

**SECTION IV: OUTSIDE
PROCESSING AND PURCHASED
COMPONENTS**

PURCHASE SPECIFICATION

1.0 SCOPE

This specification delineates the approved sources for the procurement of components and external processing services. Procurement sources are restricted to those designated in **Table 1** and **Table 2** herein.

NOTE: For the special processes listed in **Table 1**, the class, grade, and/or type must be specified on the drawing.

TABLE 1. Approved Outside Processing Sources

Process	Applicable Specification or Industry Standard	Conditions	Approved Source of Supply
Paint and Coating, Application and Finish	M4-110	All	Advanced Metal Finisher B & C Plating Spacesonics Sheetmetal Finishing First M's Refinishing Magic Spray Mass Precision Accurate Metal Finishing
Copper Plating	AMS 2418, Type 1	All	MPP Plate Shop ENS Technologies (only for parts that don't fit in MPP Plate Shop's tanks)
Dip Brazing	AWS C3.7	All	Cobham Advanced Electronic Solutions Apollo Microwave Thermofusion Amalar
Electroless Nickel, Nickel Boron	ASTM B607, Type 2	All	INTA
Electropolish	CPI Part Number Drawing	All	A&E Industries of Fountain MPP Plate Shop Any source specified on the CPI drawing
Gold, Electrolytic	MIL-DTL-45204 ASTM B488, Type I, Code C	All	MPP Plate Shop INTA
Helix Body Honing	CPI Part Number Drawing	All	Metric Design MPP Machine Shop

Revision Information

Updated to correct copper plating and gold plating call outs.



APPROVED SOURCES FOR RAW MATERIALS AND PROCESSES

Spec. No.: **P0-1, Sec. IV**

ECO: MPP621846 Rev J

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Page 2 of 3

PURCHASE SPECIFICATION

TABLE 1. Approved Outside Processing Sources (Continued)

Process	Applicable Specification or Industry Standard	Conditions	Approved Source of Supply
Nickel, Dull Watts	ASTM B689, Type 1, Watts Dull	All	MPP Plate Shop
		Helix Kovar Cathode Parts only	INTA
		EIMAC Cavity & Hardware Parts only	ENS Technology
Nickel, Sulfamate	AMS-2424, ASTM B689, Type 2	All	MPP Plate Shop
		Molybdenum Pins & Helix Kovar Cathode Parts only	INTA
		EIMAC Cavity & Hardware Parts only	ENS Technology
Silver	ASTM B700	All	MPP Plate Shop
		EIMAC Cavity & Hardware Parts only	ENS Technology

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TABLE 2. Approved Purchased Component Sources

Component	Applicable Specification or Industry Standard	Conditions	Approved Source of Supply
0.15 l/s Ion Pump	P20-8	All	Agilent Technologies VPD
High-Reliability Ion Pumps	P20-6	All	Agilent Technologies VPD Altair Technologies Any source specified on the CPI drawing
Braze Assemblies	P20-2	Metal-to-Metal Seals	Altair Technologies
		Metal-to-Ceramic Seals	Altair Technologies
Laminated Polepiece Blanks for CCT	P20-2	Laminated Polepiece Blanks for CCT	Altair Technologies INTA
Dispenser Cathodes	P20-4 EIA 941	M-Coating of Dispenser Cathodes	Ceradyne/3M
		Dispenser Cathodes	Ceradyne/3M Spectra-Mat
Homogenous Dispenser Cathodes	P20-5 EIA 941	All	Ceradyne/3M
Photoetched Grids	P20-7	All	Elcon Precision LLC Tecomet
RF Center Pins (Heat Treated and Plated)	CPI Part Number Drawing	All	P-A-R Precision
Welded Bellows	P20-1	All	Senior Aerospace Metal Bellows