



**SUPPLIER FLOWDOWN REQUIREMENTS FOR  
Industry Standard Process & Material  
Specifications**

**POFD-005  
Rev: 01  
03/11/2025**

This document forms a part of Cascade Engineering Technologies purchase order, unless otherwise specified.

**Material Specifications**

Specification	Rev	Title	Superseded
AMS 2175 (E-357 AL)	A	Casting, Classification and Inspection Of	
AMS 4050(7050-T7451)	K	Aluminum Alloy, Plate 6.2Zn - 2.3Cu - 2.2Mg - 0.12Zr (7050-T7451)) Solution Heat Treated, Stress Relieved, and Overaged	
AMS 4081(6061-T4)	K	Aluminum Alloy Tubing, Hydraulic, Seamless, Drawn, Round (1.0Mg - 0.60Si - 0.28Cu - 0.20Cr (6061-T4)) Solution Heat Treated and Naturally Aged	
AMS 4083(6061-T6)	N	Aluminum Alloy Tubing, Hydraulic, Seamless, Drawn, Round (1.0Mg - 0.60Si - 0.28Cu - 0.20Cr (6061-T6)) Solution and Precipitation Heat Treated	
AMS 4101(2124-T851)	F	Aluminum Alloy, Plate (4.4Cu - 1.5Mg - 0.60Mn (2124-T851)) Solution Heat Treated, Stretched, and Precipitation Heat Treated	
AMS 4107(7050-T74)	H	Aluminum Alloy Die Forgings (7050-T74)) Solution Heat Treated and Overaged	
AMS 4108(7050-T7452)	F	Aluminum Alloy, Hand Forgings (6.2Zn - 2.3Cu - 2.2Mg - 0.12Zr (7050-T7452)) Solution Heat Treated, Compression Stress-Relieved, and Overaged	
AMS 4162 (2219-T8511)	F	Aluminum Alloy, Extrusions (6.3Cu - 0.30Mn - 0.18Zr - 0.10V - 0.06Ti (2219-T8511)) Solution Treated, Stress Relief Stretched, Straightened, and Precipitation Heat Treated	
AMS 4216 (6013-T6)	C	Aluminum Alloy, Sheet (1.0Mg - 0.8Si - 0.8Cu - 0.50Mn (6013-T6)) Solution Heat Treated and Artificially Aged	
AMS 4218 (A356.0-T6P)	J	Aluminum Alloy Castings (7.0Si - 0.35Mg (A356.0-T6P) (Formerly T61P Temper) Solution and Precipitation Heat Treated	



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AMS 4330 (2297-T87)	E	Aluminum Alloy, Plate (2297-T87) 2.8Cu-1.5-Li-0.30 Mn-0.25 Mg Solution Heat Treated, Stretched, and Artificially Aged	
AMS 4347 (6013-T4)	E	Aluminum Alloy Sheet (1.0Mg - 0.8Si - 0.8Cu - 0.5Mn (6013-T4)) Solution Heat Treated and Naturally Aged	
AMS 4533	E	Copper-Beryllium Alloy Bars and Rods (98Cu - 1.9Be Solution and Precipitation Heat Treated (TF00, Formerly AT))	
AMS 4534	E	Copper-Beryllium Alloy, Bars and Rods (98Cu - 1.9Be Solution Heat Treated, Cold Worked, and Precipitation Heat Treated (TH04, Formerly HT))	
AMS 4535 (C62300)	E	Copper-Beryllium Alloy, Mechanical Tubing (98Cu - 1.9Be Solution and Precipitation Heat Treated (TF00, Formerly AT))	
AMS 4640 (C63000)	J	Aluminum Bronze, Bars, Rods, Shapes, Tubes, and Forgings (81.5Cu - 10.0Al - 4.8Ni - 3.0Fe Drawn and Stress Relieved (HR50)) or Temper Annealed (TQ50))	
AMS 4862 (C86300)	F	Manganese Bronze, Sand and Centrifugal Castings (63Cu - 24Zn - 6.2Al - 3.8Mn - 3.0Fe High Strength, as Cast	
AMS 4901(Ti-CP)	T	Titanium Sheet, Strip, and Plate Commercially Pure Annealed, 70.0 ksi (485 MPa)	
AMS 4902 (Ti-CP)	M	Titanium Sheet, Strip, and Plate Commercially-Pure Annealed 40.0 ksi (276 MPa) Yield Strength	
AMS 4911 (Ti-6Al-4V)	S	Titanium Alloy, Sheet, Strip, and Plate 6Al - 4V Annealed	
AMS 4914 (Ti-15333)	J	Titanium Alloy Cold Rolled Sheet and Strip 15V - 3Al - 3Cr - 3Sn Solution Heat Treated	
AMS 4919 (Ti-6-2-4-2)	K	Titanium Alloy Sheet, Strip, and Plate 6Al - 2Sn - 4Zr - 2Mo - 0.08Si Duplex Annealed	



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AMS 4921 (Ti-CP)	R	Titanium Bars, Wire, Forgings, and Rings Commercially Pure 70.0 ksi (483 MPa) Yield Strength	
AMS 4928 (Ti-6Al-4V)	W	Titanium Alloy Bars, Wire, Forgings, Rings, and Drawn Shapes 6Al - 4V Annealed	
AMS 4941 (Ti-CP)	H	Titanium Tubing, Welded Annealed, 40,000 psi (276 MPa) Yield Strength	
AMS 4943 (Ti-3Al-2.5V)	M	Titanium Alloy, Hydraulic, Seamless Tubing 3.0Al - 2.5V Annealed	
AMS 4944 (Ti-3Al-2.5V)	M	Titanium Alloy Tubing, Seamless, Hydraulic 3.0Al - 2.5V Cold Worked, Stress Relieved	
AMS 4945 (Ti-3Al-2.5V)	H	Titanium Alloy Tubing, Seamless, Hydraulic 3Al - 2.5V, Controlled Contractile Strain Ratio Cold Worked, Stress Relieved	
AMS 5383 (Inconel 718)	F	Nickel Alloy, Corrosion and Heat Resistant, Investment Castings (52.5Ni - 19Cr - 3.0Mo - 5.1(Cb+Ta)) - 0.90Ti - 0.60Al - 18Fe) Vacuum Melted Homogenization and Solution Heat Treated	
AMS 5510 (321 CRES)	T	Steel, Corrosion and Heat Resistant, Sheet, Strip and Plate (18Cr - 10.5Ni - 0.40Ti (SAE 30321)) Solution Heat Treated	
AMS 5516 (302 CRES)	R	Steel, Corrosion Resistant, Sheet, Strip, and Plate (18Cr - 9.0Ni (SAE 30302)) Solution Heat Treated	
AMS 5517 (301 CRES)	N	Steel, Corrosion Resistant, Sheet and Strip (18Cr - 8Ni (SAE 30301)) Cold Rolled, 125 ksi (862 MPa) Tensile Strength	
AMS 5518 (301 CRES)	N	Steel, Corrosion Resistant, Sheet and Strip (18Cr - 8Ni (SAE 30301)) Cold Rolled, 150 ksi (1034 MPa) Tensile Strength	
AMS 5519 (301 CRES)	P	Steel, Corrosion Resistant, Sheet and Strip (18Cr - 8Ni (SAE 30301)) Cold Rolled, 185 ksi (1276 MPa) Tensile Strength	



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AMS 5520(PH 15-7 Mo)	H	Steel, Corrosion and Heat Resistant, Sheet, Strip, Foil, and Plate (15Cr - 7.1Ni - 2.5Mo - 1.1Al) Solution Heat Treated, Precipitation Hardenable	
AMS 5581(Inconel 625)	G	Nickel Alloy, Corrosion and Heat Resistant, Seamless or Welded Tubing (62Ni - 21.5Cr - 9.0Mo - 3.7Cb) Annealed	
AMS 5596 (Inconel 718)	M	Nickel Alloy, Corrosion and Heat Resistant, Sheet, Strip, Foil and Plate (52.5Ni - 19Cr - 3.0Mo - 5.1Cb - 0.90Ti - 0.50Al - 18Fe) Consumable Electrode or Vacuum Induction Melted 1775 Degrees F (968 Degrees C)) Solution Heat Treated	
AMS 5599 (Inconel 625)	N	Nickel Alloy, Corrosion and Heat Resistant, Sheet, Strip, and Plate (62Ni - 21.5Cr - 9.0Mo - 3.7(Cb+Ta)) Annealed	
AMS 5604 (17-4 PH)	K	Steel, Corrosion Resistant, Sheet, Strip, and Plate (16.5Cr - 4.0Ni - 4.0Cu - 0.30Cb) Solution Heat Treated, Precipitation Hardenable	
AMS 5629 (PH 13-8 Mo)	J	Steel, Corrosion-Resistant, Bars, Wire, Forgings, Rings, and Extrusions (13Cr - 8.0Ni - 2.2Mo - 1.1Al) Vacuum Induction Plus Consumable Electrode Melted Solution Heat Treated, Precipitation Hardenable	
AMS 5643 (17-4 PH)	W	Steel, Corrosion Resistant, Bars, Wire, Forgings, Tubing, and Rings (16Cr - 4.0Ni - 0.30(Cb+Ta)) - 4.0Cu Solution Heat Treated, Precipitation Hardenable	
AMS 5659 (15-5 PH)	T	Steel, Corrosion Resistant, Bars, Wire, Forgings, Rings, and Extrusions (15Cr - 4.5Ni - 0.30Cb - 3.5Cu) Consumable Electrode Melted Solution Heat Treated, Precipitation Hardenable	
AMS 5662(Inconel 718)	P	Nickel Alloy, Corrosion and Heat Resistant, Bars, Forgings, and Rings (52.5Ni - 19Cr - 3.0Mo - 5.1Cb - 0.90Ti - 0.50Al - 18Fe Consumable Electrode or Vacuum Induction Melted 1775 Degrees F (968 Degrees C)) Solution Heat Treated, Precipitation Hardenable	
AMS 5666 (Inconel 625)	K	Nickel Alloy, Corrosion and Heat Resistant, Bars, Forgings, Extrusions, and Rings (62Ni - 21.5Cr - 9.0Mo - 3.65 (Cb+Ta)) Annealed	
AMS 5737 (A286)	R	Steel, Corrosion and Heat-Resistant, Bars, Wire, Forgings, and Tubing (15Cr - 25.5Ni - 1.2Mo - 2.1Ti - 0.006B - 0.30V Consumable Electrode Melted 1650 Degrees F (899 Degrees C)) Solution and Precipitation Heat Treated	
AMS 5837 (Inconel 625)	H	Nickel Alloy, Corrosion and Heat Resistant, Welding Wire (62Ni - 21.5Cr - 9.0Mo - 3.7Cb)	



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AMS 5862 (15-5 PH)	M	Steel, Corrosion Resistant, Sheet, Strip, and Plate (15Cr - 4.5Ni - 0.30Cb - 3.5Cu) Consumable Electrode Remelted, Solution Heat Treated Precipitation Hardenable	
AMS 5864 (PH 13-8 Mo)	D	Steel, Corrosion Resistant, Plate (13Cr - 8.0Ni - 2.2Mo - 1.1Al) Vacuum Induction Plus Consumable Electrode Melted Solution Heat Treated, Precipitation Hardenable	
AMS 5901	D	Steel, Corrosion Resistant, Sheet, Strip, and Plate (18Cr - 8Ni (SAE 30301)) Solution Heat Treated Composition	
AMS 5902	D	Steel, Corrosion-Resistant, Sheet and Strip (18Cr - 8Ni (SAE 30301)) Cold Rolled, 3/4 Hard, (175 ksi (1207 MPa)) Tensile Strength	
AMS 6257	G	Steel Bars, Forgings, and Tubing (1.6Si - 0.82Cr - 1.8Ni - 0.40Mo - 0.08V (0.40 - 0.44C)) Consumable Electrode Vacuum Remelted Normalized and Tempered	
AMS 6414 (4340)	N	Steel Bars, Forgings, and Tubing (0.80Cr - 1.8Ni - 0.25Mo (0.38 - 0.43C)) (SAE 4340)) Vacuum Consumable Electrode Remelted	
AMS 6532	L	Steel Bars and Forgings (3.1Cr - 11.5Ni - 13.5Co - 1.2Mo (0.21 - 0.25C)) Vacuum Melted, Annealed (Heat Treatable to 280 ksi (1931 MPa)) Tensile Strength	
AMS A21180	C	Aluminum-Alloy Castings, High Strength	(Superseded by: Alloy Type)
AMS-QQ-A-200	C	Aluminum Alloy, Bar, Rod, Shapes, Structural Shapes, Tube and Wire, Extruded, General Specification For	(Superseded by: Alloy Type)
AMS-QQ-A-225	B	Aluminum and Aluminum Alloy, Bar, Rod, Wire or Special Shapes, Rolled, Drawn or Cold Finished, General Specification For	(Superseded by: Alloy Type)
AMS-QQ-A-250	B	Aluminum and Aluminum Alloy Plate and Sheet; General Specification For	(Superseded by: Alloy Type)
AMS-T-9046 / MIL-T-9046	CANCELLED D	Titanium and Titanium Alloy, Sheet, Strip, and Plate	(Superseded by: Alloy Type)



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AMSWWT700	3B	Tube, Aluminum and Aluminum Alloy, Drawn, Seamless, General Specification for	
ASTM B 152/B 152M	19	Standard Specification for Copper Sheet, Strip, Plate, and Rolled Bar	
ASTM B138	M	Bronze Manganese; Rod, Shapes, Forgings, and Flat Products, (Flat Wire, Strip, Sheet, Bar, and Plate)	
EN3354	2013	Aerospace Series Titanium Alloy TI-P64001 Annealed Sheet for Superplastic Forming a less than or Equal to 6 mm Edition P 3	
MIL-T-8808	B	Tubing, Steel, Corrosion-Resistant (18-8 Stabilized) Aircraft Hydraulic Quality	
<b>Adhesives</b>			
A-A-3097	-	Adhesives, Cyanoacrylate, Rapid Room-Temperature Curing, Solventless	
AMS 3726	E	Shims, Filled Resin Compound	
<b>Miscellaneous</b>			
A-A-59588	-	Rubber, Silicone (General Specification)	
AMS-3277	Superseded	Sealing Compound, Polythioether Rubber Fuel Resistant, Fast Curing Intermittent Use to 360 F (182 C)	(Superseded by: SAE AMS3277 B)
AMS-2518	Superseded	Thread Compound, Antiseize, Graphite-Petrolatum	(Superseded by: SAE AMS-2518 A)
AMS-3281	Superseded	Sealing Compound, Polysulfide (T) Synthetic Rubber for Integral Fuel Tank and Fuel Cell Cavities Low Density (1.20 to 1.35 sp gr), for Intermittent Use to 360 Degrees F (182 Degrees C)	(Superseded by: SAE AMS-3281 G)



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AMS-3374	G	Sealing Compound, Firewall	
AMS-G-4343	Superseded	Grease, Pneumatic System	(Superseded by: SAE-AMS-G-4343 A)
AS8660	CANCELLED	Silicone Compound, NATO Code Number S-736	Last Revision (A)
ASTM-D-4000	23	Standard Classification System for Specifying Plastic Materials	
ASTM-D6576	20	Rubber, Cellular, Chemically Blown	
ASTM-E2016	22	Standard Specification for Industrial Wire Cloth and Screens (Square Opening Series)	
ASTM-B488	A	Standard Specification for, Electrodeposited Coatings of Gold for Engineering Uses	
DOD-G-85733	A	Grease, High Temperature, Catapult System	
DOD-L-25681	Superseded	Lubricant, Molybdenum Disulfide, Silicone	(Superseded by: MIL-DTL-25681 F)
GL/PD 13-09A	A	Purchase Description, Pants, Unisex, Army, Physical Fitness Uniform	
IPC FC 241	Superseded	Flexible Metal-Clad Dielectrics for Use in Fabrication of Flexible Printed Wiring	(Superseded by: IPC-4204)
IPC-MF-150F	Superseded	Metal Foil for Printed Wiring Boards	(Superseded by: IPC 4562 A)



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IPC-SM-817	A	General Requirements for Dielectric Surface Mounting Adhesives	
IPC-SM-840	E	Qualification and Performance of Permanent Solder Mask	
MIL-PRF-16173	E	Corrosion Preventative Compound, Solvent Cutback, Cold-Application	
AMS-C-27725	Superseded	COATING, INTEGRAL FUEL TANK CORROSION PROTECTION	(Superseded by: SAE-AMS-C-27725)
MIL-DTL-5541	F	Chemical Conversion Coatings on Aluminum and Aluminum Alloys	
MIL-C-882	Superseded	Cloth, Duck, Cotton or Cotton-Polyester Blend, Synthetic Rubber, Impregnated, and Laminated, Oil Resistant	(Superseded by: MIL-STD882 E)
MIL-DTL-83420	E	Wire Rope, Flexible, for Aircraft Control	
MIL-G-21164	D	Grease, Molybdenum Disulfide, For Low and High Temperatures, NATO Code Number G-353	
MIL-PRF-23827	C	Grease, Aircraft and Instrument, Gear and Actuator Screw, NATO Code Number G-354	
MIL-I-16923	H	Insulating Compound, Electrical, Embedding, Epoxy	
MIL-L-23398	D	Lubricant, Solid Film, Air-cured, Corrosion Inhibiting, NATO Code Number S-749	
MIL-M-24519	E	Molding Plastics, Electrical, Thermoplastic	





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MIL-PRF-10924	H	Grease, Automotive and Artillery	
MIL-PRF-14107	D	Lubricating Oil, Weapons, Low Temperature	
MIL-PRF-22750	G	Coating, Epoxy, High-Solids	
MIL-PRF-23586	Superseded	Sealing Compound (With Accelerator), Silicone Rubber, Electrical	(Superseded by: QPL-23586)
MIL-PRF-27617	G	Grease, Aircraft and Instrument, Fuel and Oxidizer Resistant	
MIL-PRF-46010	F	Lubricant, Solid Film, Heat Cured, Corrosion Inhibiting	
MIL-PRF-6085	F	Lubricating Oil: Instrument, Aircraft, Low Volatility	
MIL-PRF-6086	F	Lubricating Oil, Gear, Petroleum Base	
MIL-PRF-7808	M	Lubricating Oil, Aircraft Turbine Engine, Synthetic Base	
MIL-PRF-81322	G	Grease, Aircraft, General Purpose, Wide Temperature Range	
MIL-PRF-83282	D	Hydraulic Fluid, Fire Resistant, Synthetic Hydrocarbon Base, Metric, NATO Code Number H-537	
MIL-PRF-83483	E	Thread Compound, Antiseize, Molybdenum Disulfide-Petrolatum	



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MIL-PRF-85285	F	Coating, Polyurethane, High Solids	
MIL-DTL-25988	D	Rubber, Fluorosilicone Elastomer, Oil - and Fuel - Resistant, Sheets, Strips, Molded Parts, and Extruded Shapes	
MIL-PRF-6855	A	Elastomer, Synthetic, Sheets, Strips, Molded or Extruded Shapes, General Specification for	
MIL-R-83248	C	Rubber, Fluorocarbon Elastomer, High Temperature, Fluid and Compression Set Resistant	(Superseded by: SAE AMS-7276, SAE AMS-7259, SAE AMS-3216, and SAE AMS-3218)
MIL-W-5625	K	Webbing, Textile, Nylon, Tubular	
NAS-M21266	3	Grommet, Plastic, Edging	
VT 295	Superseded	Thread, Nylon	(Superseded by: A-A-59826 Rev A)
VV P 236	A	Petrolatum Technical	



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MIL-A-8625	F	Anodic Coatings for Aluminum and Aluminum Alloys	
MIL-C-26074	D	Nickel Plating-Electroless	
MIL-C-8837	Cancelled	Cadmium Plating, Vacuum Deposited	(Superseded by: SAE-AMS-C-8837 A)
MIL-S-13165	Cancelled	Shot Peening of Metal Parts, Engineering and Inspection Requirements	(Superseded by: AMS-2430 U)
MIL-STD-130	N	DEPARTMENT OF DEFENSE STANDARD PRACTICE IDENTIFICATION MARKING OF U.S. MILITARY PROPERTY	
MIL-DTL-5541	F	CHEMICAL CONVERSION COATINGS ON ALUMINUM AND ALUMINUM ALLOYS	
MIL-STD-186/404	F	PROTECTIVE FINISHING SYSTEMS FOR ROCKETS, GUIDED MISSILES, SUPPORT EQUIPMENT AND RELATED MATERIALS	
MIL-DTL-53022	F	PRIMER, EPOXY COATING, CORROSION INHIBITING LEAD AND CHROMATE FREE	
ASTM E 1004	17	Standard Test Method for Determining Electrical Conductivity Using the Electromagnetic (Eddy Current) Method	
ASTM E1417	M 2021	Standard Practice for Liquid Penetrant Testing	
AMS-STD-595	A	Colors Used in Government Procurement	
AMS-STD-2154	A	Inspection, Ultrasonic, Wrought Metals, Process For	
AMS 2486	F	Conversion Coating of Titanium Alloys Fluoride- Phosphate Type	
AMS-QQ-N-290	U	Nickel Plating, Electrolytic	



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TT-C-490	J	CHEMICAL CONVERSION COATINGS AND PRETREATMENTS FOR METALLIC SUBSTRATES (BASE FOR ORGANIC COATINGS)	
SAE AMS 2801	D	Heat Treatment of Titanium Alloy Parts	
QQ-P-35	Cancelled	Passivation Treatments for Corrosion Resistant Steels	(Superseded by: AMS-2700 F)
AMS 2700	F	Passivation of Corrosion Resistant Steels	
AMS 2750	H	PYROMETRY	
AMS-QQ-P-416	G	Cadmium Plating (Electrodeposited)	
PM-5010	N	PACKAGING, LABELING AND SHIPPING GUIDELINES	
<b>Not for New/Revised Designs</b>			
LMA-PA019	Cancelled	Carbon and Alloy Steels, Heat Treatment and Processing of (Below 220 KSI)	Process in accordance with QCS-001