

BAC5753

REVISION
V
10/30/2012

CLEANING, DESCALING AND
SURFACE PREPARATION OF
TITANIUM AND TITANIUM ALLOYS



THIS SPECIFICATION ESTABLISHES THE REQUIREMENTS FOR CLEANING, DESCALING, ETCHING, AND SURFACE PREPARATION DURING THE PROCESSING OF TITANIUM AND TITANIUM ALLOYS.

<u>BAC 5753 DEPARTURES</u>	<u>EFF DATE</u>	<u>SUBCONTRACTOR(S) AFFECTED</u>	<u>ON MODELS</u>	<u>MFG DEPTS OF DIV BELOW AFFECTED</u>	<u>REASON</u>
6-88	6/30/1987	BRITISH AEROSPACE	ALL COMMERCIAL AIRPLANES AND DERIVATIVES THEREOF	NONE	TO ALLOW BRITISH AEROSPACE THE USE OF EXISTING FACILITIES FOR PRECLEANING PRIOR TO FUSION WELDING
6-97	11/14/1989	LOCKHEED – GEORGIA	ALL COMMERCIAL AIRPLANES AND DERIVATIVES THEREOF	NONE	TO ALLOW THE USE OF EXISTING ALTERNATE PROCESS SOLUTION
6-101	9/14/1990	H. E. LIMITED	ALL COMMERCIAL AIRPLANES AND DERIVATIVES THEREOF	NONE	TO ALLOW THE USE OF EXISTING FACILITIES FOR PRECLEANING PRIOR TO FUSION WELDING.
6-114	5/23/1994	FUJI HEAVY INDUSTRIES, UTSUNOMIYA, JAPAN	ALL COMMERCIAL AIRPLANES AND DERIVATIVES THEREOF	NONE	TO ALLOW FHI THE USE OF EXISTING MATERIALS AND FACILITIES
6-116	9/20/1994	AEROQUIP CORPORATION	ALL COMMERCIAL AIRPLANES AND DERIVATIVES THEREOF	NONE	TO ALLOW AEROQUIP TO USE ACES 7826 FOR REMOVAL OF OXYGEN EMBRITTLEMENT LAYER OF TI 15V-3CR-3AL-3SN
6-119	3/9/1994	NIPPI CO.	ALL COMMERCIAL AIRPLANES AND DERIVATIVES THEREOF	NONE	TO ALLOW THE USE OF EXISTING SOLUTION.
6-136	11/5/2001	XAC	ALL COMMERCIAL AIRPLANES AND DERIVATIVES THEREOF	ALL BCAG AND SUPPORTING	TO PERMIT THE USE OF LOCALLY AVAILABLE CHINESE MATERIALS.
6-138	3/1/2002	ARROWHEAD PRODUCTS STAINLESS STEEL PRODUCTS, INC.	ALL COMMERCIAL AIRPLANES AND DERIVATIVES THEREOF	NONE	TO UPDATE APPROVED PROCESSOR SPECIFICATION TABLE.
6-145	8/18/2003	PRECISION CASTPARTS CORP. (PCC) SUPPLIER #063790 PORTLAND, OREGON	ALL COMMERCIAL AIRPLANES AND DERIVATIVES THEREOF	NONE	TO ALLOW PRECISION CASTPARTS CORP. (PCC) THE USE OF EXISTING MATERIALS AND FACILITIES FOR PRECLEANING RAW TITANIUM CASTINGS PRIOR TO WELDING.
6-147	10/27/2005	PRECISION CASTPARTS CORP. (PCC) SCHLOSSER REDMOND, OREGON	ALL COMMERCIAL AIRPLANES AND DERIVATIVES THEREOF	NONE	TO ALLOW PRECISION CASTPARTS CORP. (PCC) SCHLOSSER TO USE EXISTING MATERIALS AND FACILITIES FOR PRE-PENETRANT ETCHING OF RAW TI CASTINGS.
6-148	10/27/2005	PACIFIC CAST TECHNOLOGIES	ALL COMMERCIAL AIRPLANES AND DERIVATIVES THEREOF	NONE	TO ALLOW PACIFIC CAST TECHNOLOGIES (PCT) THE USES OF EXISTING MATERIAL AND FACILITIES FOR ETCHING RAW TITANIUM CASTINGS.
6-149	8/29/2005	ALL SUBCONTRACTORS IN CHINA	ALL COMMERCIAL AIRPLANES AND DERIVATIVES THEREOF	NONE	TO ALLOW RAW MATERIALS CERTIFIED TO CHINA NATIONAL STANDARDS.
6-152	11/13/2006	BARNES AEROSPACE LANSING DIVISION	ALL COMMERCIAL AIRPLANES AND DERIVATIVES THEREOF	NONE	TO ALLOW BARNES AEROSPACE LANSING DIVISION TO USE THEIR EXISTING TITANIUM ETCH SOLUTION FOR SPF PARTS.
6-153	1/22/2007	EADS DEUTSCHLAND GMBH, HAUNSTETTER STR. 225 D- 86179 AUGSBURG GERMANY	ALL COMMERCIAL AIRPLANES AND DERIVATIVES THEREOF	NONE	TO ALLOW EADS TO USE THEIR EXISTING TITANIUM ETCH SOLUTION AND FACILITIES.
6-156	9/5/2008	TRIUMPH FABRICATIONS, HOT SPRINGS, AR	ALL COMMERCIAL AIRPLANES AND DERIVATIVES THEREOF	NONE	TO ALLOW TRIUMPH FABRICATIONS TO USE TF-HS ES 205 FOR METHOD II CLEANING AND DESCALING OF TITANIUM.
6-160	11/11/2009	JAPANESE SUBCONTRACTORS	ALL COMMERCIAL AIRPLANES AND DERIVATIVES THEREOF	NONE	TO ALLOW THE USE OF ALTERNATE CHEMICALS AVAILABLE IN JAPAN.
6-164	12/18/2013	NONE	ALL COMMERCIAL AIRPLANES AND DERIVATIVES THEREOF	SHOP A-8700 ONLY	TO ALLOW NON-UNIFORM DISCOLORATION OF TITANIUM FITTINGS AT TDRC SHOP A-8700
6-165	11/11/2014	NONE	ALL COMMERCIAL AIRPLANES AND DERIVATIVES THEREOF	BOEING PORTLAND	TO ALLOW THE USE OF CITRIC ACID TO CLEAN SHOT PEEN RESIDUE ON TITANIUM ASSEMBLIES WITH FAYING SURFACES. ALLOW THE USE OF LIQUID CITRIC ACID FOR SOLUTION 29.
6-168	6/23/2015	RTI ADVANCED FORMING, INC. 1701 WEST MAIN STREET WASHINGTON, MO 63090	ALL COMMERCIAL AIRPLANES AND DERIVATIVES THEREOF	NONE	TO ALLOW RTI ADVANCE FORMING, INC. TO USE TS-1100 AND TS-1100A FOR METHOD II CLEANING AND DESCALING OF TITANIUM.
8-4	4/24/1995	ALL	ALL BH	BH AND SUPPORTING	TO REMOVE OZONE DEPLETING CHEMICALS FROM PROCESSING.
8-5	5/2/2012	DUCOMMUN AEROSTRUCTURES	ALL CH-47 AND DERIVATIVES	NONE	TO ADD TI-4AL-2.5V-1.5FE TO TABLE V AND SECTION 10.1C.

8-6	9/30/2013	AGUSTA	CH-47	NONE	DEFINE ETCHING SOLUTION USED BY AGUSTA FOR TITANIUM.
8-7	2/27/2014	DUCOMMUN AEROSTRUCTURES	CH-47 AND DERIVATIVES	NONE	TO ALLOW USE OF AN OPTIONAL SCALE CONDITIONER FOR IMPROVED FLOW TIME AND TECHNICAL UPDATES.
9-6	4/8/1994	AEROCHEM, INC.	494 (F-22)	NONE	TO ALLOW AEROCHEM PROCESS SPEC APS 1409 FOR DESCALING OF TI AND TI ALLOYS.
9-40	5/13/2002	NOT AVAILABLE			
9-43	7/18/2002	NOT AVAILABLE			
9-44	10/21/2002	NOT AVAILABLE			
9-51	11/19/2003	ALL	ALL BOEING DEFENSE AND SPACE GROUP (EXCEPT 494)	BOEING DEFENSE AND SPACE GROUP AND SUPPORTING	REISSUE TO ELIMINATE PSD CONFLICT.
9-52	6/30/2003	NOT AVAILABLE			
9-54	2/12/2004	NOT AVAILABLE			
9-58	2/6/2004	NOT AVAILABLE			
9-59	2/6/2004	NOT AVAILABLE			
9-60	4/9/2004	NOT AVAILABLE			
9-61	8/18/2005	PRECISION CASTPARTS CORP. (PCC) SCHLOSSER REDMOND, OREGON	494	NONE	TO ALLOW PRECISION CASTPARTS CORP. (PCC) SCHLOSSER THE USE OF EXISTING MATERIALS AND FACILITIES FOR PRE-PENETRANT ETCHING OF RAW TI CASTINGS.
9-62	8/18/2005	PACIFIC CAST TECHNOLOGIES (PCT) SUPPLIER #578214 ALBANY, OREGON	494	NONE	TO ALLOW PACIFIC CAST TECHNOLOGIES (PCT) THE USE OF EXISTING MATERIALS AND FACILITIES FOR ETCHING RAW TITANIUM CASTINGS.
9-64	8/17/2006	ALL	494	INTEGRATED DEFENSE SYSTEMS	TO ADD OPTION TO CLEAN IN ACCORDANCE WITH BAC5749 OR BAC5763 AFTER PENETRANT INSPECTION.