

Gulfstream

A GENERAL DYNAMICS COMPANY

July 24, 2019

Kevin Billington
Pacific Metallurgical, Inc.
925 5th Ave. S., Kent WA, 98032

Subject: Supplier Approval

Kevin,
Gulfstream Aerospace Corporation Quality Assurance is pleased to inform you that your Quality System has been APPROVED.

The scope of your approval will be for the attached process list.

Future audits of your facility will be at the discretion of our Quality Assurance department based upon your performance and our Quality requirements.

This approval will remain in effect until July 24, 2022 unless rescinded by Gulfstream.

Regards,



Andy Williams
Supplier Quality Engineer
Gulfstream Aerospace Corporation
Phone: 912-251-6750

Gulfstream

A GENERAL DYNAMICS COMPANY

Approval Of Supplier

Gulfstream is pleased to grant its approval to

Pacific Metallurgical, Inc.

as a supplier of material, parts, and/or services. This approval is given after a complete survey and examination of the Quality Control/Assurance organization has been accomplished. You are approved to provide to Gulfstream the various categories of material, parts, and/or services as listed below:

Heat Treating

This approval is given subject to your continued compliance with Gulfstream Supplier Quality Assurance Requirements as defined by contract.

EXPIRATION DATE July 24, 2022



GULFSTREAM
QUALITY ASSURANCE DEPARTMENT
P O BOX 2206
SAVANNAH, GEORGIA 31402-2206



SUPPLIER NAME: Pacific Metallurgical, Inc.

SURVEY DATE: 07/24/19

SUPPLIER CODE: 1014143

AUDITOR: Andy Williams

PERM #: 320895

RISK LEGEND	
Records 33%	
On Site 57% + Records 33%	
On Site 100%	

APPROVAL LIST

GAF 14A CODE PROCESS FINISH	PROCESS DESCRIPTION	GAMPS, ETC.	INDUSTRY SPECIFICATION	APPROVALS (Y)		COMMENTS/ VALIDATION
				NADCAP	GAC	
HEAT TREAT						
BT	HEAT TREATING OF LOW ALLOY STEEL, ≥ 125 KSI	GAMPS 5101	AMS 2759/1	Y	Y	
BU	HEAT TREATING OF LOW ALLOY STEEL, ≥ 150 KSI	GAMPS 5101	AMS 2759/1	Y	Y	
BV	HEAT TREATING OF LOW ALLOY STEEL, ≥ 165 KSI	GAMPS 5101	AMS 2759/1	Y	Y	
BW	HEAT TREATING OF LOW ALLOY STEEL, ≥ 180 KSI	GAMPS 5101	AMS 2759/1	Y	Y	
BY	HEAT TREATING OF LOW ALLOY STEEL, ≥ 200 KSI	GAMPS 5101	AMS 2759/1	Y	Y	
BZ	HEAT TREATING OF LOW ALLOY STEEL, ≥ 220 KSI	GAMPS 5101	AMS 2759/2	Y	Y	
CA	HEAT TREATING OF LOW ALLOY STEEL, ≥ 240 KSI	GAMPS 5101	AMS 2759/2	Y	Y	
CB	HEAT TREATING OF LOW ALLOY STEEL, ≥ 260 KSI	GAMPS 5101	AMS 2759/2	Y	Y	
CC	HEAT TREATING OF LOW ALLOY STEEL, ≥ 280 KSI	GAMPS 5101	AMS 2759/2	Y	Y	
GS	NORMALIZING OF STEEL	GAMPS 5101	AMS 2759/1	Y	Y	
CN	ANNEALING OF WROUGHT 17-4 PH & 15-5 PH CRES ≤ 185 KSI	GAMPS 5102	MIL-H-6875, COND A	Y	Y	
CV	ANNEALING OF PRECIPITATION HARDENING CRES, 17-7 PH ≤ 150 KSI	GAMPS 5102	AMS 2759/3, COND A	Y	Y	
CY	ANNEALING OF PRECIPITATION HARDENING CRES, PH 15-7 MO ≤ 150 KSI	GAMPS 5102	AMS 2759/3, COND A	Y	Y	
CP	HEAT TREATING OF PRECIPITATION HARDENING CRES, 17-4 PH & 15-5 PH ≥ 170 KSI	GAMPS 5102	AMS 2759/3, H 925	Y	Y	
CR	HEAT TREATING OF PRECIPITATION HARDENING CRES, 17-4 PH & 15-5 PH ≥ 195 KSI	GAMPS 5102	AMS 2759/3, H 1025	Y	Y	
CS	HEAT TREATING OF PRECIPITATION HARDENING CRES, 17-4 PH & 15-5 PH ≥ 145 KSI	GAMPS 5102	AMS 2759/3, H 1075	Y	Y	
CT	HEAT TREATING OF PRECIPITATION HARDENING CRES, 17-4 PH & 15-5 PH ≥ 135 KSI	GAMPS 5102	AMS 2759/3, H 1150	Y	Y	
CU	HEAT TREATING OF STEEL, PRECIPITATION HARDENING, ≥ 190 KSI	GAMPS 5102	SAE-AMS-H-6875	Y	Y	
CW	HEAT TREATING OF PRECIPITATION HARDENING CRES, 17-4 PH ≥ 180 KSI	GAMPS 5102	AMS 2759/3, H 1050	Y	Y	
CZ	HEAT TREATING OF PRECIPITATION HARDENING CRES, 17-4 PH ≥ 240 KSI	GAMPS 5102	AMS 2759/3, CH 900	Y	Y	
DA	HEAT TREATING OF PRECIPITATION HARDENING CRES, 17-4 PH ≥ 150 KSI	GAMPS 5102	AMS 2759/3, TH 1100	Y	Y	
DB	HEAT TREATING OF PRECIPITATION HARDENING CRES, 15-5 PH & 15-7 MO ≥ 190 KSI	GAMPS 5102	AMS 2759/3	Y	Y	
DE	HEAT TREATING OF PRECIPITATION HARDENING CRES, PH 13-8 MO ≥ 205 KSI	GAMPS 5102	AMS 2759/3, H 1000	Y	Y	
DF	HEAT TREATING OF PRECIPITATION HARDENING CRES, PH 13-8 MO ≥ 185 KSI	GAMPS 5102	AMS 2759/3, H 1025	Y	Y	
DK	HEAT TREATING OF PRECIPITATION HARDENING CRES, A-286, COND STA	GAMPS 5102	AMS 2759/3, AMS 9525, & AMS 5895	Y	Y	
DL	HEAT TREATING OF PRECIPITATION HARDENING CRES, A-286, COND STA	GAMPS 5102	AMS 2759/3 & AMS 5734	Y	Y	
HT	HEAT TREATING OF PRECIPITATION HARDENING CRES, 17-4 PH & 15-5 PH ≥ 1100, ≥ 140 KSI	GAMPS 5102	AMS 2759/3	Y	Y	
BJ	HEAT TREATING OF MARTENSITIC CRES, ≥ 125 KSI	GAMPS 5103	AMS 2759/5	Y	Y	
BK	HEAT TREATING OF MARTENSITIC CRES, ≥ 180 KSI	GAMPS 5103	AMS 2759/5	Y	Y	
BL	HEAT TREATING OF MARTENSITIC 431 CRES	GAMPS 5103	AMS 2759/5	Y	Y	
BM	HEAT TREATING OF MARTENSITIC 420 CRES, ≥ 240 KSI	GAMPS 5103	AMS 2759/5	Y	Y	
BN	HEAT TREATING OF MARTENSITIC (440C) CRES, 55-60 HRC	GAMPS 5103	AMS 2759/5	Y	Y	
BP	HEAT TREATING OF MARTENSITIC (440C) CRES, 59-62 HRC	GAMPS 5103	AMS 2759/5	Y	Y	
AHT	HEAT TREATING OF AUSTENITIC CRES	GAMPS 5104	AMS 2759/4	Y	Y	
SVD	DIMENSIONAL STABILIZATION OF AUSTENITIC CRES	GAMPS 5104		Y	Y	
BC	NITRIDING OF STEEL		AMS 2759/6	Y	Y	
GC	NITRIDING OF NITRALLOY N, CASE HARDNESS 90 HR 15-N MINIMUM, CORE STRENGTH ≥ 190 KSI		AMS 2759/6	Y	Y	
GP	NITRIDING OF STEEL, CASE HARDNESS 92 HR 15-N MINIMUM, CORE STRENGTH, ≥ 135 KSI		AMS 2759/6	Y	Y	
AH	HEAT TREAT OF ALUMINUM ALLOY 7075 TO T73, T7351, T7352, & T73511	GAMPS 5106	AMS 2770	Y	Y	
ALH	HEAT TREATMENT OF ALUMINUM ALLOY	GAMPS 5106	SAE-AMS-H-6088	Y	Y	
T6	HEAT TREATMENT OF ALUMINUM ALLOY TO T6	GAMPS 5106	AMS 2770 or AMS 2771	Y	Y	
T7	HEAT TREATMENT OF ALUMINUM ALLOY TO T7	GAMPS 5106	AMS 2770 or AMS 2771	Y	Y	
T8	HEAT TREATMENT OF ALUMINUM ALLOY TO T8	GAMPS 5106	AMS 2770	Y	Y	
T42	HEAT TREATMENT OF ALUMINUM ALLOY TO T42	GAMPS 5106	AMS 2770	Y	Y	
T61	HEAT TREATMENT OF ALUMINUM ALLOY 7475 TO T61	GAMPS 5108	AMS 2770	Y	Y	
T62	HEAT TREATMENT OF ALUMINUM ALLOY TO T62	GAMPS 5108	AMS 2770	Y	Y	
T71	HEAT TREATMENT OF ALUMINUM ALLOY TO T71	GAMPS 5108	AMS 2771	Y	Y	
T73	HEAT TREATMENT OF ALUMINUM ALLOY TO T73	GAMPS 5108	AMS 2770 or AMS 2771	Y	Y	
T74	HEAT TREATMENT OF ALUMINUM ALLOY TO T74	GAMPS 5108	AMS 2770 or AMS 2771	Y	Y	
T76	HEAT TREATMENT OF ALUMINUM ALLOY TO T76	GAMPS 5108	AMS 2770 or AMS 2771	Y	Y	
T81	HEAT TREATMENT OF ALUMINUM ALLOY TO T81	GAMPS 5108	AMS 2770	Y	Y	
T87	HEAT TREATMENT OF ALUMINUM ALLOY TO T87	GAMPS 5108	AMS 2770	Y	Y	
T732	HEAT TREATING & STRETCH STRESS RELIEVING OF ALUMINUM ALLOY 7075 THIN GAUGE EXTRUSIONS (< 0.062") TO T732	GAMPS 5108	AMS 2770	Y	Y	
T761	HEAT TREATING OF ALUMINUM ALLOY 7475 TO T761	GAMPS 5108	AMS 2770	Y	Y	
T762	HEAT TREATING OF ALUMINUM ALLOY TO T762	GAMPS 5108	AMS 2770	Y	Y	
T852	HEAT TREATING OF ALUMINUM ALLOY TO T852	GAMPS 5108	AMS 2770	Y	Y	
T8510	HEAT TREATING OF ALUMINUM ALLOY TO T8510	GAMPS 5108	AMS 2770	Y	Y	
T8511	HEAT TREATING OF ALUMINUM ALLOY TO T8511	GAMPS 5108	AMS 2770	Y	Y	
T76511	HEAT TREATING OF ALUMINUM ALLOY TO T76511	GAMPS 5108	AMS 2770	Y	Y	
BCB	HEAT TREATING OF BERYLLIUM/BERYLLIUM-COPPER		SAE-AMS-H-7199	Y	Y	
THT	HEAT TREATING OF TITANIUM & ITS ALLOYS, SOLUTION TREATED	GAMPS 5105	AMS 2801			
HIP	HOT ISOSTATIC PRESSING (HIP) OF CASTINGS	GAMPS 5111				
AFE	AGE FORMING OF ALUMINUM ALLOY PARTS, 7075-T6511 EXTRUSION AGED TO 7075-T73511	GAMPS 5129				
AFP	AGE FORMING OF ALUMINUM ALLOY PARTS, 7075-T6511 PLATE AGED TO 7075-T7351	GAMPS 5129				