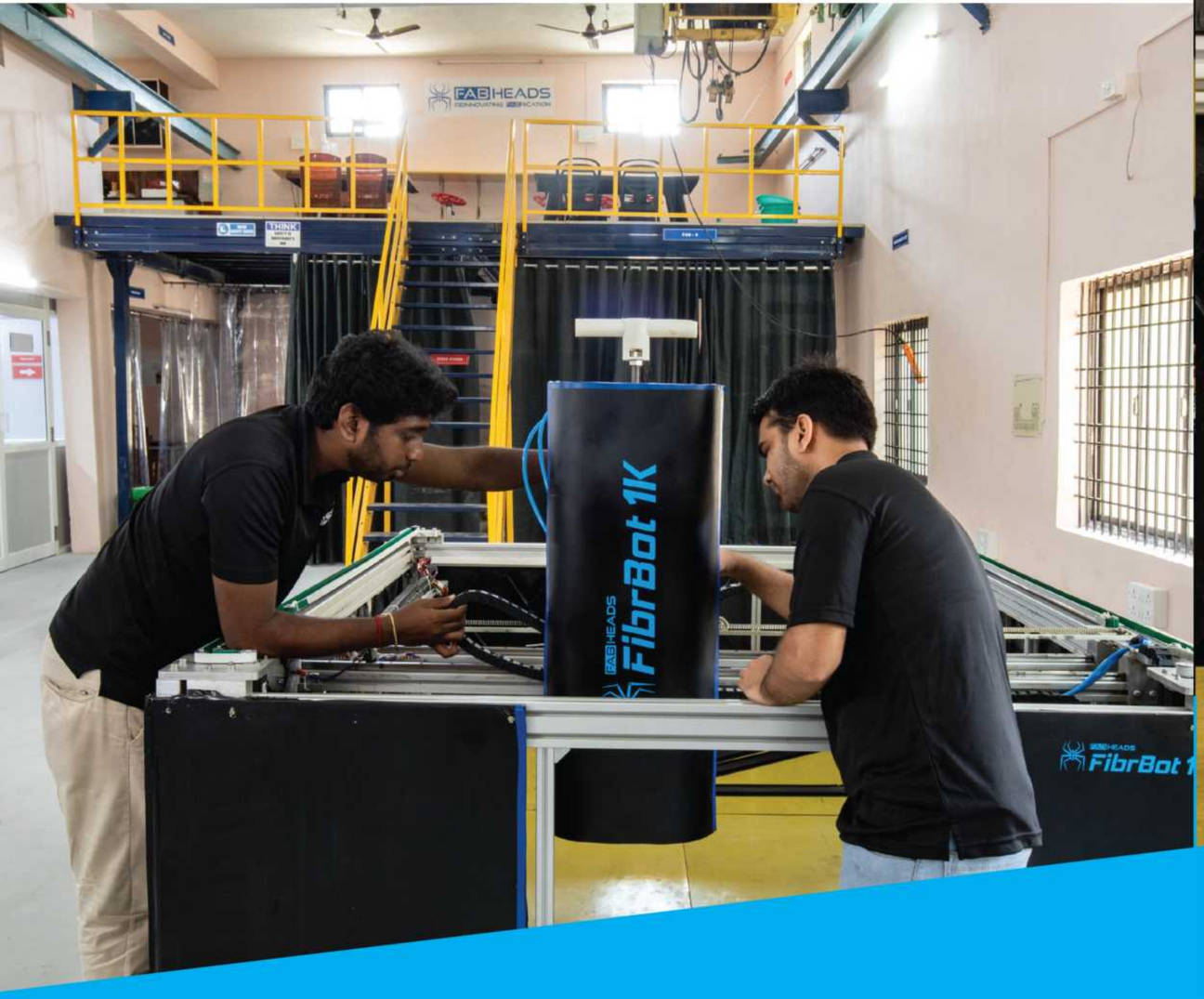
OFFERING COMPOSITE PART FABRICATION SOLUTIONS

FABHEADS

COMPANY PROFILE



The company offers composite part fabrication services to clients across Aerospace, Aviation, Auto, Defence, etc.

They largely differ from other composite part fabricators via their in-house developed "FibrBot" series of 3D printers giving them several additional capabilities.

Fabheads offers:
- Traditional layup based fabrication
- Automated / Semi-automated hybrid fabrication
- 3D Printing Fiber Composite materials
- Mold-free fabrication
- Newer designs that can be highly weight-optimised, not possible with traditional manufacturing
- Design collaboration

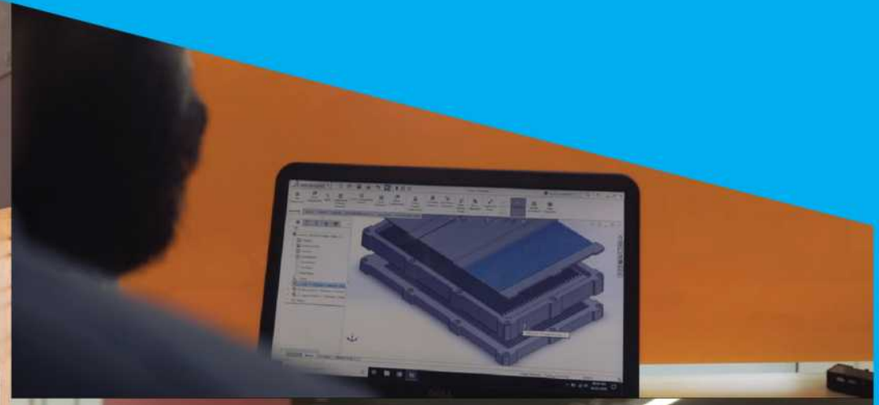
Thereby...
SMARTER, FASTER and ECONOMICAL fabrication

FABHEADS

ADVANCED COMPOSITES CENTRE

The facility houses:

FibrBot 300 - 2 units
FibrBot 300S - 3 units
FibrBot 1K - 1 unit
Dual Purpose Ovens - 2 units
Prepreg machines - 2 units
Layup Facility
R&D Center with CAD/CAM/FEM
Several smart human brains



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FibrBot 300

Specifications:

Build Volume	325x325x325 mm^3
Max. Chamber Temp	200°C

3D Printable Materials:

Fibers:	Matrix:
Glass	ABS
Carbon	Nylon
Kevlar	ULTEM
	PEEK
	Epoxy

Ideal Applications:

High performance components used across Aero, Space, Biomedical, etc. requiring high temperature materials.

FAB HEADS

FibrBot 300s

Specifications:

Build Volume	300x300x300 mm^3
Max. Chamber Temp	Room Temp

3D Printable Materials:

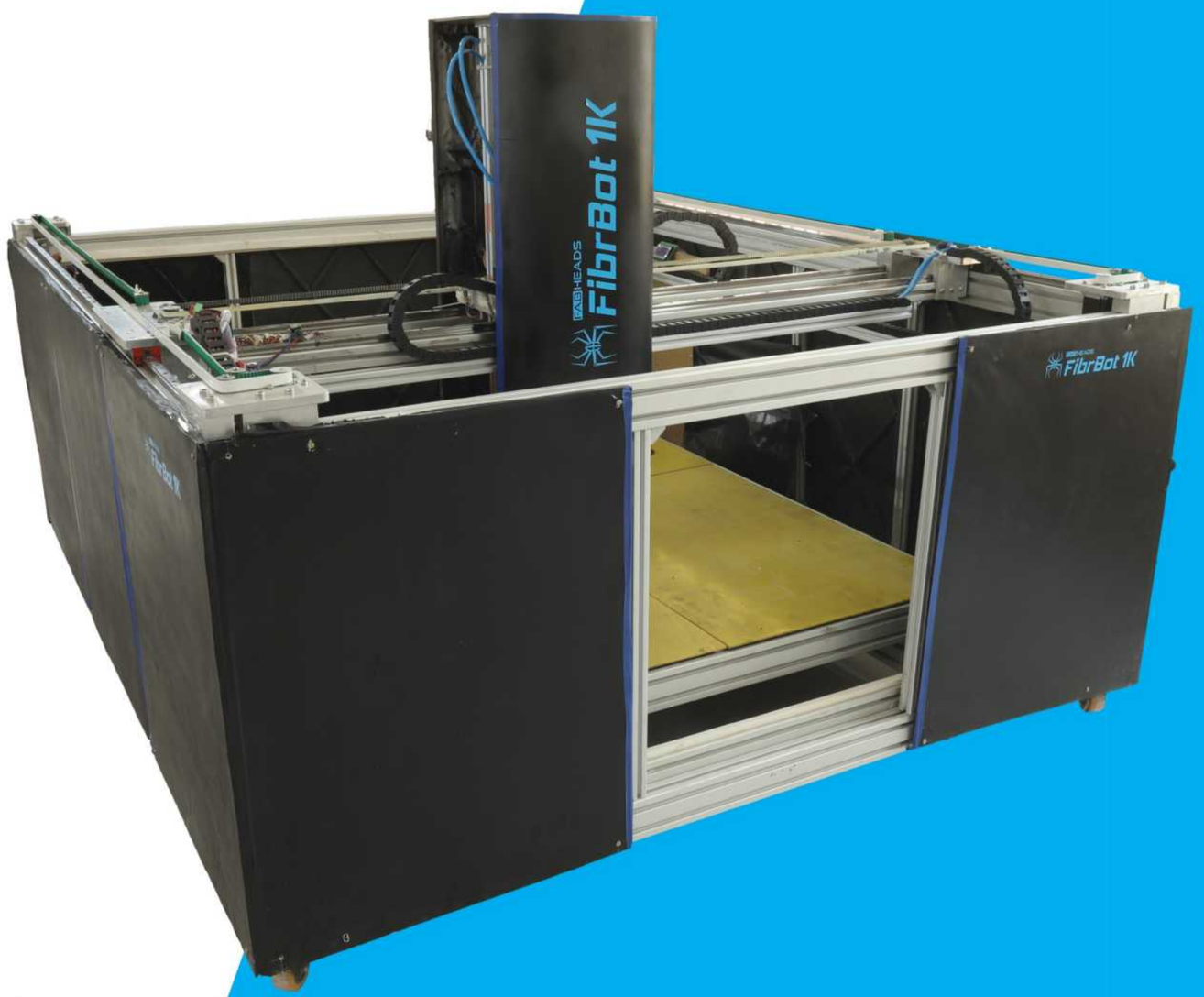
Fibers:	Matrix:
Glass	ABS
Carbon	Nylon
Kevlar	Epoxy

Ideal Applications:

Medium performance components not requiring high temperature materials.

FAB HEADS

FibrBot 1K



Specifications:

Build Volume 1500x1000x700 mm^3

Max. Chamber Temp Room Temp

3D Printable Materials:

Fibers:	Matrix:
Glass	ABS
Carbon	Nylon
Kevlar	Epoxy

Ideal Applications:

Larger sized parts like drones, bodyworks, mold fabrication, fixtures, jigs, etc.

Full sized Drones, Monocoque structures, Bodyworks, etc.

Drones, Aero, Space, etc.

Auto, Robotics, etc.

Fabheads offerings has several APPLICATIONS across different sectors

CASE STUDIES

Sandwich panels:

The panels shown here are pure all-composite sandwich panels with extremely high bending load capability with much reduced shear failure between interfaces compared with metal-composite sandwiches.

Fabricating Composite Molds:

Fabheads' Fiber 3D Printing is quite ideal for quickly 3D printing composite molds for any subsequent processing.

With good precision and fast turn around times, the whole fabrication process can be sped up many folds.

CASE STUDIES

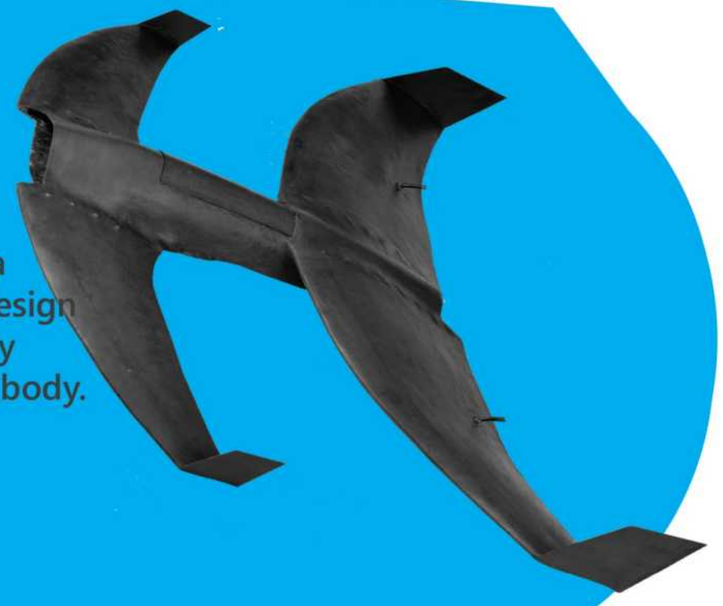
Composite-Metal Hybrids:

The gear shown here takes the same load as the pure metal one for one-third the weight.

The flange shown here can maintain leak proofing via its metal sealing surface, keeping weight to a minimum via the rest of carbon fiber area.

Drones:

Fabheads collaborated with a drone company right from design till fabrication in this uniquely designed monocoque drone body.



CASE STUDIES

Innovative designs:

The quadrotor frame here is designed keeping Fabhheads' fiber 3D Printing in mind.

The whole monocoque structure is made without using any mold

Structural Airframes:

The wing airframe shown here or a fuselage airframe is made using Fabheads fiber 3D Printer with high strength.

An easy layup can be done over such airframes to quickly fabricate strong wings / fuselage/etc.

CASE STUDIES

Satellites/Payload Boxes:

The structure shown here is designed as a casing for satellite components and similar designs can be made for battery/payload casings for drones, etc.

Bicycle Frame:

Bicycle frame and similarly loaded other truss structures with additional lightweighting requirements.

Besides technology, machines and everything, we believe it is the people who make up what a company is.

People at Fabheads are

Smart, experienced and extremely innovative!
Capable of various manufacturing processes for composite materials
Well experienced with CAD/CAM/FEM
Experience with Aerospace standards
Experienced in end-to-end product development

Fabheads' Recognitions

ICERP-JEC 2019 Award for "Outstanding Innovation in Composites"

Featured as one of the "Trailblazers of Indian Aerospace" in the book released by Indian Government in Aero India 2019

Awarded the "Top Startup in Manufacturing - Startupreneurs 2018" by Confederation of Indian Industries (CII)

How can Fabheads help you?

Fabheads can be your ->
Go-To Prototyping Partner
Manufacturing Partner
End-to-End Collaborator

Fabheads has assisted their clients starting from design to prototyping to scaling up. Feel free to reach out even if you are still in your ideation stage. We will be happy to help out!

Scan below to watch a quick teaser of our FibrBot 300 machine...

Scan below to watch a quick video on our Engineering Services offered..

FABHEADS

http://fabheads.in

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