



“A truly excellent product” – CEO, Classic Car Restoration Company



Precision Product Solutions

We supply components for companies from a variety of industries including:



Aerospace



Military / Defence



Rail



Communication

Your single source solution for the manufacture and supply of precision engineered components



Investment Casting



Sand/Gravity/Pressure Die Casting



Electronic



Medical



Oil / Gas



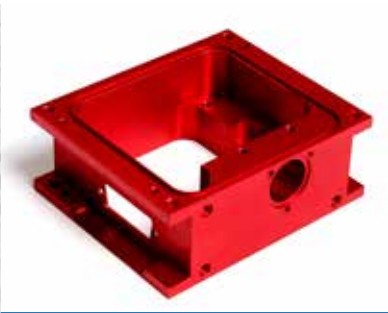
Sub Sea



Polyurethane Moulding



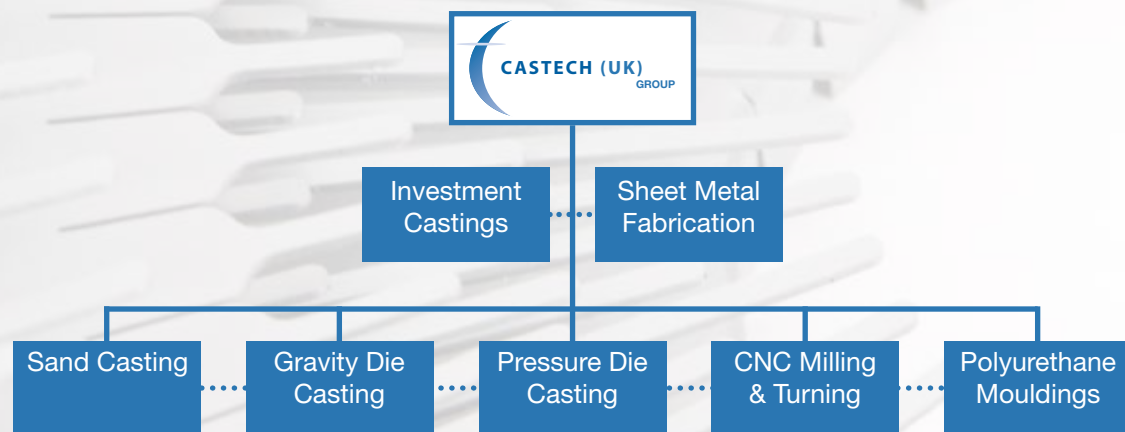
Sheet Metal Fabrication



CNC Machining



ISO 9001 Certified



Welcome to Castech (UK) Ltd

Established in 1988, Castech (UK) Ltd specialise in the manufacture and supply of Precision Components. We embrace every stage of the process, from initial design consultation to the delivery of the finished components. We offer a host of in-house surface finishes and have excellent relationships with local sub contractors. Surface finishes available include wet paint, powder coat, anodising, alochroming, heat treatment, x-ray, impregnation, plating and more. Castech (UK) Ltd are proud to be ISO 9001 accredited and work in accordance with our Q.A Manual. We are always prepared to consider your additional specific QA requirements.



Stainless Steel Shaft (length 250mm, outside diameter 40mm)



2 part electronics housing in Aluminium (dims. 240 x 160 x 30mm)

Polyurethane Mouldings

- Low cost permanent tooling.
- Development to low/medium volume production quantities.
- Our technical staff provide help and guidance on your component design.
- Standard wall thicknesses are 3-4mm, but this can be reduced to 1.5mm in local areas, whilst ribs, bosses and other changes in thickness can also be achieved.
- Cast material densities allow threaded holes to be introduced directly to the material.
- Our components are strong, dense and impact resistant or soft and malleable. Our standard material conforms to UL 94/V0 specification.
- We undertake full product assembly, using either free issue or brought in parts and packaging – adding value to the process.



Medical enclosure (dims. 250 x 150 x 100mm)

CNC Machining

- State of the art Milling and Turning centres.
- Very short lead times – we are regularly delivering low/medium batches within 1 to 2 weeks.
- We regularly machine from Stainless Steel, Mild Steel, Brass, Aluminium, Acetal, ABS, Acrylic, Nylon and more.
- General tolerance $\pm 0.1\text{mm}$ but we regularly work to the nearest micron to meet your specification.
- Host of surface finishes include wet paint, powder coat, anodising and alochroming.
- We have extensive experience in machining free issued cast components.
- In-house CMM inspection facility available.



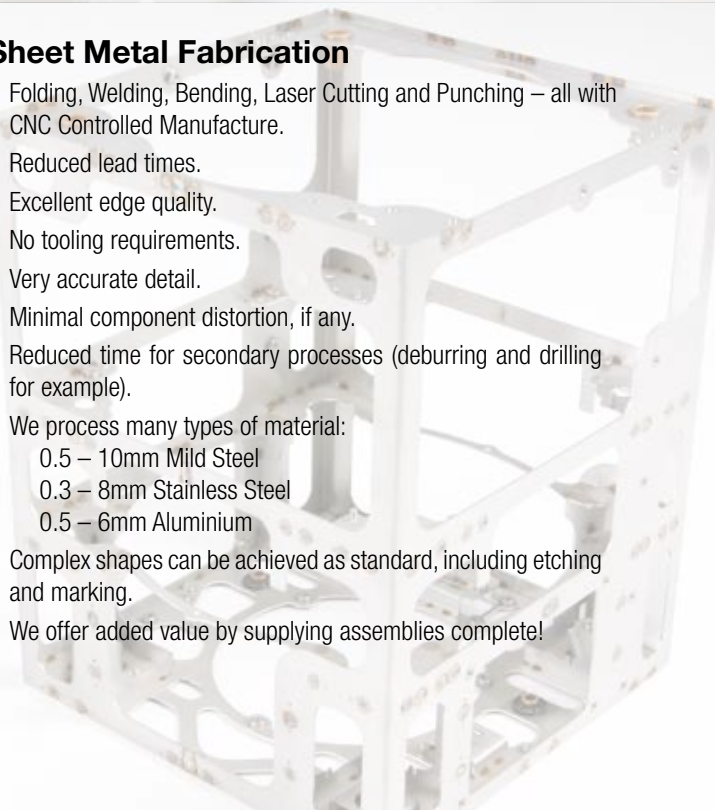
Red anodised Aluminium components (largest piece dims. 125 x 95 x 30mm)



Close up of an Aluminium carousel (outside diameter 255mm)

Sheet Metal Fabrication

- Folding, Welding, Bending, Laser Cutting and Punching – all with CNC Controlled Manufacture.
- Reduced lead times.
- Excellent edge quality.
- No tooling requirements.
- Very accurate detail.
- Minimal component distortion, if any.
- Reduced time for secondary processes (deburring and drilling for example).
- We process many types of material:
 - 0.5 – 10mm Mild Steel
 - 0.3 – 8mm Stainless Steel
 - 0.5 – 6mm Aluminium
- Complex shapes can be achieved as standard, including etching and marking.
- We offer added value by supplying assemblies complete!



Background image: Stainless Steel projector chassis 1.5mm laser cut and TIG weld

Sand / Gravity / Pressure Die Casting

Sand Casting

- Non-ferrous metals – Aluminium and Copper Alloys available.
- Low cost permanent tooling.
- Development to low/medium volume production quantities.
- General casting tolerances of $\pm .4\text{mm}$ up to 250mm $\pm .05\text{mm}$ per additional 25mm.
- As cast wall section down to 3mm.
- Short lead times.
- Excellent quality procedures ensure castings arrive as per drawing specification.
- Certificate of Conformance available by request.

Gravity Die Casting

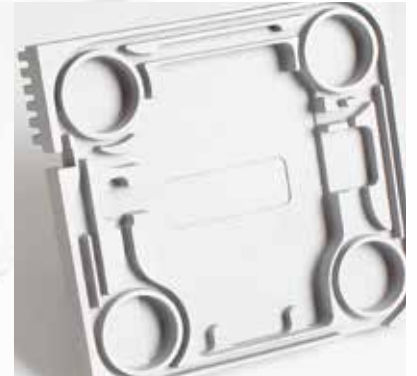
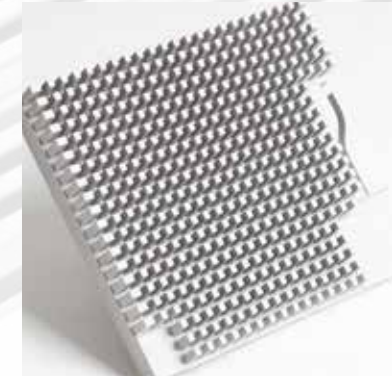
- Tooling – cast iron moulds.
- Non ferrous metals – Aluminium and Zinc Alloys available.
- Low cost unit price for medium/large quantities.
- Higher casting rate than Sand Casting.
- Produce the highest quality of casting requiring less finishing and polishing – also reduces the amount of machining required.
- Castings have high tensile strength.
- Minimum wall thickness of 3mm – 5mm.

Investment Castings

- AS9100 accredited manufacture of Investment Castings and CNC Machining.
- Low cost permanent tooling that can be easily modified.
- Thin Walls - We can manufacture wall sections as fine as 0.2mm (0.008"), typically 1-3mm (0.04" – 0.12").
- Light Weight Components - Manufacturing techniques can be used to minimise material usage whilst helping maintain the integrity of the component. Some components can weigh as little as 1g (0.04 oz.).
- Small Components - Maximum size of 190mm x 160mm x 160mm (8" x 6" x 6"). A length of 250mm (10") is possible providing no other dimensions exceed 100mm (4").
- Detail - Complex detail on internal and external surface features.
- Superfine Surfaces - With 0.8 micrometres (32 micro inches) being the "as cast" finish.
- Zero draft angles.
- Non-ferrous metals – Aluminium and Copper Alloys available.
- 4 Axis CNC Machining - In-house CNC Machining with 24 hour capabilities. Milling and Turning available.

Pressure Die Casting

- Tooling– hardened steel moulds.
- Non ferrous metals – Aluminium and Zinc Alloys available.
- Very low unit prices.
- Wall thickness as low as 2mm achievable.
- Very high yield of over 90%.
- High quality castings with a very fine grain surface - less finishing requirements (fettling and trimming costs reduced).
- Porosity free castings are obtainable.



The front and back view of an Aluminium Casting heat sink (dims. 230 x 200 x 40mm)



Wax master with soluble inner core (length 75mm, height 54mm)



Tree assembly as cast (length 255mm)



Aluminium elbow bend with post CNC Machining (dims. 45 x 15mm)



Electronics enclosure with post CNC Machining (dims. 65 x 53 x 66mm)

Your Enquiry

Please send Castech (UK) Ltd your enquiries via email or give us a call if you would like to discuss your requirements. Ideally, 2d PDF documents will be made available and supported by 3D IGES/STEP files. Once you have sent us your enquiry you can expect a swift response from one of our Technical Sales team.