

Sree Dakssnaa Aerospace and Defence India Pvt Ltd

(A subsidiary of Airfloa Rail Technologies Limited)

Chennai, India.





Company Overview

Sree Dakssnaa Aerospace and Defence India Pvt Ltd, established in 2024, focuses on delivering innovative solutions in the Defense and Aerospace sectors. As a subsidiary of Airflow Equipment's India Pvt Ltd, we leverage nearly three decades of industry expertise to drive our mission forward.

As a parent company M/s **Airflow**, has been pioneer in Rolling Stock - Interior Furnishing & Car Body, Defense and Aerospace Integrates with design, analysis, development, fabrication, machining, Welding & assembly of Metal and non -metal turnkey products.



SHAREHOLDING
PATTERN



Name	% of Holding
Airflow	99%
D. Manikandan	1%
Total	100%

Director's Introduction

Managing Director – D Venkatesan

He has three decades of experience in manufacturing industries. He lead a team with strength and integrity, and has been instrumental in establishing a robust foundation for the company, ensuring its competitive edge in the market.

Director – D Manikandan

Mechanical engineering graduate, he has over 15 years of experience and spearheading all new initiatives of Airflow. He makes significant strategic and operational decisions that's ensure the company meets its objectives.



Mission and vision

Our company's mission is to provide innovative and reliable defense and aerospace solutions that contribute to global security and technological advancement.

The vision is to become a leading player in the industry by delivering cutting-edge products and services.

Core Competencies and Expertise

Our company has core competencies in aerospace engineering, military systems integration, and advanced technology development.

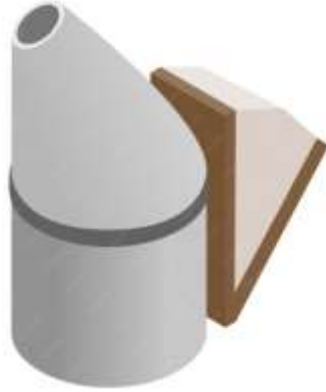
- Our key differentiators include a highly skilled and experienced team, a strong focus on research and development, and strategic partnerships with industry leaders.
- We prioritize innovation, customization, and customer satisfaction to stand out in the competitive market.



Our Capabilities



Machining



Composite



Assembly



Coatings



Fabrication



Quality, R & D

Our Capabilities



Advanced Manufacturing



Project Management

Partnerships and Alliances

- RUBTEC, DENMARK – ALUMINIUM WHEELS
- VCI COMPOSITES, CANADA – ARMOUR GRADE COMPOSITE PANELS



Orders In Hand

- Our Holding company M/s Airflow have given subcontract to us for the value of around 15 crs.

Expecting Orders around 25 crs from the direct OEM such us

- HAL -Bangalore,
- ADA -Bangalore
- MCSRDC- Bangalore
- MSC / DRDO, Pune
- ASL / DRDO, Hyderabad
- HVF , Chennai.



FACILITIES AVAILABLE

Laser Processing Machines Specifications



Model	-	ML3015SR
Drive System	-	Flying optics (3-axis beam travel)
Control System	-	X-Y-Z simultaneous 3 axis (Z axis height control is also possible)
Workpiece dimensions (mm)	-	3015 x 1525
Stroke X-axis (mm)	-	3100
Stroke Y-axis (mm)	-	1565
Stroke Z-axis (mm)	-	150
Rapid feed rate (combined) XY-axis (m/min)	-	Max. 140 (combined)
Positioning accuracy XY-axis (mm)	-	0.01/500
Positioning accuracy Z-axis (mm)	-	0.01/100
Repeatability XY-axis (mm)	-	±0.01
Table Pass height (mm)	-	880
Footprint (reference value in mm)	-	12500 x 5150
Machine weight (kg) (excluding oscillator)	-	7500
Pallet Changer weight (kg)	-	2100
Applicable oscillator	-	ML32XP

Laser Processing Machines Specifications

Mitsubishi ML3015HV

Heavy-duty CNC CO2 laser cutting system built for high-precision sheet metal fabrication. It typically features a 4kW CO2 laser resonator and a 3,050 mm x 1,525 mm working area, making it a reliable industrial choice for high-volume metal cutting



CNC TURNING

PL6050L (Turning Centre) :

| 1000 mm | 1500 mm | 2000 mm |



Punch Machines



DIMENSIONS

WIDTH	6540 mm *1
DEPTH	7237 mm *1
HEIGHT	2155 mm *1

MAXIMUM STROKE RATE

PUNCHING (E = 1 MM)	900 1/min
MARKING	1600 1/min

WORKING RANGE

PUNCHING MODE, X AXIS	2500 mm
PUNCHING MODE, Y AXIS	1250 mm
MAXIMUM SHEET THICKNESS	6.4 mm
MAXIMUM WORKPIECE WEIGHT	150 kg
MAXIMUM PUNCHING FORCE	165 kN



Features

- ✓ Power Saving Up To 30 - 70 %
- ✓ Power Factor (PF) More Than 0.9
- ✓ Light In Weight & Compact In Size
- ✓ High Quality & Spatter Less In Welding
- ✓ Good ARC Start And Arc Force
- ✓ Protection Against Low Voltage, High Voltage, Single Phase & Surge Voltage
- ✓ Suitable To Weld All Kind Of Electronics
- ✓ H.F. Arc Starting With Pulse Control
- ✓ Two Function Of DC TIG / MMA
- ✓ Be Able To Weld Mild Steel, Stainless Steel, Copper & Titanium Metals Etc.

High Performance Double Column Machining Centres

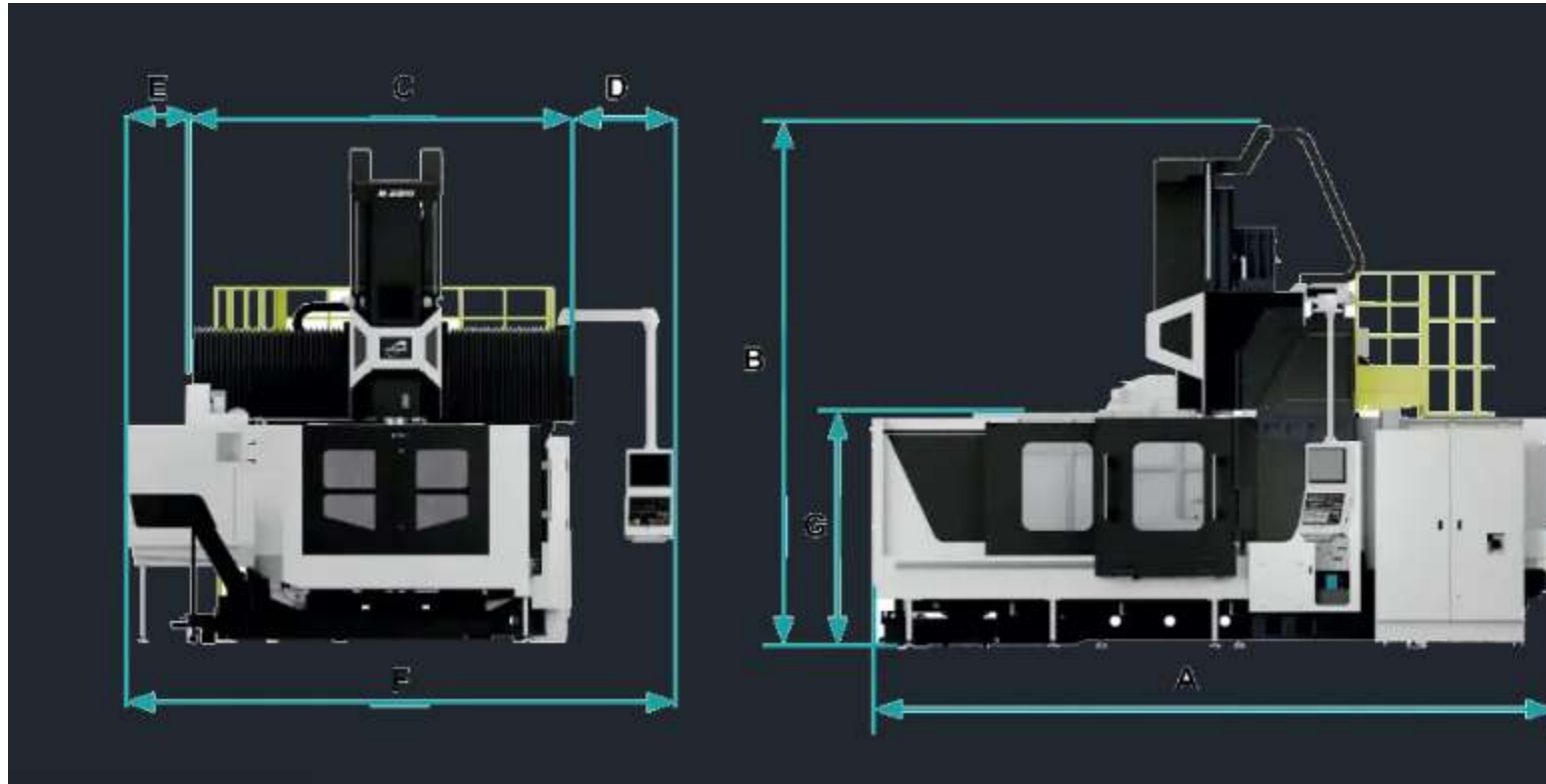


Table size: 4000×2100 mm

Maximum load: 13 tons

X axis travel: 4200 mm

Y axis travel: 2300 mm

Z axis travel: 1000 mm

Spindle motor (Mitsubishi): 22/26 kW

Speed: 6,000 (8,000, 10,000) rpm

Taper: BBT-50

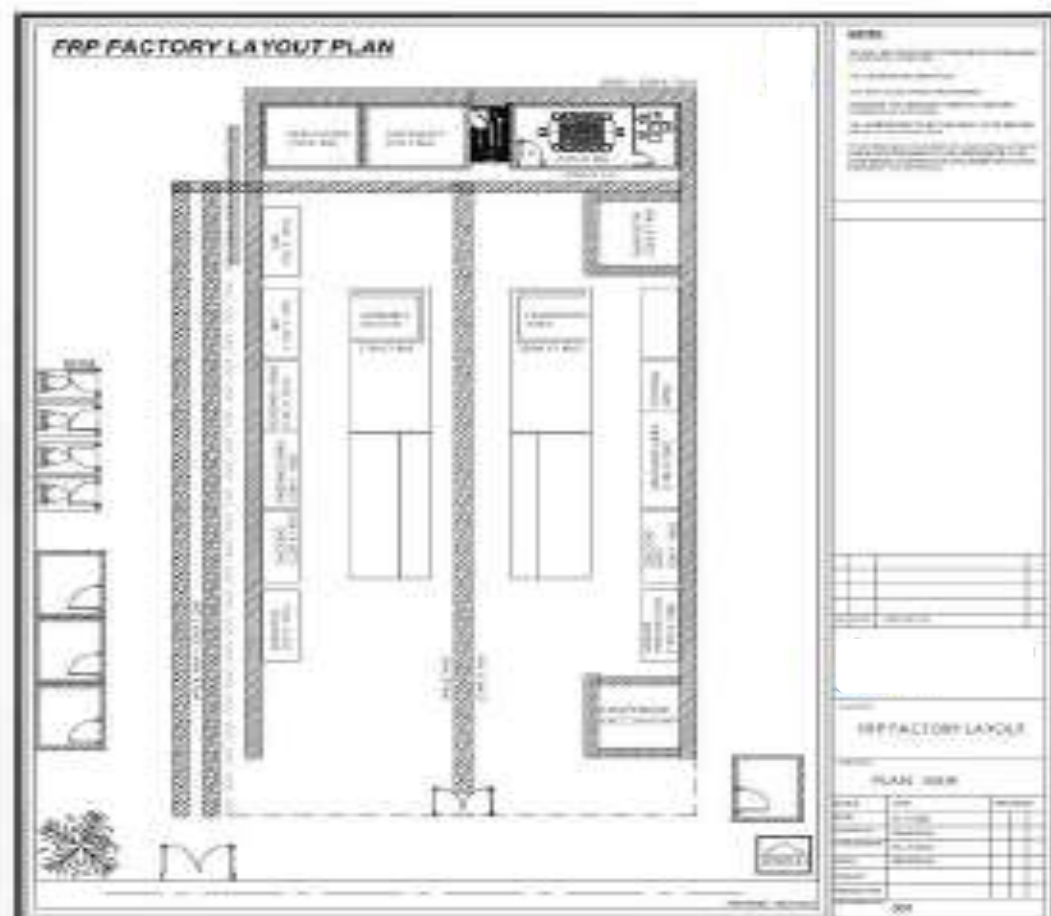
Rapid rate (Mitsubishi): 15/15/12 m/min

Cutting feed rate: 1 – 10,000 mm/min

CAPABILITIES ENHANCEMENT

Enhancing Capabilities

Inclusion Of New Facilities & Expanding existing ones:

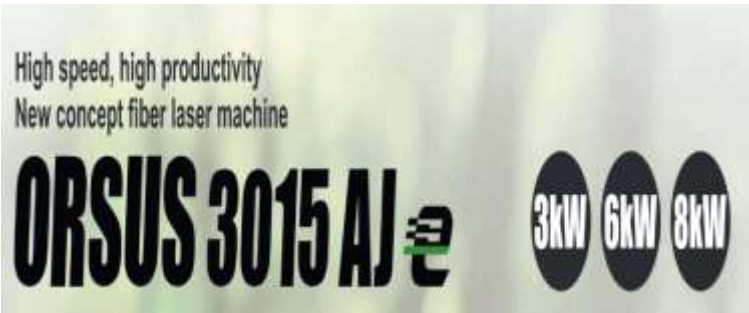


New Facility of 44,000 Sq. ft Area Exclusively for FRP (Unit-7)

Looking forward towards manufacturing of advance composites for DRDO , CABS , CVRDE & HAL

- 1.BALLISTIC Skirt Plates for Battle tanks
- 2.CFRP Foot rest & Consoles for Surveillance aircrafts
- 3.CFRP Shells for missile re-entry components

Laser Processing Machines Specifications



Machine Specifications

Model		ORSUS-3015AJe		
Registered model name		OR3015AJE		
Axis travel distance X×Y×Z	mm	3070×1550×100		
Maximum processing dimensions X×Y	mm	3070×1550		
Maximum workpiece mass	kg	920		
NC controller		AMNC 4ie		
Oscillator		FL-3000U	FL-6000U	FL-8000U
Chiller		RKE2200B1-V-2CH-AMD-A	RKE5500B-V-2CH-AMD	RKE7500B-V-2CH-AMD
Dust collector		PXN-6XA / JXN-6XA (self-standing pail can type)		
Axis control method		X,Y : Rack & Pinion, Z : Ball Screw		
Rapid traverse X×Y Composite	m/min	170		
Least input increment	mm	0.001		



Next-generation press brake

The HRB series is AMADA's next-generation press brake that provides new input modes on the AMNC 3i control, and is retrofittable to streamline a customer's bending process. AMADA's IoT solution "V-factory" is supported.



Additive Manufacturing



Additive manufacturing is an industrial process that builds 3D objects by adding material layer by layer from a digital model. Unlike traditional subtractive methods that cut away from a solid block, it uses plastics, metals, or ceramics to create complex designs with less waste

Supporting Materials

Titanium Alloy, Aluminium Alloy, Superalloy, Stainless Steel, High-strength Steel, Tool Steel

Build Dimension(1)

450mm×450mm×500mm (W×D×H)

Laser Power

500W×4 ; 500W×6 ; 500W×8

Building Speed(2)

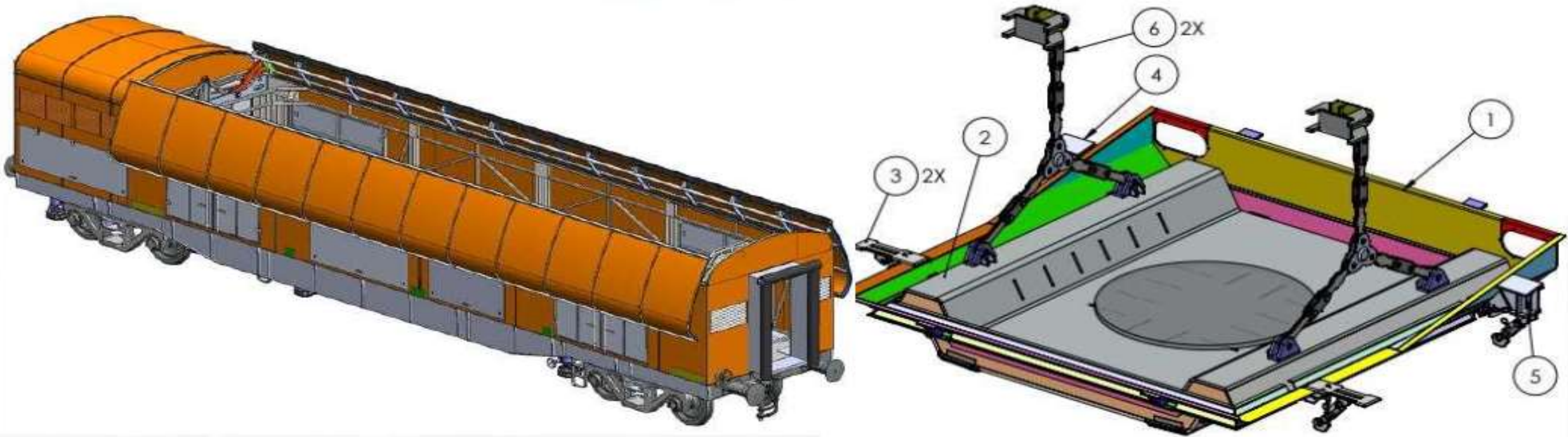
100cm³/h ; 150cm³/h ; 200cm³/h

Leading Customers



Notable Projects

DEVELOPMENT,FABRICATION AND INTEGRATION OF HOOD STRUCTURE WITH
SPLIT ROOF AND MECHANICAL SYSTEMS ON RAILWAY WAGON.



HOOD STRUCTURE WITH SPLIT ROOF , MECHANICAL
SYSTEMS AND LAUNCH PLATFORM FULL .

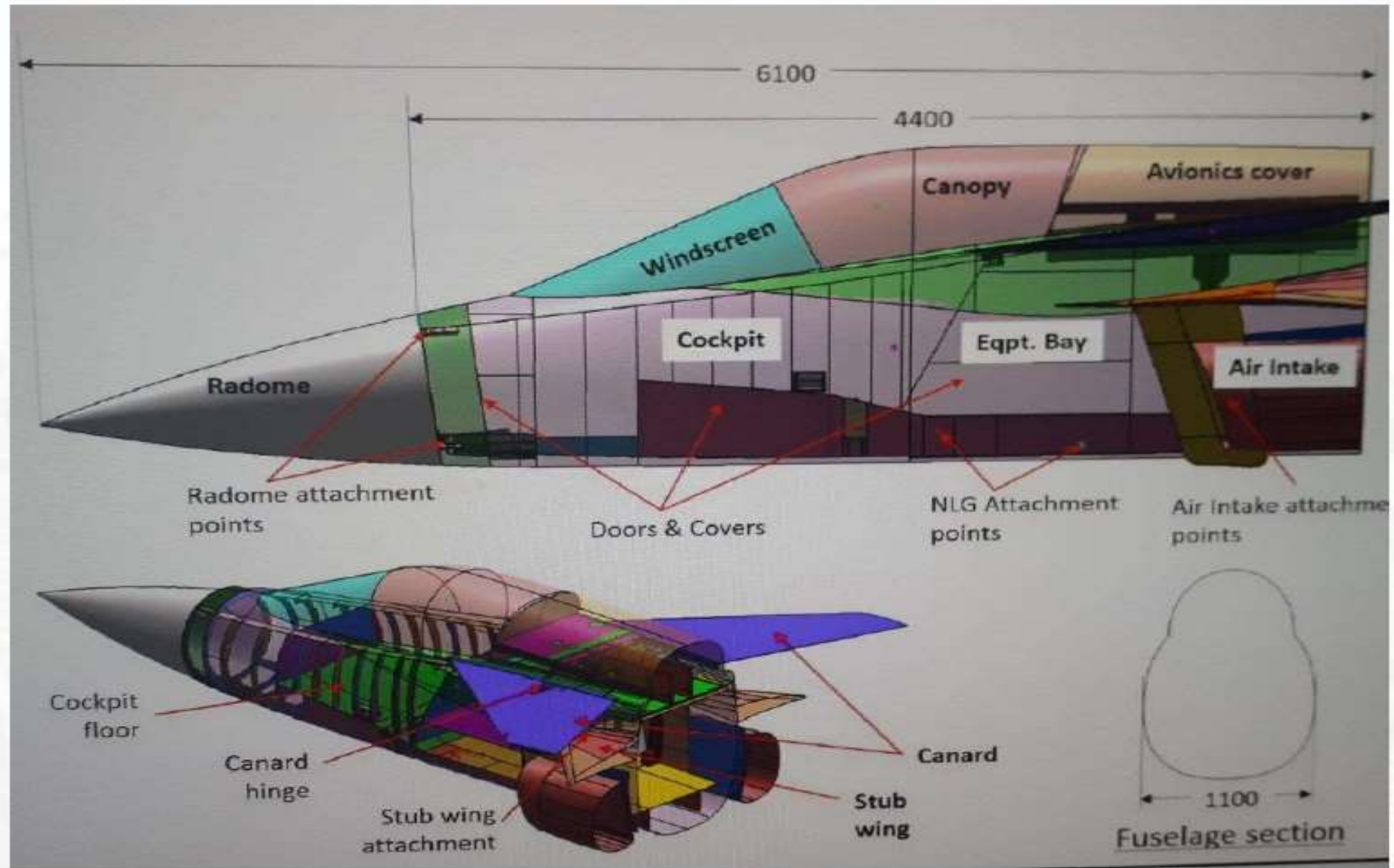
Customer – MSC ,PUNE.

MOCK-UP COCKPIT FABRICATION FOR AMCA



Customer – ADA, Bangalore.

MODULAR COCKPIT SHELL FOR LCA AF MK2



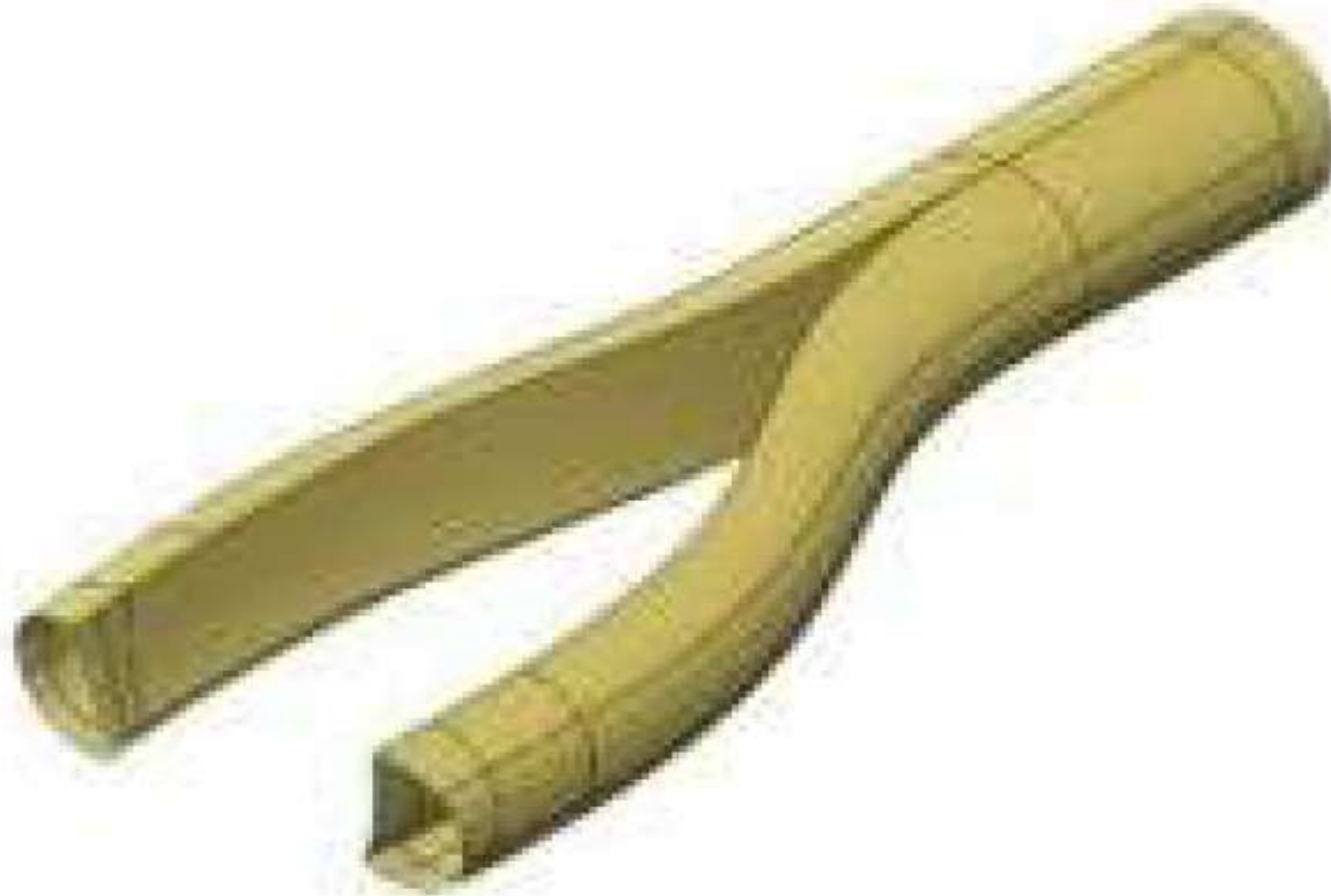
Customer – ADA , Bangalore.

MANUFACTURING OF REPLICA FIGHTER AIRCRAFT COCKPIT SHELL FOR FIXED BASE FULL MISSION SIMULATOR FOR JAGUAR AIRCRAFT



Customer – HAL , Bangalore.

FABRICATION OF FULL SCALE MODEL OF AIRCRAFT INTAKE DUCT.



1.Full Length of the Duct -5424mm

2.Max Dia - 775mm (Approx)

3.Min Dia - 332 (Approx)

4.Max Height of one end -
2000mm(From Ground)

5. Min Height of one end -
1000mm(From Ground)

Customer – DRDO,Jodhpur.

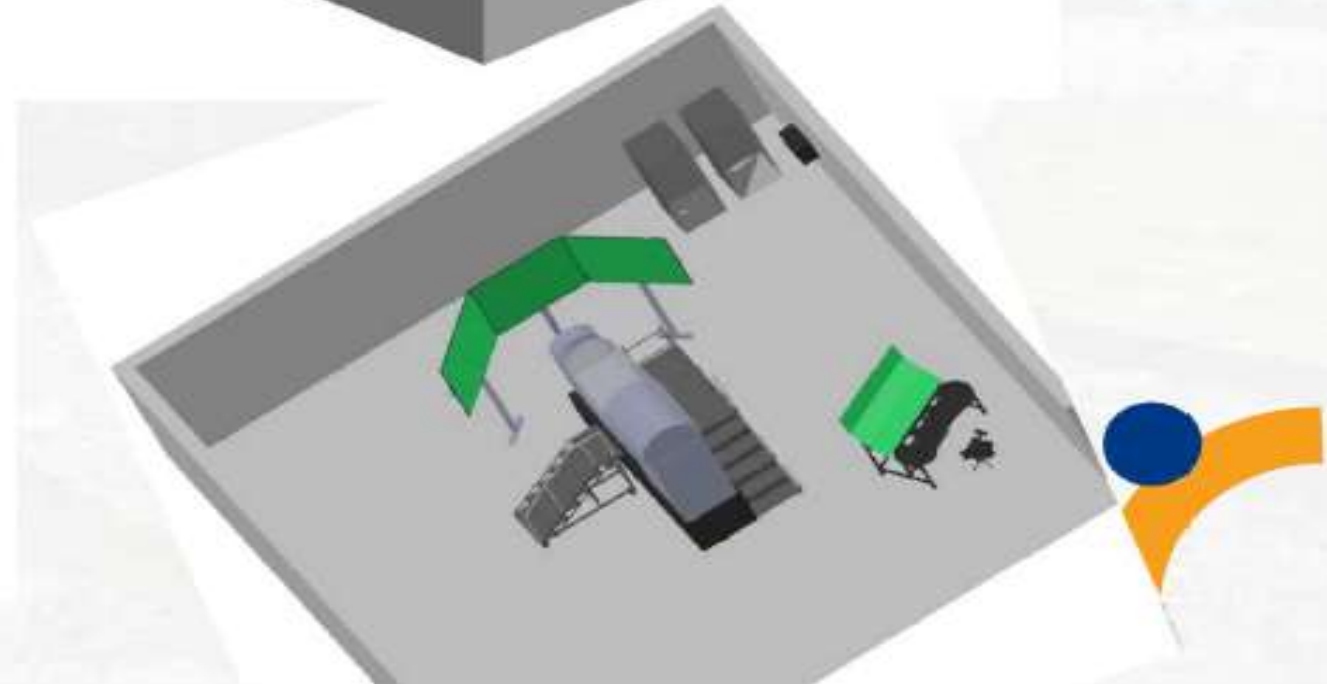
STEALTH PAINT

Our Coatings minimize enemy's real time capability to utilize friendly assets thermal /IR signatures to:

**Detect
Recognize
Identify
Pinpoint Friendly targets**

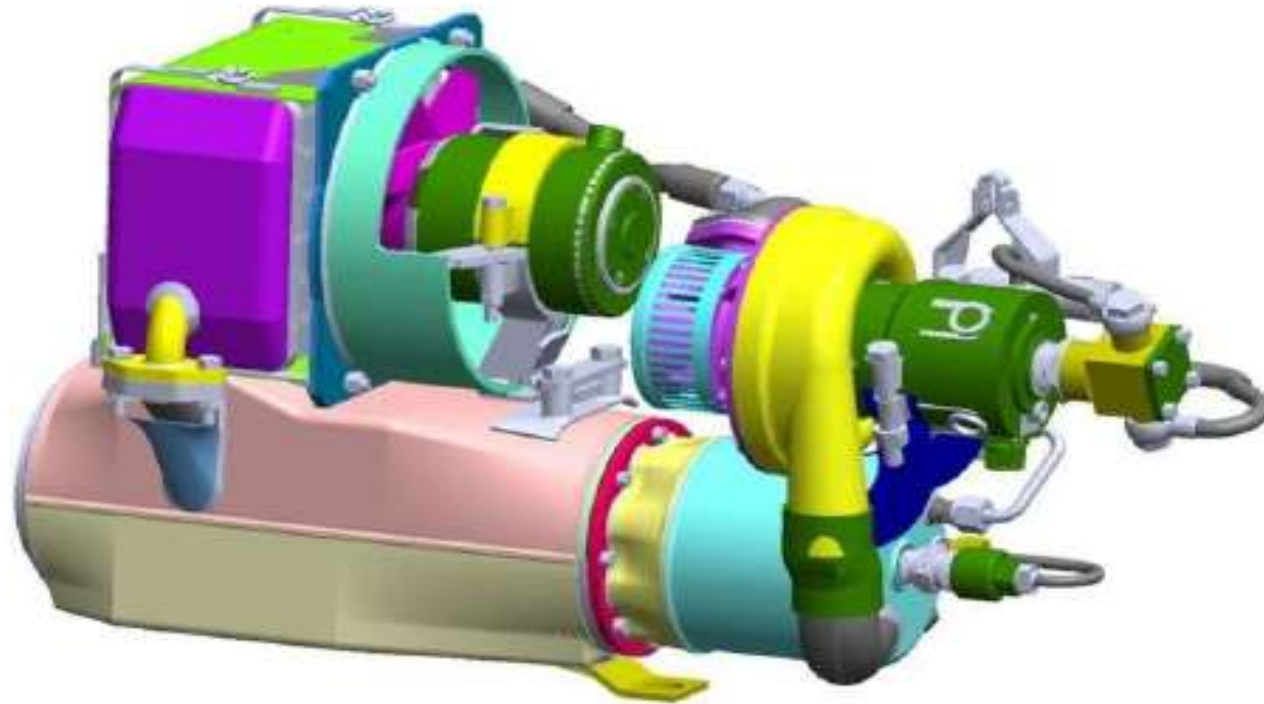


AVIONICS PART TASK TRAINER (APTT)



Customer – HAL, LCA Unit , Bangalore.

Pre Heater – T90 / Main Battle Tanks



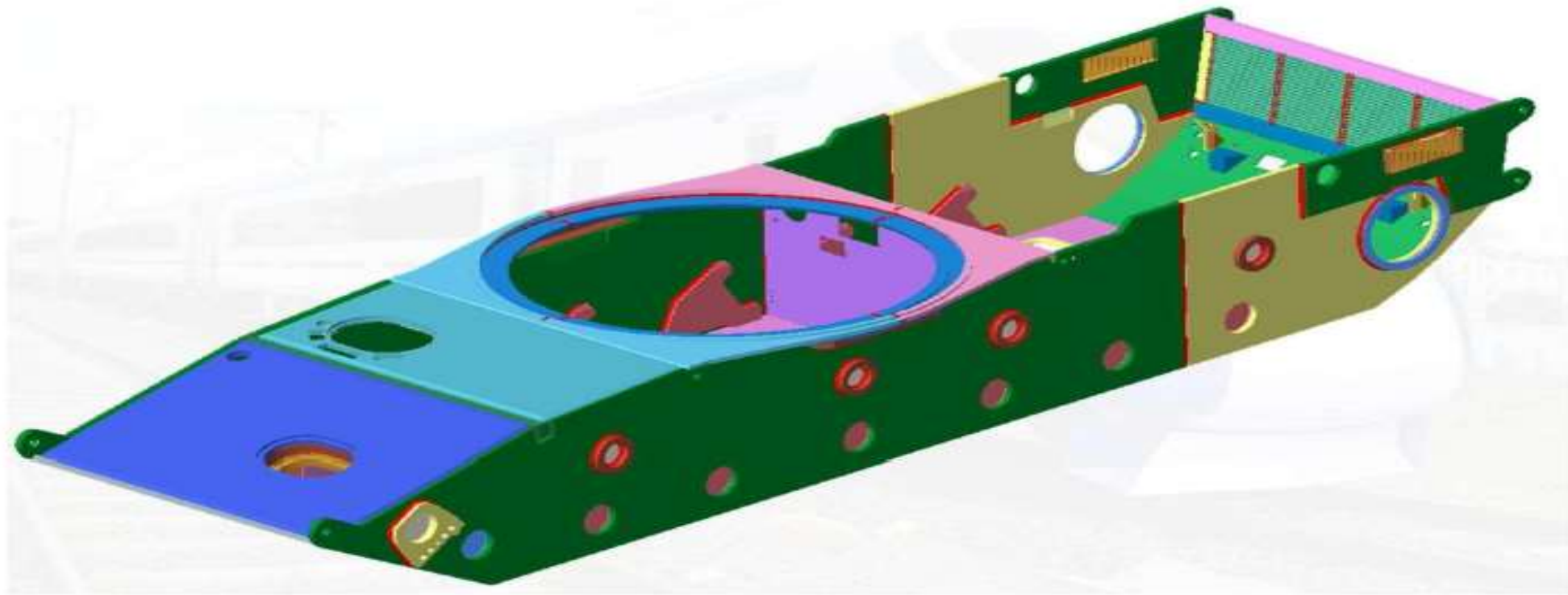
T90 PRE HEATER
188.36.001 cbCb

Customer : HVF, Avadi /Chennai.

& Much more..

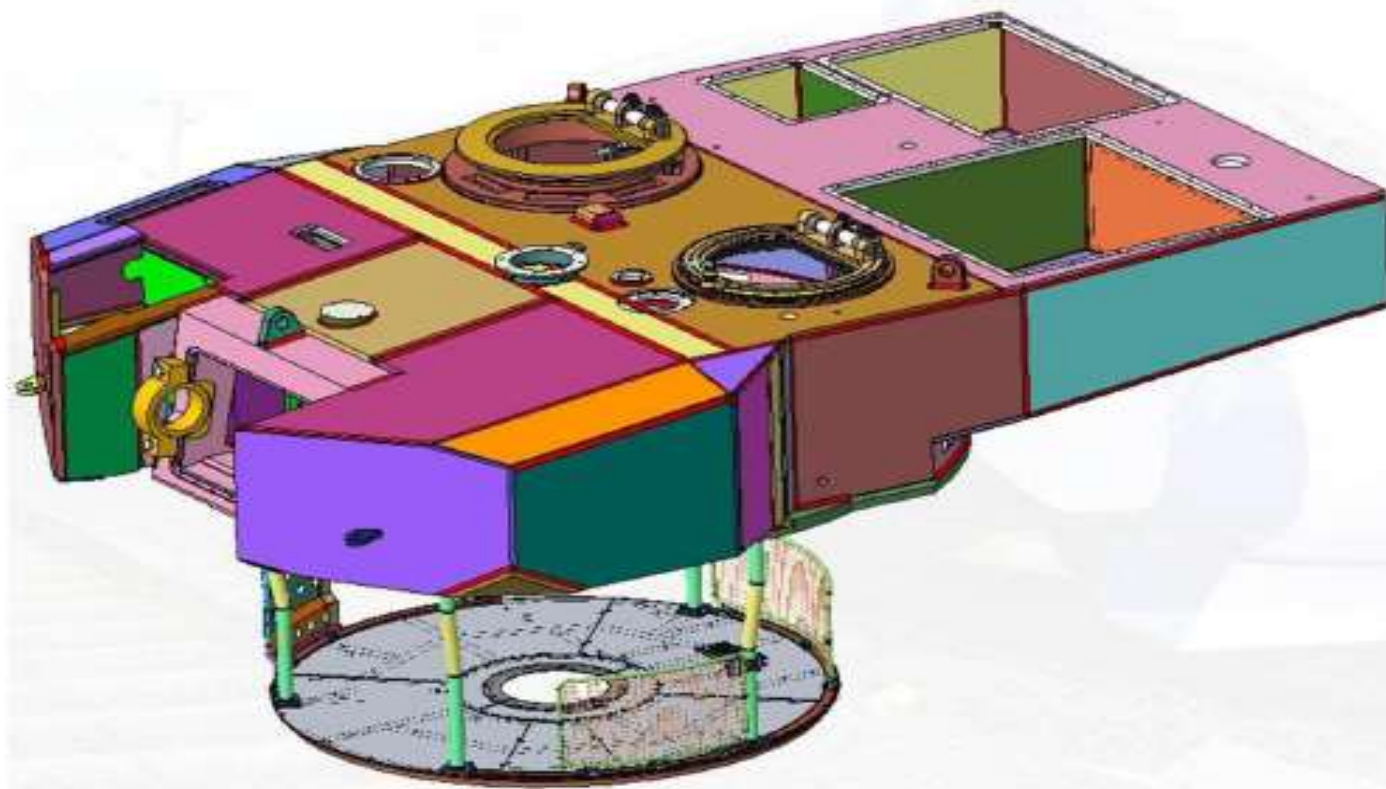
Hull Structure

FABRICATION OF COMPLETE HULL STRUCTURE – Under Development



Customer : HVF, Avadi /Chennai.

TURRET STRUCTURE WITH TRAVERSE TABLE & HATCHES



Customer : HVF, Avadi /Chennai.

Thanks



Office Address:
127, Mettupalayam road , Panruti,
Sriperubudur,
Kancheepuram – 631604
Tamil Nadu, India.
Ph: +91 9444431234