

## STATEMENT OF CAPABILITIES

Mincham Aviation supports the Civil Aerospace and Defence communities with specialist capabilities in:

*Advanced Composite and Sheet Metal  
Component Repair and Manufacture  
Fabrication Technologies  
Welding / Machining / Heat Treatment  
Engine Cylinder Overhaul  
Project Management  
Electroplating  
Painting  
Engineering Design Approvals*

Ours is a 'total solution' focus, whether for prototyping tasks or production. Mincham Aviation prides itself on high quality work and providing rapid turn-around times, with competitive, personalised services.

### Sheet Metal

#### **Machinery**

3m Press Brake  
CNC router 2.4m x1.2m  
2.4m & 1.2m Guillotines  
2.4m & 1.2m Rollers  
160 t Press  
Punches  
Notches  
Folders

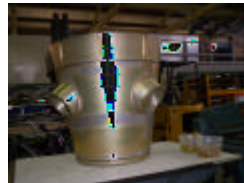
+ Most general sheet metal tooling

#### **Materials**

Aircraft Grade Al Alloys  
Aircraft Grade Steel Alloys  
Marine Grade Materials  
Commercial Grade Materials



**3m Press brake**



**Sheet metal Component**

### Composite

#### **Materials**

Carbon Fibre  
Kevlar  
E & S Glass  
Honeycomb  
Epoxy  
Phelolic  
Vinyl Ester  
Prepreg

#### **Processes**

Wet Lay-Up  
Autoclave  
Vacuum Bagging  
Pressure Moulding  
Resin Transfer  
Oven cure  
Resin Infusion



**Composite oven**



**Autoclave**



**Cylinder Grinder**

### Cylinder Overhaul

Welding  
Honing  
Grinding  
Seat and Guide replacement

### Welding

#### **Processes**

MIG  
TIG  
Oxy  
Brazing  
Arc

#### **Soldering**

Aluminium  
Carbon Steel  
Inconel  
Stainless Steel  
Copper  
Brass



**Tig Welding**

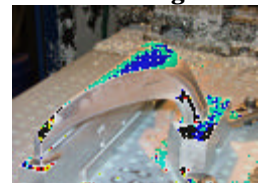


**CNC Machining**

### Machining

#### **Machinery**

CNC Milling  
CNC Turning  
Cylinder Grinding  
General Milling  
General Turning



**Machined Components**

### Heat Treatment

#### **Materials**

Aircraft Grade Al Alloys  
Aircraft Grade Steel Alloys  
Marine Grade Materials  
Commercial Grade Materials



**Heat treated components**

### Provision of design and design approval services

Design Advice  
Detailed Design  
Development,  
Manufacture  
Integration and Installation  
Design Approval  
T&E  
Flight Test; and  
Project Management.



**CNC 3D Router**

## **Approvals**

### **CASA approvals (C562794)**

- Repair of aircraft sheet metal & fibre re-enforced plastic components. Excluding critical structural components of Aircraft above 5700 kg where the approved data specifies the requirement for jiggging.
- Equipment and furnishings limited to sheet metal and fibre reinforced plastic, maintenance of bulkheads, cabinets, Cargo bay panels and trimmings, covers, ducting, emergency escape equipment, floors, galleys, instrument combings, interior trimming, lockers, seats, crew seats, steps, toilets, trolleys, wardrobes & window scratch panel linings
- Engine cylinder and engine crankcase components for horizontally opposed engines with a maximum horsepower rating not exceeding 375kw (500hp)
- Exhaust Systems for Piston and Turbine engines
- Tubular Metal components
- Machining, Parts Manufacturing Approval and Maintenance of aircraft pending.

### **Other approvals**

- We will work to your company standards (e.g. Mil Spec, FAA, BCAA, ISO 9000 Series, etc.).
- ISO 9100 and PMA pending

## **Project Examples**

### **Composite-**

P3- Orion Pannier systems, Internal Racking systems for RAAF and Civil Aircraft, Military Pods, Military Pylons, Ducting, Consoles, Radomes, UAV's, Airborne Geo research components, Air intakes, General Aviation parts & Non Aviation Engineering Products.



Composite Consoles



UAV's



P3 Pannier System



Geo Research



Radomes/Ducting



Aero-medical Fit-outs

### **Sheet metal-**

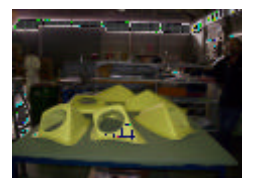
Internal racking systems, Aero-medical loaders, Aero-medical stretchers, Restraints, Cabinets, Equipment racks, Operational Consoles, most aircraft structural / non-structural components & Non Aviation Engineering Products.



Pods



Intakes



P3 Orion EWSP

## **List of Clients.**

BAE Systems  
 Tenix Defence Aerospace  
 Tenix Defence ESD  
 Tenix Aviation  
 Tenix Land Division  
 L3 Communications  
 Hawker Pacific  
 Royal Flying Doctors (NSW, VIC, SA, WA & NT)  
 DSTO  
 RAAF  
 Aeronautical Engineers Australia  
 Australian Flight Test Services  
 National Jet Systems

BAE Systems Flight Training  
 CHC Helicopters  
 CEA Technologies  
 Resonance Technologies  
 Weir  
 GDLS  
 Uni SA  
 Raytheon Australia  
 Pearl Aviation  
 Sydac  
 Regional airlines  
 General Aviation  
 Non Aviation Engineering Companies.

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