



ADVANCEDENGINEERING
COMPUTER AIDED MANUFACTURING

Sales Presentation

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Company Profile

Advanced Engineering UK Ltd, located in Birmingham, specialise in multi-axis precision engineering for the Automotive, Aerospace and associated sectors. The facilities cater for product requirements ranging from one off prototypes cut from solid material to full automotive production of precision components and all requirements in between. With continual investment in the latest machining technologies, employee training and recent expansion of the manufacturing facility Advanced Engineering are able to offer the highest quality engineering service. Our business embraces the prototype, pre-production and production stages of manufacture whilst ensuring that each product is delivered to the highest standard.

Quality Accreditations

BS EN ISO 9001:2008 Accreditation – Certificate Number FM 29768
TS 16949:2009 BSI Accreditation – Certificate Number TS 570746



ADS Member Aerospace Defence Sector Scheme Member



SC21 – Supply Chain 21st Century Scheme Member



Markets Sectors & Recent Projects

- Automotive Engineering Development
 - Machining of cast engine components including cylinder heads, cylinder blocks, sumps and cam covers
- Interior Brightwork to production schedule
 - Machining of interior latch from aluminum extrusion and management of subcontractor for satin chrome plating
- Prototype Suspension Development
 - Machining of suspension knuckles and arms from solid aluminum
- Decorative works
 - Machining of a silver bowl for Diamond Jubilee celebrations
- Interior Brightwork
 - Machining of various interior brightwork parts from solid aluminum and extruded aluminum, applied finishes include, satin chrome, Chrome, polishing, anodising and paint finishes.
- Aerospace
 - Supply of Machined, castings, forgings and fabrications

Capabilities

Prototypes

Producing prototype parts to challenging customer deadlines has been the backbone of Advanced Engineering for the past 15 years. We are able to machine parts from solid materials such as aluminium, titanium and acetal but can also machine castings and extruded material sourced through our supply base or supplied by our customers. Using our experience over this time we have developed innovative production processes and working practices to ensure we meet deadlines and aim to exceed customer expectations while maintaining the highest possible quality.

Production

Advanced Engineering has a proven track record of supplying production parts to schedule in the automotive sector. This has ranged from bespoke interior bright work machined from solid to cast engine components such cylinder heads, blocks, either sourced internally or supplied by our customers. With the experience Advanced Engineering have in the marketplace we are capable of producing all supporting documentation for production projects including all levels of PPAP, APQP, FMEA, SPC's, ISIR's as well as full supply chain management.

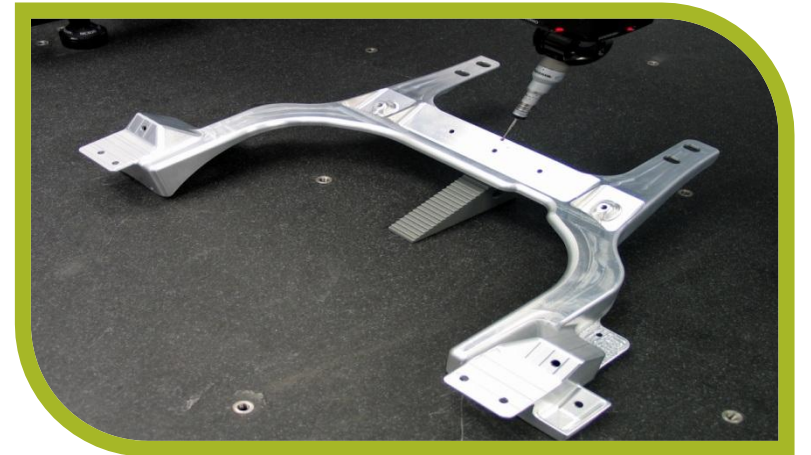
Capacity List

MANUFACTURER	MACHINE NAME	CAPACITY	DATE OF MANUFACTURE
MACHINERY			
Mazak	630-5X II - 80 Tool	630 x 765 x 510	2012
Mazak	630-5X II - 80 Tool	630 x 765 x 510	2008
Mazak	630-5X II - 120 Tool	630 x 765 x 510	2011
Mazak	Hyper Variaxis 630 - 80 Tool	730 x 500 x 600	2012
Mazak	VTC-800/30/SR	3000 x 800 x 720	2009
Mazak	VTC510C-II	1050 x 510 x 660	2007
Mazak	VTC510C-II	1050 x 510 x 660	2007
Mazak	410A-II	410 x 900	2010
Mazak	410A-II	410 x 900	2010
Mazak	410A-II	410 x 900	2010
Mazak	410A-II	410 x 900	2010
Mazak	430A-II	430 X 900	2011
Mazak	430A-II	430 X 900	2011
Haas	Sminimill 2	508 x 406 x 356	2011
Haas	Sminimill 2	508 x 406 x 356	2011
Haas	Super VF2	760 x 400 x 500	2004
Haas	Super VF2	760 x 400 x 500	2004
Haas	Super Minimill VF2	760 x 400 x 500	2004
Haas	Super VF2	750 x 400 x 500	2002
Haas	Super Minimill	400 x 300 x 350	2001
Brother	TC-228	420 x 300 x 200	N/A
Brother	TC-228	420 x 300 x 200	N/A
Nakamura	TMC30	500 dia x 550	N/A
Okuma & Howa	ACT-20	300 dia x 460	1995
Haas	Lathe SL-40	648 dia x 1118	2007
INSPECTION EQUIPMENT			
Mitutoyo	CRYSTA APEX C 9106	905 x 1005 x 605	2005
Mitutoyo	CRYSTA APEX C 574	505 x 705 x 405	2011



Quality

Advanced Engineering operate a quality system to AS9100 Rev B (ISO:900:2008) and have recently achieved accreditation to TS16949:2009. The inspection department at Advanced Engineering has two Mitutoyo CMM's with measurement footprints of 905 x 1005 x 805mm and 505 x 705 x 405 respectively. The larger machine is equipped with fully programmable probe station and SP25 scanning head which allows full surface measurement. This technology combined with our highly experienced inspection team ensures that customer requirements are met including SPC analysis, full ISIR and FAIR reports.



Part Gallery – Interior Brightwork

Gearshift Plate – Solid Aluminium, Mirror Polish



Switch Bezel – Solid Aluminium, Raw State



Seat Belt Bezel – Solid Aluminium, Satin Chrome



Interior Hinge – Solid Aluminium, Bright Chrome



Switch Bezel – Satin Chrome/Raw Comparison



Table Bezel – Solid Aluminium, Bright Chrome

Part Gallery – Bespoke Prototypes

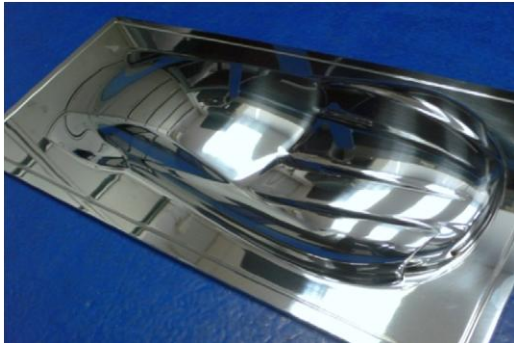
Model Car – Solid Aluminium, Machined Finish



Show Car Wheel – Solid Aluminium



Car Silhouette – Solid Aluminium, Mirror Polish



Show Car Wheel - Solid Aluminium



Front Grill – Solid Aluminium, Mirror Polish



Model Car – Solid Aluminium, Machined Finish

Part Gallery – Production supply

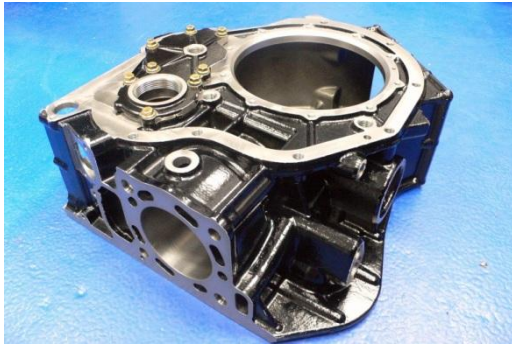
Cylinder Head – Machined from Casting



Cam Cover – Machined from Aluminium Casting



Side Fins – Machined and Hand Finished



Transfer Box – Machined from Cast Iron



Gear Box – Machined from Aluminium Casting



Suspension Arm – Machined from Casting

Part Gallery – Production Brightwork

Ipad Bezels – Anodised Black



Tray Front and Chiller Tuber – Satin Chrome



Window Switch Bezel – Satin Chrome



Rear Switch Bezel/Audio Control – Satin Chrome



Tray Table Arms – Satin Chrome



Side Gills – Provided In Raw Condition



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