# **Supplier Quality Requirements – Special Processes**

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# 1. WORKMANSHIP AND SPECIFICATIONS MANUAL (WSM)

The CSW Workmanship and Specifications Manual is applicable to all CSW procurements unless otherwise specified in the Purchase Order, Drawing, or Subcontractor Statement of Work. The Manual may be identified on the L3 drawing as either the Workmanship and Specifications Manual, WSM-01, WSM, or S01.

It invokes CSW Workmanship Standards (WS-XXX), Internal Specifications (IS-XXX), and Specification 60083155 (Torque and Retention Requirements for Threaded Hardware), establishing design, manufacturing, and acceptance requirements. The manual may be accessed at <a href="https://example.com/BCS-Workmanship.and-Specification Manual/">BCS Workmanship.and-Specification Manual/</a> Internal Specifications | L3Harris Technologies, Inc.

## 2. SPECIAL PROCESS CATEGORIES

CSW considers the following process categories as Special Processes:

QC Code Number	QC Code Designation	Process Family	Sub-processes *	
501	СР	Chemical Processing	paint (wet, powdercoat), etch and etch inspection, material removal, anodizing, electrodeposited and electroless plating, conversion coating, surface cleaning and passivation  brazing, carburizing, nitriding, HIPing, atmosphere and vacuum thermal processing, stress / embrittlement relief, pyrometry	
502	нт	Heat Treatment		
503	ЕТБРВА	Electronics	electronic components, printed boards / printed board assemblies, and associated processes (chemical processing for electronic components and boards, soldering, tinning, conformal coating, etc.)	
504	WELD	Welding	torch and induction (manual) brazing, electron beam, resistance, fusion, laser / EB metallic powder bed additive manufacturing	
505	СОМР	Composites	pre-preg / adhesive bond / resin film infusion, core processing, compression molding, liquid resin	
506	ESEAL	Sealing	o-rings, plate seal/rubber bond to substrate, molded shapes, compression seals, compounding, gasketing	

507	СТ	Coatings	thermal spray, vapor deposition, diffusion coatings
508	NDT	Nondestructive Testing	liquid penetrant, magnetic particle, ultrasonic, film and digital radiography, eddy current
509	MTL	Materials Testing Laboratories	chemical analysis, mechanical test specimen preparation and testing, hardness, metallography and microhardness, corrosion / accelerated corrosion testing, fasteners
510	NM / SE	Nonconventional Machining & Surface Enhancement	EDM (wire, sinker, fast hole), laser machining, manual / computer controlled / automated / flapper peening

<sup>\*</sup>Note: The listing of sub-processes is not all-inclusive for CSW controlled special processes. Reference AS9100D Clause 8.5.1.f and 8.5.1.2 for further information.

#### 3. SUB-TIER SUPPLIERS

All Special Processes that are performed within the CSW supply chain, including that of any sub-tier suppliers, shall be approved by CSW Supplier Quality. This approval does not alleviate Supplier's responsibility for delivering conforming material to CSW.

#### 4. NADCAP CERTIFICATION

CSW prefers that all Special Process Suppliers achieve and maintain NADCAP Certification. All costs associated with NADCAP Certification are to be borne by the Special Process Supplier. CSW may elect, at its own discretion, to validate Supplier's NADCAP Certification in lieu of approval audit. Manufacturers with design authority may control their own special process supply chain. Reference sections 5 and 6.

### 5. MANUFACTURER BUILD-TO-PRINT

Supplier, and any sub-tier suppliers, shall only use CSW approved Special Process Suppliers. A list of Special Process Suppliers is available on the Supplier web page.

#### 6. MANUFACTURER WITH DESIGN AUTHORITY

Supplier has the authority and responsibility to approve and control its special processing sources including inhouse processes. Supplier is not required to use those sources or specifications listed on the Supplier web page.

## **END OF DOCUMENT**

### **Revision History Summary**

Revision #	Description of Change	Date
00	Initial Release.	1/08/2016
01	Updated Special Process Categories in section 2 and included a note.	6/27/2022
02	Updated Special Process Categories in section 2. Added "Manufacturers with design authority may control their own special process supply chain. Reference sections 5 and 6." to section 4.	6/5/2023
NA	Updated hyperlink in section 1. No revision upgrade necessary.	2/25/2025
NA	Corrected typo in QC code designation. Changed to ETGPBA instead of EGTPBA. No revision upgrade necessary.	3/25/2025