INTERNATIONAL LAW IS PROHIBITED. THE PURCHASER AGREES TO COMPLY WITH APPLICABLE LAWS AND REGULATIONS OF THE UNITED STATES, OTHER RELEVANT JURISDICTIONS, AND PERTINENT INTERNATIONAL ORGANIZATIONS PERTAINING TO THE EXPORT, DEEMED EXPORT, RE-EXPORT, OR RELEASE OF THESE PRODUCTS. ANY VIOLATIONS OF THIS CLAUSE, AS DETERMINED SOLELY BY AIR INDUSTRIES COMPANY, SHALL BE DEEMED A MATERIAL BREACH OF THIS AGREEMENT.



12570 Knott Střeet Garden Grove, CA 92841

### **Certification of Chemical and Physical Test**

1092714

Products identified on this certificate have been manufactured, tested and inspected in accordance with, and unless otherwise noted below, conform in all respects to the applicable drawings, specification and/or standards.

Country o	of Origin	ı: USA												Purch	ase Order	Date:	9/2/2014
Customer	WE	SCO A	IRCRAFT	CAPAC	ITY AG	MT -		-	0077031		ite of ertifica	ation	2/7/2015	Pac Slip			000462548
Purchase Order	162	6000		_		art umber	EN611	4K4X8				Revision	P7	 i	Prod Orde Lot Number	T3109	92
Customer Part Num	ber									Mfg. Date		N/A	Lot Size	15,8		antity ipped	13,525
Procurem Specifical		N6116	, ED. P3,									reat ication	SOLUTION	N-SMA N	-81200- PE	FAST.	
Finish Specifical		N 447	3									Lubrica Specific		117			
Non-destr Specificat		esting	ASTM E1	417- M	HTCHEL	L LAB.								Sa 10	mple or SA	MPLE	
Materia		6-4 Ti		Mate	erial	AMS49			Heat	U4A8	RQ.		Supplie		LVAC, USA		
	'	· · · · · · · · · · · · · · · · · · ·		Spe	cification	VIAIO42			No.	0470			Опри	- ,		<del>-</del>	
C	.029	Mn		Р		s		Si		Ni		. (	Cr	Mo	1	02	.16
Va	4.02	Ti	BAL	Al	6.15	N2	.014	Fe	.17	В		: (	Cb+T	Cu		Co	
Mq		Ca	į	Pb		Bì		Se		Sn		1,	Y < .00	11 H2	.0060	Cb	
 Ta	<b>.</b> .	1										1	Hardness N	O RC		-	
Micro/Macr Structure S			bunzation	Discon Accept	tinuities able	ACCEP	т 		Effect factory	Grain thd) S		v (Hd. actory	Finish Pa H2 ppm	art 47.9	PPM		
Doub	le St	ear :	Strengt	h		Ultin	nate Te	ensile	Streng	yth			Tens	ion-Te	nsion F	atigu	е
103 103 10 104 103 102 104 104 103 104 103	S .3 KSI .5 KSI .6 KSI .3 KSI .4 KSI .4 KSI .9 KSI .9 KSI .5 KSI .5 KSI .6 KSI .8 KSI .8 KSI .8 KSI .8 KSI .8 KSI .8 KSI		Resul	is.		Pound	s	Too S	lions of F	allure	det all a dependent of the second of the sec	Liv	e Cycles		Too Sh		Failure
MIN. 95 REQ 95	KSI		MAX REQ N	R		MIN. TO	O SHO	MAX REQ	NR			AVE. NI	R	AVE. N	NR	MIN. REQ	TOO SHOP
Ka	NR _		X1-KaS	NR		(a	NR	X1-Ka		NR		Hiah Load	NR		Low Load	NF	t
Temp: .oad:	··· S	ress F	lupture			ample Size	:	ue Test 50 "#	ing —	****	+	Sample Load:		Stress	Durability Sustained L	oad	
l'ime:		No fa	Ho ilures.	ours				No failur	es.			Time:	sults - Satisfa	ectory			Hours
					•				_		•	-	*	of Part:			

50 MICROS PASSED

THREADS WERE INSPECTED PER AS8879
PLATING THICKNESS .00033-.00038 ADHESION PASSED
AGE HEAT TREAT PER AMS-H-81200- PB FASTENERS

AIR INDUSTRIES CO.

ANDRES DIAZ

AIRBUS DSQR INSPECTOR

FEB 0 2014

DATE

Form # 155-155-1 Rev. 5 225111

THE PRODUCTS SUPPLIED HAVE BEEN MANUFACTURED, INSPECTED AND TESTED TO THE REQUIREMENTS OF AUK; SA;001-3 (AIRBUS SAS APPROVAL No. 100048)

Gloria Palomino, Certification Clerk

(NAC)



12570 Knott Street Garden Grove, CA 92841

### **Certification of Chemical and Physical Test**

1092714

Products identified on this certificate have been manufactured, tested and Inspected in accordance with, and unless otherwise noted below, conform in all respects to the applicable drawings, specification and/or standards.

Country of 0	Origin: US	SA									Purch	ase Orde	r Date:	9/2/2014
Customer	WESCO	AIRCRAFT	CAPACITY	AGMT			0077031	Date Certifi	of ication	2/7/2015	Pacl Slip	_	00000	0000462548
Purchase Order	1626000	)		Part Number	EN611	14K4X8			Revision	P7		rod Order ot Number		12
Customer Part Number	r							Mfg. Date	N/A	Lot Size	15,8		Quantity Shipped	13,525
Procuremen Specification		16, ED. P3,							Treat	SOLUTION	AMS-H	-81200- F	PB FAST	
Finish Specification	FN 44	173				-			Lubricat Specific		117			
Non-destruc Specification		ASTM E	1417- MITC	HELL LAB.							Sar 100	mole or s	SAMPLE	
Material	6-4 T	ï	Material Specific	ation AMS492	28	,	Heat No.	U4A89		Supplier	AL	LVAC, U	SA	
с .	029 <sub>Mr</sub>	l	Н	s		Si		Ni -	i c	r	Mo		O2	.16
Va 4	.02 Ti	BAL	Al	6.15 N2	.014	Fe	.17	8	C	b+T	Cu		Co	
Mq	Ca		Pb	Ві		Se		Sn	· Y	÷ .00	)1 H2	.0060	СР	
Та							  - 		H	ardness No	O RC			
Micro/Macro Structure Satis		carburization	Discontinui Acceptable		Γ		k Effect sfactory	Grain Flo thd) Sati		Finish Pa H2 ppm	rt 47.9	PPM	<u></u>	
Double	Shea	r Strengt	th	Ultim	ate T	ensile	Streng	jth		Tensi	on-Te	nsion	Fatigu	le
103. 105 104. 103. 105 104. 103. 103. 103.	4 KSI 9 KSI 5 KSI 2 KSI 9 KSI 2 KSI 2 KSI 2 KSI 7 KSI 2 KSI 6 KSI 6 KSI 6 KSI 2 KSI													
MIN. 95 K		. REW	 NR	REU	SHO	MAX REQ	NR	- · · · ·	AVE. NR LIFE High	. !	AVE N	IR Low	MIN. REQ	TOO SHO
Ka N	IR Stress	X1-KaS Rupture	NR	Ka N	VR Tor	X1-Ka gue Tes		ir	Load	NR	Strees	Load Durabilit	N	
Temp;	Olies	Tuplate	. —	Sample Size:	101	50	-		Sample S	lize	JU 633	- 31 abilit	7	**
Load:				Torque	31	0 "#					que	Sustained	Load	
Time:		H	iours		J.	- "			Load:					Uerre
	No	failures.				No failur	ree			ults - Satisfa	ctorv			Hours

Type of Part:

### 50 MICROS PASSED

THREADS WERE INSPECTED PER AS8879
PLATING THICKNESS .00033-.00038 ADHESION PASSED
AGE HEAT TREAT PER AMS-H-81200- PB FASTENERS

THE PRODUCTO SUPPLIED HAVE BEEN MANUFACTURED, INSPECTED AND TESTED TO THE REQUIREMENTS OF AUK/SA/001-3 (AIRBUS SAS APPROVAL NO. 100048)

Gloria Palomino, Certification Clerk





1092714

12570 Knott Street
Garden Grove, CA 92841

Products Identified on this certificate have been manufactured, tested and inspected in accordance with, and unless otherwise noted below, conform in all respects to the applicable drawings, specification and/or standards.

Country of C	Origin	: USA										Purcha	se Order	Date:	9/2/2014
Customer	WES	SCO AIRCE	AFT	CAPACITY	AGMT		007	7031	Date of Certifi		2/7/2015	Pack Slip I		00000	000462548
Purchase Order	1626	3000			Part Number	EN6114	K4X8			Revision	P7		od Order/ t Number	T31099	2
Customer Part Number									Mfg. Date	N/A	Lot Size	15,89		uantity nipped	13,525
Procurement Specification		N6116, ED.	P3,							Treat	SOLUTION	AMS-H-	81200- P	B FAST	
Finish Specification	! 	N 4473								Lubrica Specific					
Non-destruct Specification		esting AST	M E1	417- MITCH	ELL LAB.							Sam 100	ple or S	AMPLE	
Material	6	i-4 Ti		Material Specificati	on AMS49	28	Heat No.		U4A89		Supplier	ALL	VAC, US	SA .	
c .0	029	Mn		Р	S		Si	:	Ni	: (	Or	Мо		O2	.16
Va 4	.02	Ti B	AL :	Al 6.	15 N2	.014	Fe .1	7	В		Cb+T	Cu		Co	
Mq		Ca		Pb	Bi		Se		Sn		,	11 H2	.0060	Cb	
Та								i		ŀ	Hardness NO	O RC			
Micro/Macro Structure Satis	sfactory	Decarburizat NIL	ion .	Discontinuitie Acceptable	S ACCEP	T	Work Effect Satisfactory		Grain Flo thd) Satis		Finish Pa H2 ppm	rt 47.9	PPM		
Double	Sh	ear Stre	ngt	h	Ultin	nate Te	nsile Str	eng	th		Tensi	on-Te	nsion	Fatigu	ie
103.1 102.8 103.1 102.9 102.9 103.2 103.3 103.2 102.7 102.9 105.1 103.4 103.3	KSI KSI KSI KSI KSI KSI KSI KSI KSI KSI														
MIN. 95 KREQ N Temp:	IR	MA RE X1- ress Ruptu	Call KaS re	R NR	REQ	•	MAX NR REQ X1-KaS ue Testing 50		R	AVE. NE LIFE NE High Load Sample	NR	Stress (	R Low Load Durability Sustained	MIN. REQ NE	TOO SHOP
										Time.					
		No failures	_			N	lo failures.		1	Time: NDT Re:	sults - Satisfa	ctory			Hours

50 MICROS PASSED

THREADS WERE INSPECTED PER AS8879 PLATING THICKNESS .00033-.00038 ADHESION PASSED AGE HEAT TREAT PER AMS-H-81200- PB FASTENERS

THE PRODUCTO CUPPLIED HAVE BEEN MANUFACTURED, INSPECTED AND TESTED TO THE REQUIREMENTS OF AUK/SA/001-3 (AIRBUS SAS APPROVAL No. 100048)





12570 Knott Street Garden Grove, CA 92841

### **Certification of Chemical and Physical Test**

1092714

Products identified on this certificate have been manufactured, tested and inspected in accordance with, and unless otherwise noted below, conform in all respects to the applicable drawings, specification and/or standards.

Country of Or	rigin: l	USA												Pi	rcnas	e Orde	r Date:	9/2/20
Customer \	WESC	O AIRCR	AFT CA	PACITY A	GMT				00770		Date of Certifica	ation	2/7/20	15	Packin Slip No		0000	000004625
Purchase Order	16260	000			Part Number	E	N6114	K4X8			F	Revision	P7			d Order Numbe		992
Customer Part Number										Mfg. Date	- · · -	N/A	Lot Size		5,890		Quantity Shipped	13,525
Procurement Specification	EN	6116, ED.	P3,								Heat T Specifi		SOLUTI	MA AC	S-H-8	1200- F	PB FAS	Т.
Finish Specification	EN	4473			· ·		_					Lubrica: Specific	ion EN	6117		-		
Non-destructive Specification	e Testi	ing AST	M E1417-	MITCHE	LL LA	В.									Samp 100%		SAMPLE	<u> </u>
Material	6-4	ł Ti		Material Specificatio	n_AM	S4928			Heat No.	U4	A89		Supp	lier	L	/AC, U	SA	
C .02	9 1	<b>M</b> n	P		s		!	Si		, Ni		(	;r		Мо		02	.16
Va 4.0	)2 7	Ti BA	L AI	6.1	5 N2	2	014	Fe	.17	: 8		(	b+T	· · · · · · · · · · · · · · · · · · ·	Сu -		Co	
Ma	C	Ca	Pb		Bi			Se		Sn			٠ :	.001	H2	.0060	) Сь	
Та	i											, F	lardness	NO RO	2			
Micro/Macro Structure Satisfa		Decerburizatio NIL		continuities eptable	AC	CEPT			Effect factory		in Flow Satisfa		Finish H2 pp		17.9 PI	PM	1	
Double 9	Shea	ar Strei	ngth	i	U	ltimat	te Tei	nsile	Stren	igth			Ten	sion.	Ten	sion	Fatig	ue
	KSI	R	esults	ļ	Pot	unds		Locat	ions of	Failur	e	Lite	Cycles	•		Loca	ations o	of Failure
Pounds	KSI KSI KSI	R	esults		Pou	unds		Locat	ions of	Failur		Lite	Cycles	;		Loca	ations o	of Failure
Pounds 103.4 k 105.1 k 105.1 k 103.1 k	KSI KSI KSI KSI	MAX			MIN.	unds TOO S		MAX	NR	Failur	A	VE. NG		AVE		Loca	MIN.	TOO SHO
Pounds 103.4 k 105.1 k 105.1 k 103.1 k 103.7 k	KSI KSI KSI KSI		NR	NR .		Too s			NR		A L	VE. NF		AVE	Lo		MIN. REQ	TOO SHO
Pounds 103.4 k 105.1 k 105.1 k 103.1 k 103.7 k	KSI KSI KSI KSI	MAX REQ	NR as M		MIN. REQ		:HO	MAX REQ	NR s	Failur	A L	VE NF		AVE	Lo		MIN. REQ	TOO SHO
Pounds 103.4 k 105.1 k 105.1 k 103.1 k 103.7 k	KSI KSI KSI KSI	MAX REQ X1-K	NR as M	!	MIN. REQ	TOO S	:HO	MAX REQ X1-Ka	NR s		A L	VE. NF	NR	AVE REQ	Lo Lo ess Du	ow ad arability	MIN. REQ	TOO SHO
Pounds 103.4 k 105.1 k 105.1 k 103.7 k 103.7 k  MIN. 95 KSI REQ 95 KSI (a NR	KSI KSI KSI KSI	MAX REQ X1-K	NR as n		MIN. REQ Ka	TOO S	:HO	MAX REQ X1-Ka se Test 50	NR s		A L	VE NF IFE NF ligh oad	NR	AVE	Lo Lo ess Du	ow Paradi	MIN. REQ	TOO SHO
Pounds 103.4 k 105.1 k 105.1 k 103.1 k 103.7 k 103.7 k REQ 95 KSI	KSI KSI KSI KSI	MAX REQ X1-K	NR as M		MIN. REQ Ka	TOO S	HO Torqui	MAX REQ X1-Ka se Test 50	NR S ing		A L	VE. NF. lich oad Sample S Load: Time:	NR	AVE REQ Stre	Lo Lo ess Du	ow ad arability	MIN. REQ	TOO SHO

50 MICROS PASSED

THREADS WERE INSPECTED PER AS8879
PLATING THICKNESS .00033-.00038 ADHESION PASSED
AGE HEAT TREAT PER AMS-H-81200- PB FASTENERS

THE PRODUCTS SUPPLIED HAVE BEEN MANUFACTURED, INSPECTED AND TESTED TO THE REQUIREMENTS OF AUK/SA/001-3 (AIRBUS SAS APPROVAL NO. 100048)

Gioria Palomino, Certification Clerk

(V#.C)







				CE	ERTIFICAT	TION NUMBER:	PBF CP2074	
SERVICE PROVIDED								
CUSTOMER NAME A	ND ADD	RESS	DDC COMPANY	40570 KNO	ייי סדטכרי	CADDEN COO	VE CA 00044	
AIR INDUSTR	IES C	OMPANY A	PPC COMPANY	12570 KNO	HSIREE	GARDEN GRU	VE, CA. 92841	
PRODUCTION ORDE	R NUME	BER			CUSTOMER	NUMBER		
T310992					484293			
CUSTOMER P.O.		CUSTOMER N	UMBER	HEAT NUMB	ER	REQUIREMENT		DATE CERTIFIED
484293		EN6114K4>	(8 REV.N/A	U4A89	·• · · · · · · · · · · · · · · · · · ·	N/A		1-19-15
PROCESS DESCRIP							ECIFICATION (S)	
AMS-H-81200	KĖV	. C				AMS-H-6	1200 REV. C	
1								
								r
							NUMBER OF	
QUANTITY		NUMBER		DESCRI			CONTAINERS	WEIGHT
15,857	CP2	074	EN	6114K4X8/ B		92	4	111 LBS.
WIRE SAMPLES:				MATERIA	L: Ti 6-4			
50 PCS.				-			<del></del>	
	<u> </u>			19	>			
							_ /*** ,	and an end of
				JAN E	0 2815			
	<u> </u>						<u> </u>	
							<del></del>	
PROC	CESS		TEMPE	RATURE		ATMOSPHERE	COOLING	METHOD
AGE								
AGE				25°F		AIR	AIR	
			SOAK TIN	#E (4) HRS.		711X		<u></u>
	•							

<u>Statement of Compliance</u>: Products identified in this shipment have been processed, and inspected in accordance with, and unless otherwise noted, conform in all respects to the applicable drawings and/or standards, specifications and purchase order requirements.

**CERTIFICATION SUPERVISIOR** 

PBF Form #14-25 (Rev. 11/11)

# Mitchell Laboratories NONDESTRUCTIVE TESTING

CERTIFICATION OF CONFORMANCE

Ph. (562) 949-6144

Fx. (562) 949-7584

CONTROL NUMBER

Pico Rivera, CA 90660 273111 www.mitchell-labs.com SOLD TO SHIP TO Air Industries Company Air Industries Company 12570 Knott Street 12570 Knott Street Garden Grove, CA 92841 Garden Grove, CA 92841 **United States United States** CUSTOMER P.O NUMBER CUSTOMER PHONE NO. CUSTOMER FAX NO. ORDER. DATE DATE SHIPPED 485185 (714) 892-5571 (714) 892-7904 02/02/15 02/03/15 MATERIAL LOT NO TERMS BUYER N/A 6-4 TIT NET75 (TEMP) ITEM QTY. ORDERED PART NUMBER / PROCESS / REVISION / DESCRIPTION QTY. ACCEPTED QTY. REJECTED EN6114K4X8 PT **FASTENER** 1 50 TOTAL LOT SIZE: 15,638 P.CS PRODUCTION ORDER NUMBER: T310992 NOTE: INDICATIONS WERE NOT PRESENT **SAMPLE SIZE 50 PCS** 50 0 PT: ASTM E1417-13, TYPE I, METHOD D, LEVEL 2 ACC CRITERIA: EN6116 REV.P3

WE HEREBY CERTIFY THE PARTS LISTED HAVE BEEN TESTED IN CONFORMANCE WITH THE SPECIFICATIONS NOTED. THIS REPORT REPRESENTS OUR INTERPRETATION OF THE RESULTS OBTAINED FROM THE TEST AND IS NOT TO BE CONSTRUED AS A GUARANTY OR WARRANTY OF THE CONDITION OF THE MATERIALS TESTED

PARTS, MATERIALS, ETC., AS PROCESSED BY US SHALL BE PRESUMED TO BE ACCEPTED AS SATISFACTORY BY YOU IF WE ARE NOT NOTIFIED OF SHORTAGES OR OTHER DISCREPANCIES WITH TEN (10) WORKING DAYS OF YOUR RECEIPT OF THE SAME.

THESE PARTS HAVE NOT COME INTO CONTACT WITH MERCURY OR MERCURY COMPOUNDS AT ANY TIME DURING PROCESSING AT MITCHELL LABORATORIES.

C. Madrid (PT Level 2)

### CERTIFICATION





		(B)					
SERVICE PROVIDED			CE	ERTIFICAT	TON NUMBER	R: CP1989	
CUSTOMER NAME A	ND ADDRESS						
		Y A PCC Company	12570 K	NOTT STE	REET GARDE	N GROVE, CA	92841
PRODUCTION ORDE	RNUMBER			CUSTOMER	NUMBER		
T310992				483174			
CUSTOMER P.O.	CUSTOMER NUM	BER	HEAT NUN		REQUIREMENT	<del></del>	DATE CERTIFIED
483174	EN6114K4X8	REV. NA	U4A89	•	N/A		12-12-14
PROCESS DESCRIPT	TON		1 - 11 - 11			PECIFICATION (S)	12-12-14
AMS-H-81200	•				AMS-H-8	1200 RÉV. C	
						•	1
		•			1		
QUANTITY	JOB NUMBER		DESCRIP	אסודוכ		NUMBER OF CONTAINERS	WEIGHT
			DEOCIGI	TION		CONTAINERS	WEIGHT
		· vorante vo					
16,214	CP1989	EN6114K4X8 /	BOLT /	T310992	•	5	121 LBS
50 PCS		Material: TI 6-4					
WIRE SAMPLES							
						ļ	
				<del></del>			
					<del></del>		
		_	<del></del>				
PROC	ESS	TEMPERA	TURE	A	TMOSPHERE	COOLING	METHOD
		1700°				GOOLING	WETTIOD
Solution Treat		Soak time (3	31) Mins		Argon	Water Quen	ch @ 59° F
						·	
	· · · · · · · · · · · · · · · · · · ·						

<u>Statement of Compliance</u>: Products identified in this shipment have been processed, and inspected in accordance with, and unless otherwise noted, conform in all respects to the applicable drawings and/or standards, specifications and purchase order requirements.

Maria Cervantes

Certification Supervisor

PBF Form #14-25 (Rev. 11/11)

(182)



195 Museum Road Washington, PA 15301

Phone 724.228.1000 Fex 724.229.4196

### **PRODUCT CERTIFICATION**

WORK ORDER **091933** 

SALES ORDER / RLS 047232 / 001

SOLD TO

Air industries 12570 Knott Street Garden Grove, CA 92841 USA

Quality System is registered to ISO 9001:2008 and AS9100:2009

					1,012 lbs	s 0006934	14		11PMENT DATE 1201/2014
					7,012 .103	9 0000304			00/0 //20 14
stener Qu	iality Dyna	lube Colf - (	).267" Dia	l <b>.</b>					
		H; AMS 492	28 Rev: T;	AMS 4967	Rev: K		<del></del>	·	
			Chemi	cal Report	(Wt.%)				
Al T	AL B	CI	СВ	Fe T	Fe B	N T	N B	O T	OB
6.15	6.15	.029	. 030	.17	.17	.014	.014	.16	.16
VВ	YT	YB	Ti	Ot E	TOE				
4.00	<.001	<.001	BAL	<.05	<.20				
	· · · · · · · · · · · · · · · · · · ·		Hydro	gen (As St	ipped)				
			···						
			As Sh	pped Proj	perties				
			si)					(%)	
-			e1)					1967	
			<b></b> -,				45	. (70)	
	Сар	ability@175	0°F (954°	C) 1hr WQ	+1000°F (	538°C) 4hr	AC .		
		•••	si)				RA #1	(%)	
_			. 11						
			31)					(%)	
IRC)	She	ear 0° #1 (p	si) ·	She	ar 90° #1	(psi)	Shear		1)
	She 108	er 0° #3 (p  400	si)			105 AC			_
			Metall	ography R	esujts	Ine	7	1	1
ta_		and the second section of the second	and an administrative lands.		ALLOY		AU	4C 6 0 1 201 1 0 1 2	
	Al T 6.15	stener Quality Dyna ns: AIC-MS-101 Rev: Dia. +0.001" / -0"  Al T Al B 6.15 6.15  VB Y T 4.00 <.001  VS 0 127 iRC) 1 Cap 1 YS 0 164 0 YS 0 165 IRC) She (psi) She 0 108	Stener Quality Dynalube Coll - (s.: AIC-MS-101 Rev: H; AMS 49: Dia. +0.001" / -0"  Al T Al B C T 6.15 .029  V B Y T Y B 4.00 < .001 < .001  (b)	Stener Quality Dynalube Coli - 0.267" Dia s: AIC-MS-101 Rev: H; AMS 4928 Rev: T; Dia. +0.001" / -0"  Chemi  Al T Al B C T C B 6.15 6.15 .029 .030  V B Y T Y B Ti 4.00 <.001 <.001 BAL  Hydro  As Sh  YS 0.2% #1 (psi) 0 127600 YS 0.2% #2 (psi) 0 127700  IRC) 1  Capability@1750°F (954°) YS 0.2% #2 (psi) 0 164700 YS 0.2% #2 (psi) 0 165000 IRC) Shear 0° #1 (psi) 8 108600 (psi) Shear 0° #3 (psi) 0 108400  Metali	ATION 111DB3BGK02670 stener Quality Dynalube Coli - 0.267" Dia. hs: AIC-MS-101 Rev: H; AMS 4928 Rev: T; AMS 4967 Dia. +0.001" / -0"  Chemical Report  Al T Al B C T C B Fe T 6.15 6.15 .029 .030 .17  VB YT YB Ti Ot E 4.00 < .001 < .001 BAL < .05  Hydrogen (As Shipped Prosite of the color of t	Stener Quality Dynalube Coli - 0.267" Dia.	Stener Quality Dynalube Coll - 0.267" Dia.	Stener Qualify Dynalube Coll - 0.267" Dia.	Stener Quality Dynalube Coll - 0.267" Dia.

Qtc302 (v6.0)

Page 1 of 2

Date Printed:

07/31/2014





196 Museum Road Washington, PA 15301

Phone 724,228,1000 Fax 724,229,4195

### PRODUCT CERTIFICATION

WORK ORDER 091933

SALES ORDER / RLS 047232 / 001

SOLD TO

Air Industries 12570 Knott Street Garden Grove, CA 92841 USA

Quality System is registered to ISO 9001:2008 and AS9100:2009

CUSTOMER P.O.	CUSTOMER PART	QUANTITY LADING NO	SHIPMENT DATE
802122		1,012 lbs 00069341	08/01/2014
		Material Data	
Melt Origin		Bt Tr °F	•
USA		1823	
Melt Source		Bt Tr °C	
ATI-Allvac		995	
	Cei	tification information	

As Shipped Condition

Annealed 1450°F (788°C) 1 Hr. A/C.

### CERTIFICATION REQUIREMENTS

Material free of Alpha Case.

Material tested in 4D gage length.

Hydrogen analysis taken from final product.

Material free of mercury and radioactive contamination.

Material has been eddy current tested.

Dennis L. Allen

Dennis L. Allen
Quality Assurance Supervisor

End of Certification

This is to certify that the above test results are correct as contained in the records of the company.

Certification shall not be reproduced except in full without the approval of Dynamet Inc.

The recording of false, ficticious or fraudulent statements or entries on this document mabe punished as a felony under Federal Law.

18 100/0
LOY ANALYSIS OK

AUG 0 5 2014,

AUG 01 2014 101-2

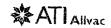
Otc302 (v6.0)

Page 2 of 2

Date Printed:

07/31/2014





4374 Lancaster Highway, Richburg, SC 29729 CERTIFICATE OF TEST

Cert No.22411 Rev.2

AMENDED

Batch -28144

Boyl Brane Sonny J. Bradleyles

Heat -U4A89

Certification Auditor Date : May 29, 2014

Amendment Notes - Amended Certification to amend the page numbers.

Customer Name & Address

Purchase Order No

Part No

Sales Order No

Sales Order Line No

Boeing/TMX\_Aerospace PO\_Box 34656 Seattle WA 98124 US

TZ - 781095 - TZ9279

836162

19421

Size (in) 4.000

Cross section Round

No Pos

Weight (lbs)

Alloy

35

13,438

ATI 6-4" Alloy

Remarks:

Hemains.

BCA-65325-1194

Purchased For: Oynamet

Customer PO#: 049555 & Item #2

Customer P/N: 111PX6-4.000

TMX W/O: ZB8122

Boeing Used On: Fastener

Contract #: STD-65253-0372

Specifications

Spec Name DI - 1036

Rav в

А

Compliance Condition

Compliant Compliant

DI -2111 Reference Specifications

Spen Name AMS 4928 ASTM B348

Rev 2013 ĪΑ

8

С

Class GRADE =5 Compliance Condition

Capable Of Capable Of

Compliant Compliant

Compliant

D6-82479 Remarks:

D1-4426

D6 - 81628

Capable Of: ATI Allvac guarantees material will meet specification requirements in the final product after additional appropriate processing but may not be tested in the 'As Shipped' condition.

### As Shipped Condition

Hot Work Type

Forged

Remarks:

Material was sent to Solar Atmospheres for vacuum degassing at intermediate billet size.

Surface Finish

Peel/Shave & Polish

Vacuum Arc Remelt

Melt Method Details

Primary Melt

**Facility** 

ATI Allvac

Address

Bakers Melt Facility 6400 Alloy Way, Monroe, NC 28110 US

Remelt Vacuum Arc Remelt

**Facility** ATI Allvac Address

Date

Bakers Melt Facility 6400 Alloy Way, Monroe, NC 28110 US

02/15/2014

ALLOY ANALYSIS OK

AUG 0 5 2014

Page 1 of 3

Cert No.22411 Rev. 2

AMENDED ART ALLIAN 4574 LANGASTED HIGHWAY, ALERBURG, SC 29124 DE

\_ Batch - 28144

Heat - U4A89

CH	E١	4T	ST	RY

Piece ID			TOP	BOTTOM
Sample Source Test Facility			Τορ	Bottom
			ATI Alivac - Monros	ATI Allvac - Monroe
Elements	MON	Method		
A1	%	XRF	6.15	6.15
ν .	%	XRF	4.02	4.00
Fe	%	XŔF	0.17	0.17
0	%	gas	0.16	0.16
C	. %	CS	.029	.030
N	%	GAS	.014	.014
Cu	%	WET	<0.01	<0.01
В	*	WET	<0.001	<0.001
Si	<b></b>	XRE	<0.01	₹0.01
Y	<sup>9</sup> d	WEŢ	<0.001	<0.001
Tí	%	XRF	BAL	, BAL

Test Comments: Other Elements (each) = 0.05 wt.% max. Total Other Elements = 0.20 wt.% max.

Remarks:

CS - Combustion/IR Detection

GAS = Inert Gas Fusion

XRF = X-Ray Fluorescence

WET = Inductively Coupled Plasma Emission

Piece ID T1 - 1 - 1 - 1 83-3-2-2 Test Facility ATI Allvac - Monroe ATI Allvac - Monroe Elements Ų**O**Ł Method н GAS 0.0026 0.0024

Test Description: Hydrogen: Billet - 0.25" Below Surface

Test Methods: C = ASTM E1941 (2010); O/N = ASTM E1409 (2013); H = ASTM E1447 (2009); ICP = ASTM E2371 (2013); XRF = ASTM E539 (2011)

### **METALLOGRAPHY**

Remarks:

Beta Transus Calculated by Chemistry: 1822 F. = TOP 1824 F. = BOTTOM

### Ultrasonic

Test Facility: ATI Allvac - Richburg, SC

Remarks:

Material ultrasonically inspected and found acceptable to the following specifications: AMS 2631 Class A1 AMS STD-2154 Type I Class A

Macro

Test Facility

Etchant

Magnification

ATT Allvac - Monroe, NC

Ammonium Bifluoride

Material macro evaluated top, middle and bottom of each ingot and found acceptable.

### Outside Source Addresses

Outside Testing Laboratory

**Facility** 

ATI Allvac

Subcontracted Operations

Facility

Solar Atmospheres

### Maps Attached

Attached File Description(s):

1) Billet Map

2020 Ashcraft Avenue, Monroe, NC 28110 USA

Address

30 Industrial Rd., Hermitage, PA 18148 USA

ALLOY ANALYSIS OF

AUG 0 5 2014

Cert No.22411 Rev. 2

AUG 01 2014 1012

Page 2 of 3



- AMENDED ATT ALLIAG 4374 Lawcaster Highway Richtung, 53 Jazza je - Batch - 28144

Heat - U4A89

### Other Attached Files

Attached File Description(s):

1) deviation approval

### Special Remarks

Material produced and controlled in accordance with T.I. SSA Dynamet-001 Rev.002.

### Remarks

Material has been produced, sampled, inspected and tested in accordance with the customer purchase order and referenced specifications and conforms to the requirements unless otherwise noted in this Certificate of Fest. If customer purchase order does not specifically reference a revision to a specification, ATI Allvac will work to the latest revision on file and in effect at the time of order placement.

Any chemical elements analyzed and found to have values below the actual limits of detection may be reported as < less than or reported at the detection level.

When values are reported to the significant places called for in the specifications, rounding will be done in accordance with ASTM E29.

This is to certify that during the manufacturing, handling, testing and inspection, this material did not come in direct contact with mercury or any device employing a single boundary of containment.

ATI Allvac products have not come in contact with radioactive materials during manufacturing or processing. No weld repair has been performed on this material.

Material melted and manufactured in the United States of America unless otherwise noted in this Certificate of Test. The recording of false, fictitious, or fraudulent statements or entries on this document may violate Federal felony.

The recording of false, fictitious, or fraudulent statements or entries on this document may violate Federal felony.

This Certificate of Test shall not be reproduced, except in full, without the written approval of ATI Allvac Quality.

Material Safety Data Sheets (MSDS) - View or print from our site: www.atimetals.com Printed copies are available upon request from the ATI Alivac Sales Department.





Page 3 of 3

Cert No.22411 Rev.2

