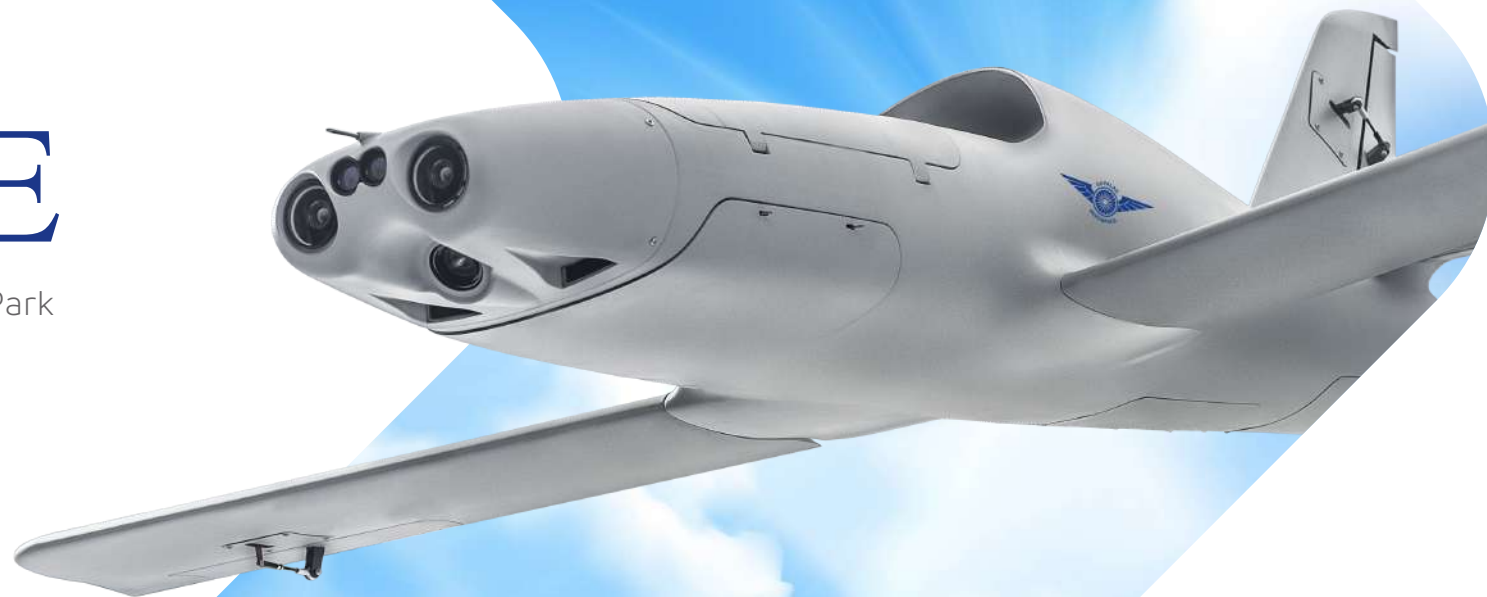




An Integrated Aerospace & Defence Park



Inspired by
Innovation
Built on **Trust**

www.gopalanaerospace.com



THE GOPALAN GROUP

Gopalan Enterprises, in the last four decades, has established itself as a standard of quality and trust. The company's commitment to innovation, integrity and customer's needs is reflected in its happy customers. Gopalan Group has a diverse multidomain portfolio that covers Property Development, Aerospace, Education, Hospitality and Organic Farming.

Our work our pride

A dynamic and diversified conglomerate, Gopalan Enterprises is celebrated for its broad portfolio and unwavering commitment to **excellence across multiple industries**. Established with a vision of innovation and quality, the group has made a lasting impact in sectors such as **residential, commercial, education, retail, aerospace, and hospitality**. Its success is driven by a strong foundation of integrity, customer-focused values, and an unyielding pursuit of delivering exceptional products and services.

Gopalan Enterprises remains a symbol of reliability, innovation, and dedication to transforming industries, communities, and lifestyles.

100+

Projects Built

6.0_{mn sqft}

Commercial Space

10K+

Residential Units

0.3_{mn Sqft.}

Aerospace

6.0_{Lakhs}

Workspace Community

120_{Acres}

Agricultural Development

2.0_{mn sqft}

Retail Space

5-Star 370_{Rooms}

Hospitality

Real Estate • Retail • Commercial • Aerospace • Hospitality • Educational Institutions • Cinemas • Hospitals



HEAVY
ENGINEERING

AEROSTRUCTURE

DRONE & UAV

PRECISION
COMPONENT
MACHINING &
SUB-ASSEMBLY

COMPOSITES
DIVISION

PROPOSED
C SCAN

SCAN TO
REACH

Plot No.6-B (Sy.No.85)
KIADB Industrial Area
Pillagumpe, Chokkahally
Village, Hoskote, Bengaluru,
Karnataka 562114





Gopalan Aerospace

Gopalan Aerospace is an innovative and value-driven company with expertise in Aerospace Design and Development comprising of multiple disciplines and technology recognized by Global Aerospace and Defence Companies.

Gopalan Aerospace is now recognised as one of states' top MSME'S by Economic Times due to its innovative growth and contribution to Indian Economy. The company specializes in Precision Machining for AeroSystems, Aerostructure, Sheet Metal Fabrication, Aerostructure Assembly, Testing and Prototyping of components.

Gopalan Aerospace's core business of Precision Machining of Aerostructures and Aerosystem components has a capacity of over one lakh machining hours/year. Facilities are equipped with state-of-the-art VMC, HMC, Turning Centres and FMS Machining capabilities that follow Robust Systems and processes approved by major OEMs and global Aerospace companies.

Gopalan Aerospace
awarded as the







Inspired by
Innovation
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Vision

Our vision is to build an Integrated Aerospace and Defence Park. A center of excellence aligned with our values, culture and greater purpose.



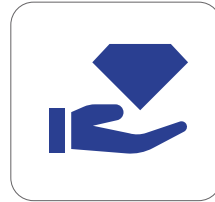
Mission

Gopalan Aerospace aims to provide one-stop-solution for all Aerospace and Defence needs of the customers by following industry best-practices to support the customers in terms of Quality, Delivery and Cost.



Purpose

To build a foundation of Trust and Innovation in the field of Aerospace and Defence needs of our country.



VALUES

We are empowered and act as
ONE LARGE FAMILY.
We together create and engage an inclusive
work environment that favours
well-being and trust.



We treat each other
with
RESPECT
and embrace diversity.



Our **RELIABILITY**
drives our core strength to
deliver
on time, quality and cost.



We partner with our
customers to enhance value
and deliver **SUSTAINABLE**
solutions.



We act with **INTEGRITY**
in all aspects of our business. We
hold ourselves to the highest ethical
standards and support a sustainable
future.

Divisions

Heavy Engineering

Robotic Welding, TIG-MIG Welding, Heavy Machinery, Component Machinery, Steel Sheet Rolling, High Pressure Testing.

Aerostructure

Sheet Metal Fabrication for both Ferrous and Non-Ferrous, TIG-MIG Welding, Lazer Cutting & Bending.

Precision Component Machining & Sub-assembly

CNC Machining 3 Axis to 5 Axis Components for Aerospace Applications.

Composites Division

Aerospace Composite Division is a Centre of Excellence for composites structures for Aerospace and defence.

Drone & UAV

Provides products and services to both the strategic and civilian sectors of Unmanned Aerial Systems (UAS) in areas such as Agriculture, Geospatial Survey, Logistics, Medical and Image Processing

Our Clients

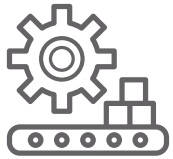
Gopalan Aerospace caters to a diverse set of customers across the Aerospace and Defence Industry.



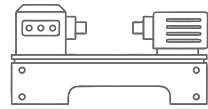
Indian Army



Capabilities



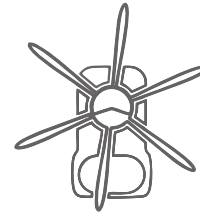
Tooling



**Conventional
Machining**



**CNC Milling
& Turning**



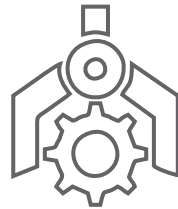
**Aerospace
Parts**



**Sub-assemblies
& Assemblies**



**Heavy
Fabrication**



**Heavy Parts
Manufacturing**



**Aerospace
Composites**



Build to Spec



Build to Print

Certifications

The certification is a testimony to our efforts to create a high-trust, highperformance organization. That we have received this recognition yet again speaks volumes about Gopalan Aerospace's core values of Transparency, Trust and Respect, which serve as our guiding star. The certifications are a tribute to the efforts that every employee has put in making us better every day and validates how we continue to stress on our organizational growth.

Gopalan Aerospace is an **AS 9100 Rev D & ISO 9001:2015** certified company.



Quality Assurance



- A strong foundation of Gopalan Aerospace has been the implementation of Aerospace and Defence Quality Management Systems and creating highly reliable quality culture with customer centricity.
- Implemented systems to understand our customer's requirements clearly and completely.
- For product design, development and industrialization, product quality plan is created involving cross functional teams, customers and suppliers as relevant.
- To give focused approach for each customer, organization is structured into customer specific Integrated Product Teams (IPT) with dedicated members from various functions as cross functional teams to meet customers' requirements in terms of quality, on-time delivery, and competitive cost throughout our business relationship.
- Product quality enhancement and sustenance through identification and implementation of right process and testing/inspection equipment and infrastructure.





Precision Component Machining & Sub-assembly

We are an AS 9100 Rev D and ISO 9001:2015 certified company with a good setup of Precision Manufacturing Facilities for the Aerospace and Defense sectors. We have modern infrastructure and machine-setup facilities like CNC Turning, Turn Mills, and VMC 3-axis to 5-axis. We have well-equipped inspection equipment, such as CMM, Height Master, Profile Projector, VMS and General Instruments, along with both destructive and non-destructive test facilities.





Products



Machinable materials include Aluminium, Stainless Steel, Mild Steel, Titanium, and Nylon.

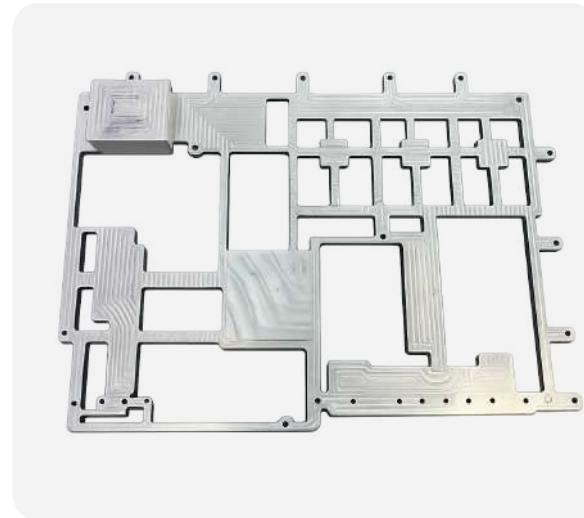
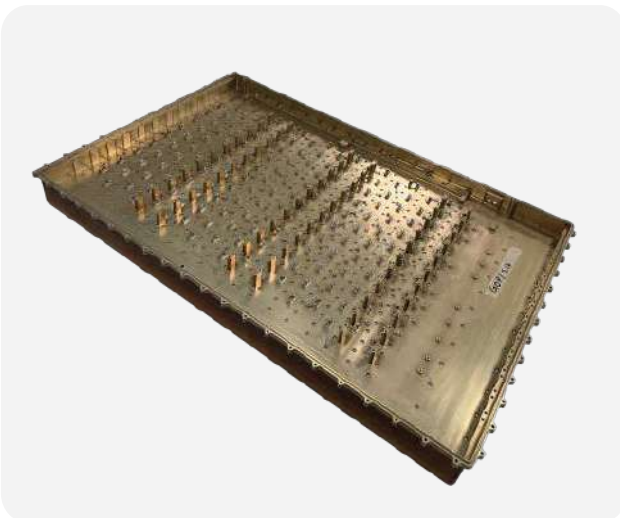
Few Glimpses



IFF ANTENNA



DOOR ASSEMBLY



Heavy Engineering

Our facility for Heavy Engineering consists of Plasma Cutting, Laser Cutting, Water Jet Cutting, Cnc Plano Milling Machine, Floor Boring Machine, Three Roll Mill, TIG, MIG and Robotic Welding. Our current defence projects are EDRC/RRC and transporters for IAF and DRDO. Our Heavy Engineering section comprises of good material handling facilities, qualified welders and engineering facilities.

Core business areas potential and capabilities comprising of - Nuclear Power – Manufacture of Machinery, Equipments & Components for Nuclear Power Plant, Decompression Chambers EDC- RRC, Windtunnels and Engineering Services.

Space – Manufacturer for ISRO and VSSC - Machinery for Satellite segment, Components for Satellites and Engineering services.





CINCINATI
MILACRON



GN2

CINCINATI
MILACRON

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MILACRON



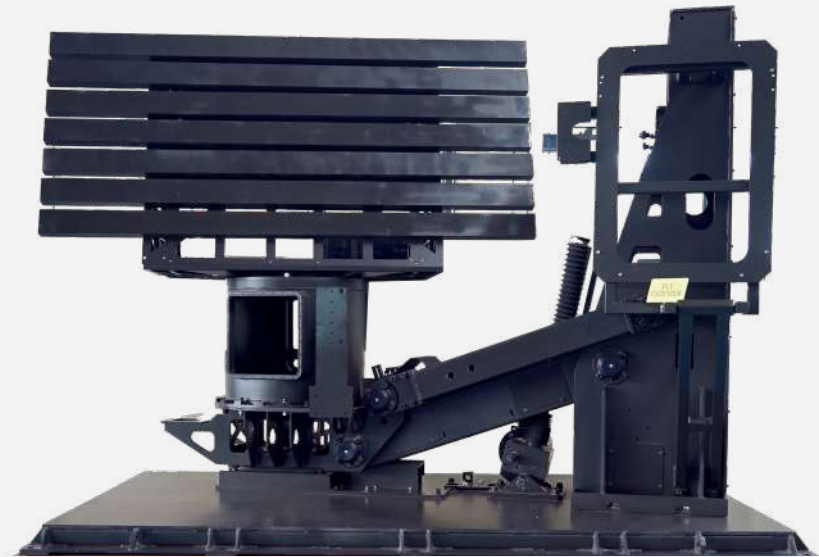
Products



ANTENNA PEDESTAL (7.5 M)



GUN STAND ASSEMBLY



FLY CATCHER



NOSE ASSEMBLY JIG



MMR RACK ASSEMBLY



MMR RACK ASSEMBLY



TRANSPORTER TO DRDO,
R&DE PUNE



EDC & RRC FOR INDIAN AIRFORCE

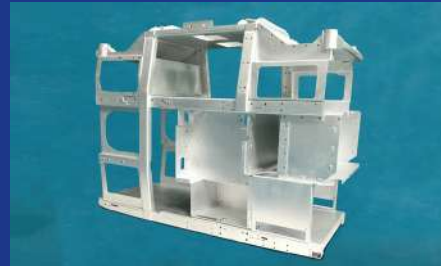


EDC & RRC FOR INDIAN AIRFORCE

Sheet Metal & Aerostructure

The Aerostructure business of Gopalan Aerospace produces sheet metal parts and assemblies for leading Global Aerospace and Defence Sectors. The facility is equipped with comprehensive capabilities to produce a variety of sheet metal components and assemblies. Current production emphasis is on soft alloys - aluminium and hard metals- titanium, Inconel, and steel.

The operating team at Gopalan Aerospace brings decades of industry experience honed through on-the-job training at our facility. Today, these trained professionals form nucleus of operations at Gopalan Aerospace.





Products



FI CABINETS



CABINETS



CABINETS



GUN STAND CROSS PIECE



Machinery



PRESS BRAKE



PUNCHING MACHINE



LASER CUTTING MACHINE

Composite Division

Gopalan Aerospace's Composite Division is a Centre of Excellence for composites structures for Aerospace and Defence. The division has excellent infrastructure, experienced and well-trained manpower in the area of Engineering Design, Tool Design, Tool and Engineering Manufacturing, Assembly and Testing with the capability to deliver "concept to certification" composite solution.

The division equipped with modern infrastructures and facilities like Autoclave of size 3 m Dia x 7 m length with temperature 200°C and pressure 7 bar, Control Contamination Area of 250 sq. m of ISO Class 7 - 10,000 class, CNC Ply Cutting Machine, Cold Stores Capacity of 70 sq.m with Ante Room, Hot Air Ovens with max. temperature of 500°C, Waterjet Cutting Machine, Environmental Monitoring Area (EMA) of 364 sq.m for wet layup and vacuum enhanced resin infusion, Ultrasonic A Scan, Universal Testing Machine – 100 KN, Coordinate Measuring Machine, CAD facility for design and manufacturing.



Manufacturing Facilities



Autoclave

Size 3m DÍA x 7m Length

Max. Working Pressure: 7 Bar

Max. Temperature: 200° C



Prepreg Cutting Machine

Size: 2500mm X 1800mm

Accuracy: ± 0.1 mm

Make: Zund G3-2XL

Automatic nesting software. With conveyer bed.

Composite Fabrication Area

- 250 sqm.



Climate Controlled Clean Room Area

- 250 sqm.

ISO Class 7 (10,000 class)

Temperature: $22 \pm 3^{\circ}\text{C}$

Humidity: 40% to 60%

Positive Pressure: $> 5 \text{ Pa}$



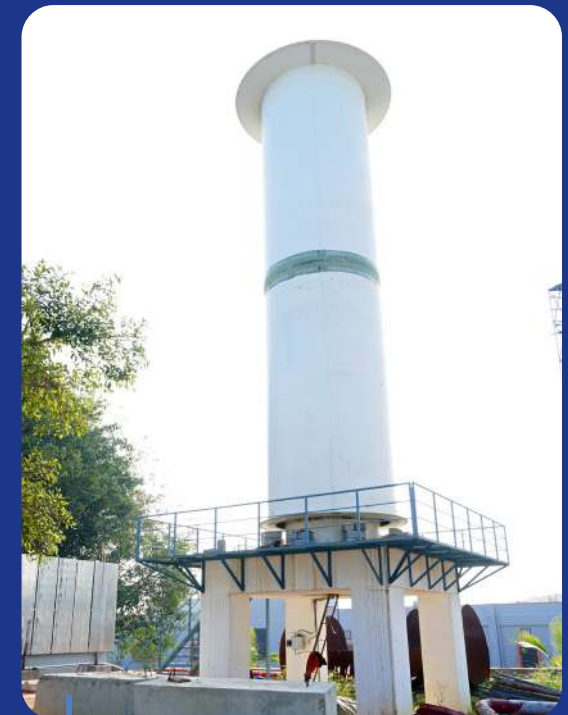
Products



Airframe for UAV



Spotfin (Underwater Scooter)



Flettner Rotor (GFRP, CFRP & Sandwich)

Drones

Gopalan Aerospace provides products and services to both the strategic and civilian sectors of Unmanned Aerial Systems (UAS) in areas such as Agriculture, Geospatial Survey, Logistics, Medical and Image Processing. The GM (Gopalan Multirotors) series Drones from Gopalan Aerospace are advanced UAS, developed through the collaboration between Gopalan Aerospace and the renowned CSIR-National Aerospace Laboratories, Bangalore, utilizing the industry's sophisticated high-end production and integration technology and indigenous design solutions.

GOPALAN OCTA SERIES

Technical Specifications

Flying weight	56kg
Payload capacity	Up to 20 kg
Battery	Li-po
Motors	IPX7 Protected
Propeller	30' Foldable propeller
Range	5 km/ 10km
Max speed	15 m/s
Operational temperature	-20 TO 55° C
Endurance	Up to 20 mins

GOPALAN AKKI 610 HEXA SERIES

Technical Specifications

Range	0.5 kms
Endurance	15 mins. (2 Acres)
Max Speed	10 m/s
Operational Altitude	50 m AGL
Optimum Spray Altitude	4 m AGL
Accuracy within	1 m
Maximum Launch Altitude	3000 m AMSL
Operational Temperature	0 to 55° C
Flying weight	29.5 kg
Battery	Li-po
Motors	IPX6 Protected
Propeller	24' Foldable Propeller

GOPALAN QUAD SERIES

Technical Specifications

Flying weight	4 kg
Payload	Up to 700g
Flying battery	Lipo
Propeller	16' foldable propeller
Range	5 km
Max speed	15 m/s
Operational temperature	-20 TO 55° C
Endurance	Up to 30 mins

• AGRICULTURE



Spray swath
3.5 - 5m



Max. Flow Rate:
5 L/min



No. of Nozzles:
4 Nos



Tank Capacity:
10 L

• SURVEILLANCE



10X Optical Zoom
3X Digital Zoom



400 Megabits
Pixels



3 - Axis
Gimbal Stabilizer

• MAPPING CAMERA



Support TF Card
2K Video Recording
2K Photography



24 MP
APS-C

• FIRE EXTINGUISHER



Dual Payload System
(Spraying and dropping
Mechanism)



Abc Powder and
Fire Ball as Payload



Integrated Thermal
Camera for fire
detection



Obstacle Avoidance
system for Smooth
Navigation

• LOGISTIC



Modular
Design

Upto
10/20 kg

Safety Features:

- Automated preflight checks
- Return to home on communication failure
- Return to home/land on low battery.
- Return to home on high winds.

Features:

- Strong and durable frame
- Collision Avoidance
- Terrain Following
- Geo Fencing
- User friendly software interface
- Hand held GCS system

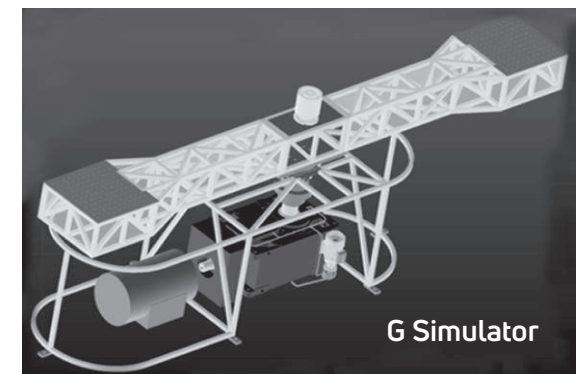




Research & Development

- **Design and prototype of new products for both Metal & Non-Metal**
- **Improvement of existing designs**
- **Continuous improvement of existing processes**

The Dynamic Technologies Research & Development Center is completely electronic, utilizing state-of-the-art parametric 3D design programs and knowledge based expert systems. Dynamic Technologies Research & Development Center is a world-class Design Center capable of total product and system design, with advanced capabilities in structural, thermal and dynamic engineering for analysis, design validation and optimization. Innovation at Dynamic includes extending technologies that will evolve and shape new ideas and unique techniques.



3D Printer

Gopalan Aerospace provides services for the development of all prototype of Drones/UAV/Critical Parts of indigenous design solutions. Material Cannisters (1500cc) Parts are produced with an accuracy of ± 0.1 .

To support Material Cannisters, auto changeover between Cannisters. Raw Material to be processed; Engineering grade Thermoplastics to build production parts, Jigs & fixtures, factory tooling, functional prototypes.

Material using: ULTEM 9085

Typical application: Prototyping

Tooling: Jigs, fixtures, composite molds

Performance properties: Ultimate Tensile Strength (9950psi)

Heat Deflection Temperature (153 degree celcius)

Make: stratasys, Model F900

XYZ axis 914 x 610 x 914mm, Plate support: Two build zones





stratasys | F900

GOPALAN CSR VENTURE

Gopalan Group's CSR initiatives focus on creating positive social impact, particularly for underserved communities. The group partners with government schemes (GOI & GOK) and various agencies to address critical issues like education, skill development, and employment. By working on projects that promote sustainability, social inclusion, and community development, Gopalan Group strives to contribute meaningfully to society's growth and welfare.



**Responsibility
Beyond Business**



Contribution to Society

- Up skilling students and encouraging practical, hands-on experiences allowing them to apply their knowledge in real-world situations, enhancing their skill set.
- Participating in Swacch Bharat Abhiyaan to bring changes regarding cleanliness and sanitation practices.
- Adopted two government schools in Whitefield and Nallurhalli equipping teachers and students with skills to adapt to changes in the education landscape.

REAL ESTATE · RETAIL · COMMERCIAL · AEROSPACE · HOSPITALITY · EDUCATIONAL INSTITUTIONS · CINEMAS · HOSPITALS





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