

#### **Capabilities**

lightcomposites.net hello@lightcomposites.net 858.204.8880







## Who are we?

- Light Composites is a San Diego based carbon composites manufacturer serving the:
  - consumer products,
  - medical device, and
  - aerospace industries.
- We specialize in:
  - mold making,
  - pre-preg, compression and bladder molding,
  - product development,
  - rapid prototyping, and
  - CAD/CAM/CAE/FEA.





# Third Party Accreditations



### AS9100D QMS Compliant: Certificate #1665

- International Standards Authority, Inc. is accredited by the ANSI-ASQ National Accreditation Board (ANAB)
- ISO9001:2015 QMS Compliant: Certificate #1665
  - International Standards Authority, Inc. is accredited by the ANSI-ASQ National Accreditation Board (ANAB)
- Joint Certification Program (JCP)
  - Defense Logistics Agency
- International Traffic in Arms (ITAR) Registered
  - Registration #M39238









#### **ISA (ANAB Accredited Registrar)**



#### **Certificate of Registration**

This is to certify that the Quality Management System of

#### **Light Composites**

11880 Community Road, Ste 350 Poway, CA 92064 (Single Site Structure)

has been assessed for conformance with the provisions set forth by

ISO 9001:2015 AS9100D

#### Scope of Registration

Manufacturer of composite molds and structural components for medical, aerospace, and consumer industries.

The assessment was performed in accordance with the requirements of the latest version of AS9104 /1:2012-01 ISA is accredited under the ICOP Scheme

Certificate No. 1665 Issue Date: 04/24/2018 Expiration Date: 04/23/2021 Certified since April 24, 2018



The conditions for maintaining this certificate of registration are set forth in ISA's Registration Policies 5.1. This registration is granted subject to the organization maintaining compliance to the noted standard. The validity of this certificate is dependent upon ongoing surveillance audits.



President Language John

International Standards Authority, Inc.

www.isaregistrar.com 525 Queensland Cir. Corona, CA 92879. USA Tel: 951-736-0035

#### **U.S. Department of State**



United States Department of State

Bureau of Political-Military Affairs Directorate of Defense Trade Controls Washington, D.C. 20522-0112

May 3, 2018

Michael Slocum, VP Light Composites 11880 Community Road Ste 350 Poway, CA 92064 MICHAEL@LIGHTCOMPOSITES.NET

REGISTRANT CODE: M39238 EXPIRATION DATE: 05/31/2019

Reference: Manufacturer Registration Statement and Fee Submission

Dear Mr. Slocum:

The Office of Defense Trade Controls Compliance received your registration statement and fee to register as a manufacturer. We have reviewed your registration statement and your registration code is M93238, which expires on 05/31/2019.

Any person who engages in the United States in the business of either manufacturing or exporting defense articles or furnishing defense services is required to register and keep that registration current with this office pursuant to the Arma Export Control Act (AECA) and the International Traffic in Arms Regulations (ITAR Part 122). Registration serves as a precondition to submitting an application for an export license or other approval from the Directorate of Defense Trade Controls (DDTC), or to use export exemptions. This registration does not satisfy the requirements for registering as a broker pursuant to ITAR Part 129.

As you are the senior officer empowered to sign the registration statement, we ask you to maintain records consistent with ITAR Section 122.5 regarding: 1) The key senior officer listed on the registration who will oversee the compliance program and be responsible for designating the direct employees who will serve as "empowered officials" at their place of employment, and 2) A list of qualified, direct employees who will serve as "empowered officials" by name, position, business unit, phone and fax numbers and email addresses. Please note that third parties (individuals who are not direct employees, such as consultants, subcontractors or outside counsel, for example) cannot serve as "empowered officials."

ITAR Section 122.5 requires you to maintain records concerning your registration and the manufacture, acquisition and disposition of defense articles; the provision of defense services; and information on political contributions, fees, or commissions furnished or obtained, as required by TTAR Part 130. Records maintained shall be available at all times for inspection and copying by this office or by Customs officials. To maintain such records, managers,

#### **Defense Logistics Agency**



Subject: Approved Militarily Critical Technical Data Agreement, DD Form 2345

#### To Whom It May Concern:

Your application for certification under the United States/Canada Joint Certification Program (JCP) as been ACCEPTED. Along with this approval letter a copy of the APPROVED DO Form 2345 has been attached to your approval entermal. Your entity's certification number that has been assigned is shown in Block 7b on the attached form. This certification is valid for a five veen revioled with the excitation date shown in Block 7c.

74 Washington Ave N

Battle Creek, Michigan 49037

All future requests for Unclassified DoD Export Controlled Militarily Critical Technical Data or requests for Directly Arranged Visits (DAV) initiated by your facility must be accompanied by a copy of your facilities approved DD Form 2345 and a statement of intended data use.

NOTE: The Joint Certification Program Office does not provide access to DoD Unclassified Export Controlled Militarily Critical Technical Data

To gain access to DoD Unclassified Export Controlled Militarily Critical Technical Data, you must register with the following agencies:

Federal Business Opportunities (FBO) office at 1-866-606-8220 <a href="https://www.fbo.gov/?s=main&mode=list&tab=list">https://www.fbo.gov/?s=main&mode=list&tab=list</a> and reference the request number 3537 to set up your Marketing Partner Identification Number (MPIN). The MPIN is your passworf for the drawings.

Certified contractors must submit a revised DD Form 2345 whenever information previously furnished becomes outdated; for example, name of company, new person designated as the Data Custodian, or if there is a change of address information. A fillable PDF version of a blank DD Form 2345 is available from the main web page of the <a href="https://dx.doi.org/10.1007/journal-new-pdf">JCP website</a>.

Please contact our office by email at <a href="mailto:JCP-Helpdesk@dla.mil">JCP-Helpdesk@dla.mil</a> should you have any questions concerning the Joint Certification Program. Please use <a href="mailto:JCP-ADMIN@dla.mil">JCP-ADMIN@dla.mil</a> for DD Form 2345 submissions and revisions.

If you have any other questions, DLA Customer Interaction Center (CIC) is available 24 hours a day, 7 days a week, including government holiday. Toll Free: 1-877-DLA-CALL (1-877-352-2255) or Email: diacontactenter@dla.mil

In closing, it is highly recommended that a copy of this letter and your approved DD Form 2345 be retained and kept in a safe place for future use.

#### Respectfully

U.S. / Canada Joint Certification Program Office Defense Logistics Agency Logistics Information Services J34

HDI Federal Center 74 Washington Ave North Battle Creek, MI USA 49037-3084

Web: <a href="http://www.dla.mil/HQ/InformationOperations/Offers/Products/LogisticsApplications/JCP.asp">http://www.dla.mil/HQ/InformationOperations/Offers/Products/LogisticsApplications/JCP.asp</a>

AS9100D: ISO9001:2015 ITAR: EAR JCP

## **Select Additional Compliances:**



Compliances

- REACH
- RoHS
- WEEE
- Convention 138 International Labour Organization
- CAL OSHA
- FED OSHA
- EPA
- Fully certified government contractor (CAGE: 83N19)

# **LIGHT**composites

## Capabilities

#### **Select Engineering and Prototyping Capabilities:**

- 100+ years of composites experience
  - Design
  - Manufacture
  - Business Development
  - Risk Assessment and Mitigation (Design, Manufacturing, Transfer)
- Dassault Systemes SolidWorks
- Autodesk Fusion 360 CAD/CAM/CAE/FEA
- Autodesk 2019 Product Design and Manufacturing Suite
- Rapid Prototype 3D Printing
- 3D Laser Scanning and Reverse Engineering

## **Select Manufacturing Technologies:**



Capabilities

- Compression Molding
- Bladder Molding
- Lay-up and Oven Cure
- Post-cure/molding machining
- Mold/mandrel machining (aluminum and stainless steel)
- Proprietary Over Molding Processes
- Mechanical Assembly

## **Select Composite Manufacturing Examples:**



Capabilities

Compression Molding





Bladder Molding





## Select Composite Mold and Machining Fixture Examples:



Capabilities









## **Select Inspection / Manufacturing Equipment:**



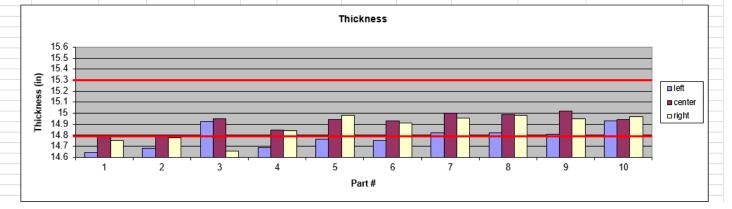
## Capabilities

- FARO Quantum S 2.5m 7 axis portable CMM with Laser Line HD capability
- 2016 Haas VF2 (30" X x 16" Y x 20" Z)
- 2017 Haas VF3SSYT (40" X x 26" Y x 25" Z)
- 2018 Haas HRT 310 4<sup>th</sup> Axis Rotary Table
- 2018 Eastman S125 Cutting Table
- 2 x 12" Wabash Heated Platen Presses
- 24" x 24" 80 ton Modern Machinery Hydraulic Heated Platen Press

#### **Quality: In-process and Final**

- In-process
  - Layup validation
  - Work instruction compliance validation
  - Validation of calibratable devices
- Final
  - Dimensional analysis using CMM
  - Traceability review
  - Compliance review
  - PO review
  - Limited shelf-life material(s) review (A/R)
  - Issue Certificate of Conformance

	175 1/3		Batch	Size:1	10							
Date	Part#	Weight in	Weight out	Resin loss	% Loss	Thickness I	Thickness c	Thickness R	Thickness L lap	Thickness R lap	Comments	Soak time
					1-3%							
	1	66.2			4.53%	14.647	14.785	14.751	7.34	7.5		0
	2	66	65.3	2.5	3.79%	14.681	14.798	14.78	7.361	7.527	change soak-new mater	r 45
	3	66.1	65.6	2.3	3.48%	14.921	14.952	14.657	7.606			60
	4	66.3	65.6	2.5	3.77%	14.69	14.846	14.841	7.41	7.596	jt	90
	5	66.2	65.9	2.1	3.17%	14.763	14.942	14.981	7.524	7.674	jt	120
	6	66	66.1	1.7	2.58%	14.75	14.931	14.913	7.457	7.719		120
	7	66.1	66.1	1.8	2.72%	14.822	15	14.956	7.49	7.701		150
	8	66.2	66.1	1.9	2.87%	14.825	14.988	14.984	7.542	7.72		150
	9	66.1	66.2	1.7	2.57%	14.812	15.017	14.948	7.587	7.719		150
	10	66.3	66.2	1.9	2.87%	14.932	14.946	14.969	7.673	7.726		150
	Average	66.2	65.8	2.1	3.2%	14.7843	14.9205	14.878	7.499	7.637		





## **Select Customers**















