

BAC5753

REVISION
AA
9/3/2021

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>AFFECTED PROGRAMS</u>	<u>AFFECTED BOEING SITES</u>	<u>REASON</u>
1-6	9/20/2021	HUTCHINSON/PFW AEROSPACE, SPEYER, GERMANY	ALL BCA	NONE	TO ALLOW PROCESSOR TO USE ALTERNATE ETCHING PROCEDURES.
1-7	9/3/2021	ALL SUBCONTRACTORS IN CHINA	ALL BCA	NONE	TO ALLOW RAW MATERIALS CERTIFIED TO CHINA NATIONAL STANDARDS
1-8	9/3/2021	JAPANESE SUBCONTRACTORS	ALL BCA	NONE	TO ALLOW THE USE OF ALTERNATE CHEMICALS AVAILABLE IN JAPAN
1-9	9/3/2021	PRECISION CASTPARTS CORP. (PCC) SCHLOSSER REDMOND, OREGON	ALL BCA	NONE	TO ALL PRECISION CASTPARTS CORP. (PCC) SCHOLSSER TO USE EXISTING MATERIALS AND FACILITIES FOR PRE-PENETRANT ETCHING OF RAW TI CASTINGS.
6-182	1/27/2020	NONE	ALL COMMERCIAL AIRPLANES AND DERIVATIVES THEREOF	BOEING PORTLAND	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.
6-183	1/27/2020	MITSUBISHI HEAVY INDUSTRIES (MHI)	ALL COMMERCIAL AIRPLANES AND DERIVATIVES THEREOF	NONE	TO PERMIT THE USE OF ULTRASONIC RINSING FOLLOWING METHOD II ETCHING.
9-73	1/27/2020	DUCOMMUN AEROSTRUCTURES	494	NONE	TO ALLOW USE OF AN OPTIONAL SCALE CONDITIONER FOR IMPROVED FLOW TIME AND TECHNICAL UPDATES. S-4762
8-12	1/27/2020	DUCOMMUN AEROSTRUCTURES	H-47 AND DERIVATIVES	NONE	TO ALLOW USE OF AN OPTIONAL SCALE CONDITIONER FOR IMPROVED FLOW TIMES AND TECHNICAL UPDATES. ADD TI-4AL-2.5V-1.5FE TO TABLE XXII AND SECTION 10.1.C
8-11	1/27/2020	AGUSTA	ALL CH-47 AND DERIVATIVES	NONE	DEFINE ETCHING SOLUTION USED BY AUGUSTA FOR TITANIUM
6-184	1/27/2020	BARNES AEROSPACE LANSING DIVISION	ALL COMMERCIAL AIRPLANES AND DERIVATIVES THEREOF	NONE	TO ALLOW BARNES AEROSPACE LANSING DIVISION TO USE THEIR EXISTING TITANIUM ETCH SOLUTIONS FOR HOT FORMED AND SUPERPLASTIC-FORMED PARTS
6-185	1/27/2020	FUJI HEAVY INDUSTRIES, UTSUNOMIYA, JAPAN	ALL COMMERCIAL AIRPLANES AND DERIVATIVES THEREOF	NONE	TO ALLOW FHI THE USE OF EXISTING MATERIALS AND FACILITIES
6-189	1/27/2020	AIRGRUP S.L.	ALL COMMERCIAL AIRPLANES AND DERIVATIVES THEREOF	NONE	TO ALLOW AIRGRUP TO USE THEIR EXISTING TITANIUM ETCH SOLUTION
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
DCNPSO-017202_01	8/31/2021	N/A	N/A	N/A	RFC 2105035032 REQUESTED THE CORRECTING THE SHELF LIFE FOR CALSOFT LAS-99 FROM 1 YEAR TO 2 YEARS AND THE ADDITION OF ACTIVOL 1357 TW AS A REACH-COMPLIANT WETTING AGENT. SFC 2106175156 REQUESTED THE ADDITION OF SOCOMUL TA AS REACH-COMPLIANT WETTING AGENT. UPDATED DEFINITION OF WATER-BREAK-FREE SURFACES TO REMOVE 30 SECOND REQUIREMENT. REVISE RINSE WATER ANALYTICAL REQUIREMENTS TO ALLOW THE USE OF TOTAL DISSOLVED SOLIDS OR TOTAL SOLIDS ANALYSIS METHODS. ON AN FYI BASIS, SUPERSEDE THREE DEPARTURES IMPRACED BY REVISIONS TO THIS SPECIFICATION.