

Gulfstream

A GENERAL DYNAMICS COMPANY

March 11, 2017
Element Materials Testing
3100 N Hemlock Circle
Broken Arrow, OK 74012

Subject: Gulfstream Aerospace Supplier Approval

Mr. Monos,

Gulfstream Aerospace Corporation Quality Assurance is pleased to inform you that your Quality System has been APPROVED. A survey/audit of your facility has been completed and your Quality System meets or exceeds Gulfstream Aerospace requirements.

The scope of your approval will be for Materials Testing. Your Gulfstream approval incorporates the following process codes as applicable.

PROCESS CODE	FINISH CODE	PROCESS	SPECIFICATIONS
		Material Test Chemical	Industry Standards
		Material Test Metallographic	Industry Standards
		Material Test Physical	Industry Standards
		Material Test Spectrographic	Industry Standards
		Salt Spray	ASTM B117
		Material Test Non Metallic	Industry Standards

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This approval will remain in effect until March 10, 2020 unless rescinded by Gulfstream.

Sincerely,

Ty Garland

Ty Garland

Supervisor, Supplier Quality

Gulfstream Aerospace

A GENERAL DYNAMICS COMPANY

**SUPPLIER SYSTEM SURVEY
To SQAR-0003**

Supplier Code _____
Supplier Category _____
Supplier Function _____

Gulfstream Aerospace Corporation
P.O. Box 2206 Savannah, Georgia 31402-2206
Telephone: (912) 965-3000 Fax: (912) 965-4210

Audit Date: 02/22/19	Supplier Name: Element Broken Arrow
----------------------	-------------------------------------

Street Address 3100 N. Hemlock Circle	Phone 918-258-6066
---------------------------------------	--------------------

Mailing Address 3100 N. Hemlock Circle	Fax 918-258-1154
----------------------------------------	------------------

City/State Broken Arrow, Oklahoma	Zip Code 74012
-----------------------------------	----------------

Subsidiary Of: Element Materials Technology <input type="checkbox"/> <input type="checkbox"/>	Regulatory Certificate (Type & No.) None
--------------------------------------------------------------------------------------------------	---------------------------------------------

Type Audit Initial <input type="checkbox"/> Periodic <input checked="" type="checkbox"/>	Total Facility Area: (No. of Bldgs. & Sq. Ft.) One Building - 20,000 Sq. Ft.
----------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------

Years in Business 72	Years of Aerospace 19	% Work Subcontracted N/A	Total No. Employees/Prod. 36/25	Q.C. Employees 2	Ratio of Q.C./Prod. 12.5 to 1
-------------------------	--------------------------	-----------------------------	------------------------------------	---------------------	----------------------------------

Supplier Personnel Contacted: Name & Title Gil Monos QA Manager

E-mail Address gil.monos@element.com

Supplier Quality Signature **Gil Monos**
Digitally signed by Gil Monos
DN: cn=Gil Monos, o=Element Broken Arrow,
ou, email=gil.monos@element.com, c=US
Date: 2019.02.22 09:55:03 -0500

GAC USE ONLY

SURVEY STATUS

Approved Conforms to requirements. Procedures and controls exist to control the product or service quality.
Resurvey Date _____

Unapproved Does not conform to requirements, does not intend to revise to conform.
PG _____ Item _____

Conditional - Minor discrepancies noted, but supplier agrees to take action to bring areas to an acceptable level.
Resurvey (Date) _____

GAC USE ONLY

Form Reviewed By _____ Date _____
Quality Assurance Representative Empl. No. _____

Approved By _____ Date _____
Quality Assurance Supplier Control Empl. No. _____

Gulfstream Testing Matrix

Gulfstream Test Code	Test Description	EBA Procedure	EBA Nadcap Test Code
Material Test Spectrographic (Industry Standards)	Atomic Emission Spectroscopy-Spark/Ark (OES)	C223	F3
Material Test Chemical (Industry Standards)	Elemental Analysis Carbon	C205	G1
	Elemental Analysis-Sulfur	C205	G5
Salt Spray ASTM B117	Corrosion-General	B201	Q
Material Test Metallographic (Industry Standards)	Metallography-General	B213	L0
	Microhardness-Interior (Knoop/Vickers)	B208	L1
	Near Surface Examinations Microhardness (Surface – Knoop/Vickers)	B208	L5
	Nitriding	B220	L6
	IGA/IGO	B214	L7
	Carburization/Decarburization	B212	L10
	Grain Size	B218	L11
	Inclusions	B204	L12
	Metallography-Macro	B205	XL
Material Test Physical (Industry Standards)	Room Temperature Tensile	A201	A
	Impact Testing	A202	N
	Bend Testing	A203	XN
	Hardness - Brinell	A204	M1
	Hardness - Rockwell	A200	M2
	Hardness - Vickers (Macro)	B208	M3
Material Test Non-Metallics (Industry Standards)	A2LA Mechanical and Chemical Scopes	Various ASTM Test Methods	N/A