

Plastic Engineering 3, 4 & 5 AXIS CNC Milling

ngineering skills lies at the very heart of our business, it is from this reputation that our business has grown. Milling and turning have been the bedrock of Arnold's manufacturing for many years.

CNC linked HAAS vertical machine centres operated by highly skilled engineers who provide the technical expertise in producing complex machined parts to exacting standards.

Materials

- Acrylic
- Polycarbonate
- PETG
- ABS
- Polypropylene (PP)
- Polyethylene (PE)
- Nylon
- Acetal
- PVC
- PEEK
- PTFE
- Polystone
- Kydex
- Aluminium
- Tufnol

3, 4 & 5 AXIS CNC Milling

CNC machining with state of the art 3, 4 & 5 axis vertical machining centres combined with 'W.I.P.S' (Wireless Intuitive Probing System) enables us to manufacture complex components with minimum set up times and to a high level of accuracy.

The full supply process from quotation through to delivery note and certificates of conformity is supported by MieTrak ERP software providing full traceability of materials and parts manufactured.

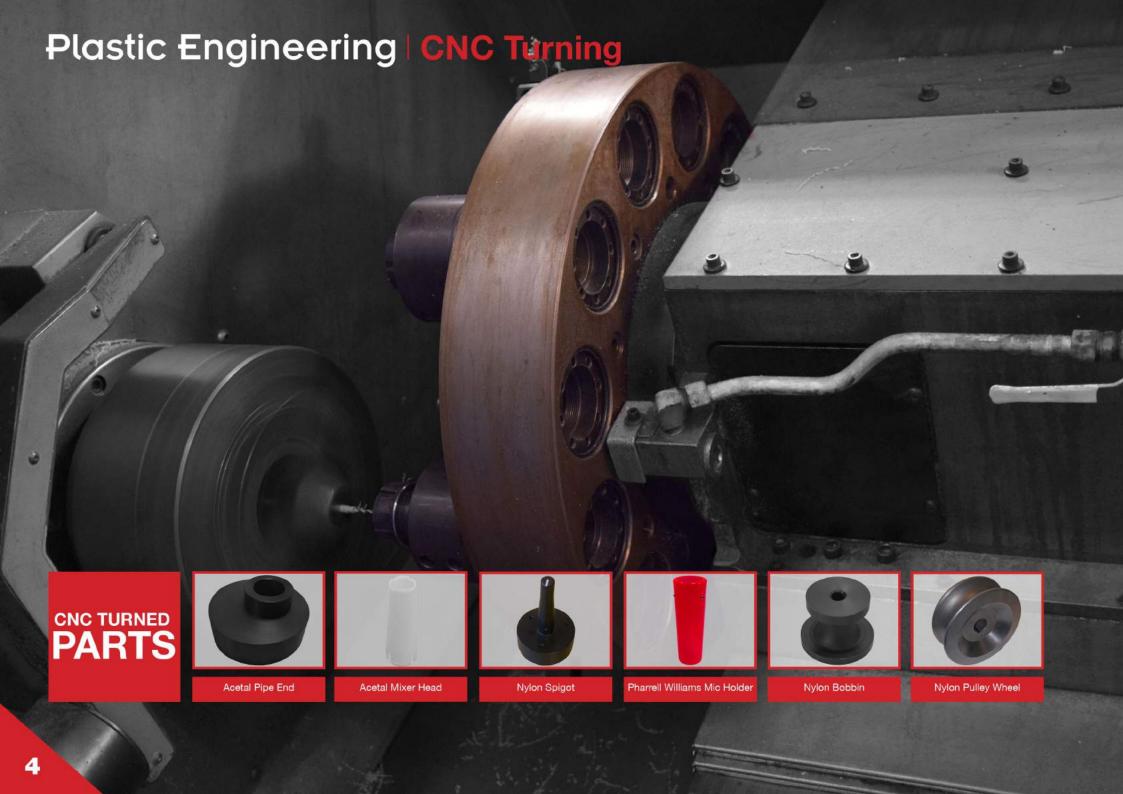
Customer supplied 3D data can be imported directly into our PowerMill CAD/CAM software package where machining cycle programs are generated and simulated for verification prior to being made available for the production process.











Plastic Engineering | CNC Turning

odern plastics afford the flexibility and cost effectiveness which traditional metal counterparts just cannot compete with, stability over a wide temperature range, resistance to chemical attack, impact and abrasion resistant, self lubricating and reduced maintenance costs.

Materials

- Acrylic
- Polycarbonate
- PETG
- ABS
- Polypropylene (PP)
- Polyethylene (PE)
- Nylon
- Acetal
- PVC
- PEEK
- PTFE
- Polystone
- Kydex
- Aluminium
- Stainless Steel

CNC Turning

Our high speed CNC turning lathes enable quick and efficient turning of both plastic and metal to very high standards. The precision CNC turning process allows for complex external geometrics and internal bores to be produced.

With continued investment in the latest and fastest machinery we can provide precision turned parts in short lead times repeatedly and with accuracy.

Combined with our CNC turning lathes, we have an array of conventional lathes and all are operated by time served highly skilled engineers.

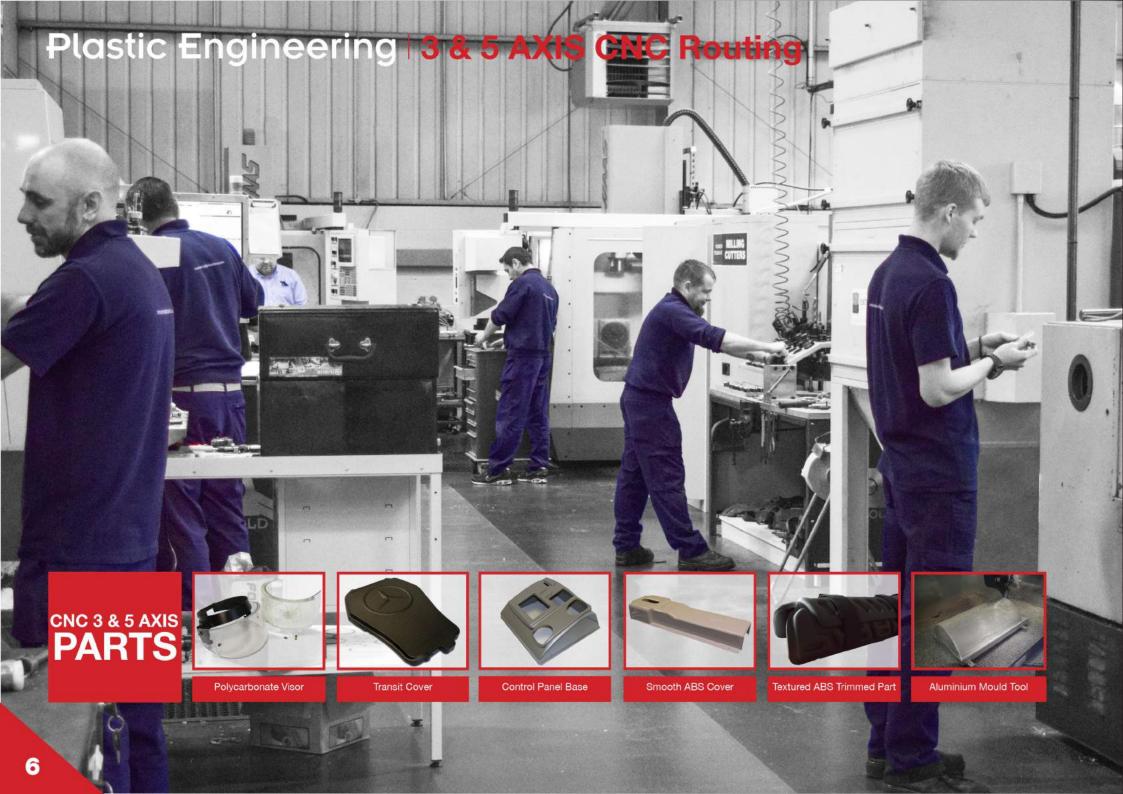
Quality is a by word for us and to this end, we have a dedicated inspection department ensuring product quality and accuracy. Drawing to part compliance is aided by the latest in co-ordinate measuring machine (CMM) systems and software.











Plastic Engineering | 3 & 5 AXIS CNC Routing

Quality and precision every step of the way with our range of 3-5 Axis CNC Routing.

CNC Routers



CNC Routing

With a bed size capacity up to 3.2 m by 1.8 m, our range of CNC 3-5 axis routers can accommodate the largest of items.

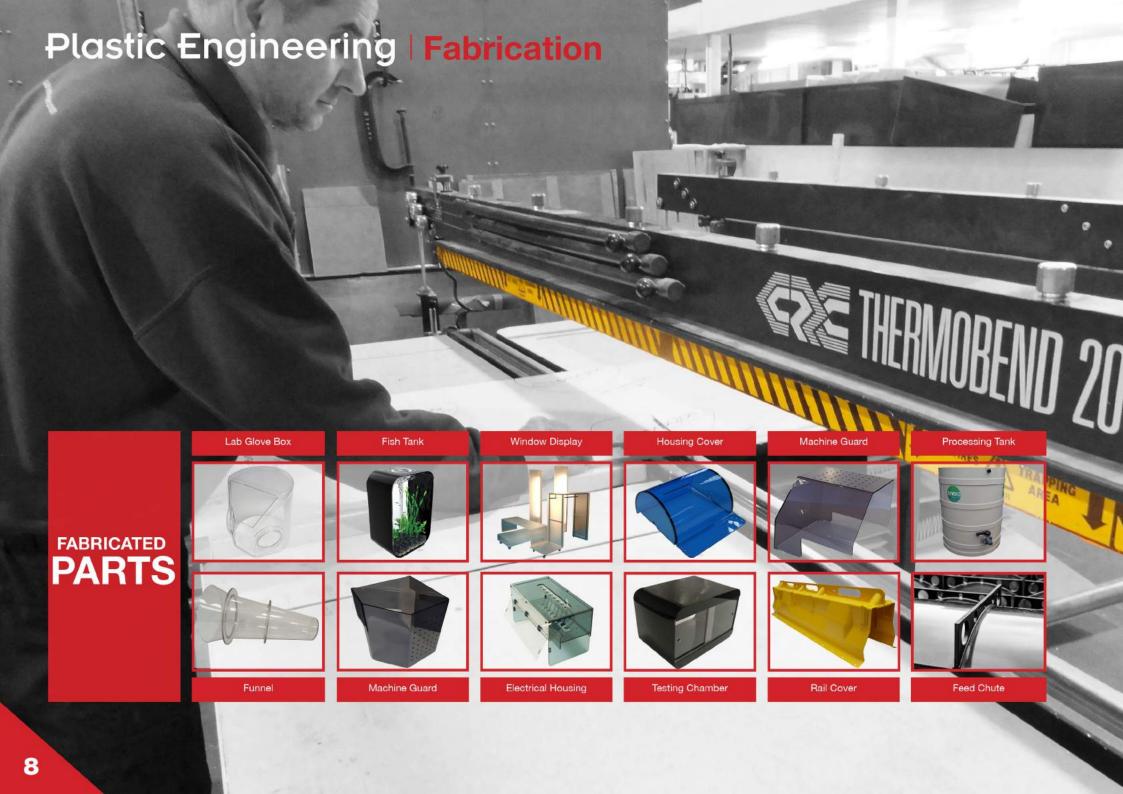
Our routers are at the leading edge of high speed cutting technology and with fully integrated software.

All our CNC routers are CAD/CAM linked with a permanent DNC link between our design and programming departments.

Having a wide range of CNC 3-5 axis routers give us the ability to machine all types of plastic components and parts and also to machine aluminium tooling.

However before we start any of the cutting process, all our CNC programs are run through our simulation software eliminating any downtime on our machinery, and enabling us to produce fast and efficient routing, keeping prices down and shortening lead times.





Plastic Engineering | Fabrication

We have a saying that, "If we can't make it, no one can" and this has proved true throughout the years. With acrylic and plastic fabrication, therein lies the skills of our fabricators by bending and/or bonding an array of plastics, creating a product purely by their labour and skill.

Materials

- Acrylic
- Polycarbonate
- PETG
- ABS
- Polypropylene
- Polyethylene
- PVC
- Starboard

Operations

- Line Bending up to 3 m long
- Drape Forming
- Flame and Diamond Polishing
- Fan Assisted Ovens
- Pre-drying
- . 3, 4 & 5 axis CNC Routing
- In House Form and Jig Manufacture
- Incorporate Metal & Wood
- Plastic Bonding
- Plastic Welding
- Assembly

Fabrication

We serve a diverse range of industries including electronics, food processing, packaging, pharmaceutical, distribution, printing, retail, transport, cosmetics, oil, gas and motorsport.

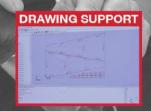
All these sectors have there own special type of manufacturing requirements whether it be special machining, drape forming, bonding, intricate fabrication or marrying fabrication with wood or metal parts.

Bending and forming all plastics can be formed by heat and this type of processing is the mainstay of fabrication manufacture, along with material bonding. We have also developed a process to achieve curved shapes in acrylic on a multi-unit production basis.

Plastic welding is a specialist area for ourselves and an art form in itself. With hot air plastic welding, we can weld a whole variety of plastics ranging from PVC, Polypropylene, Polycarbonate, Polyethylene and PETG into tanks, chutes, hoppers, tunnels, pipes, extractors and housings.











Lamination

The ability to manufacture seamless solutions. We are one of the few companies in Europe able to manufacture laminated plastic panels and we can also extend this process to glass.

Encapsulate

(Materials That Can Be Encapsulated)

- Glass
- Wood
- Plastic
- Fabric
- Paint
- Print
- Organic
- Steel
- Aluminium
- Copper
- Brass
- Vinyl film
- Paper

Lamination

We originally developed this process to produce ballistic visors for military and police service use, exporting them worldwide. The visors are created by bonding layers of polycarbonate and acrylic together to create a panel strong enough to withstand the impact of a high velocity bullet.

We can laminate panels up to a size of 2.5 m long by 1.5 m wide and using from just 2 mm thick material up to almost any thickness and number of layers. This is a cost effective and light weight alternative to glass lamination.

As a feature of the lamination process, we can encapsulate other materials and finishes within the panels with no real limit to the encapsulation depths that can be achieved.

The product application is wide, be it for use as partitions, showers screens, staircases or balustrades.

We have a free of charge design service that is on hand to advise as to "what you can do and can't do" with this very exciting process.







Solid Surface | SOLID **SURFACE**



Kitchen Sink



Serving Plate



Bath







Interior Wall Cladding

| Solid Surface

Better known by the brand names Corian, Kerrock and Avonite, this range of materials are truly wonderful with a huge colour palette available.

With over eighty colours to choose from, 100% waterproof, clean, super hygienic and with outstanding durability, solid surface is a material for the 21st century.

Applications & Products

- Home
- Industry
- Commerce
- Retail
- Sinks
- Baths
- Work tops
- Furniture
- Interior Cladding
- Exterior Cladding
- Illumination

Solid Surface

Well recognised in kitchens and bathrooms, this material has come out to the main stream and we use it for a number of other applications such as wall cladding, retail displays and home and office furniture.

Being fire rated, solid surface material can be used in any number of applications in the commercial and retail sectors.

We are authorised approved fabricators and installers, with our own fitting teams, so we can guarantee first class workmanship and installation.

Our free of charge design and technical service is able to assist with customer projects.























We offer a complete moulding service from design, in-house tooling, to manufacture, with the additional services of fabrication, assembly and printing.

Whether prototyping, short or long production runs, we are the moulder of choice for industry, commerce and retail.

Materials

- · HIPS
- ABS
- Rigid PVC
- Polypropylene
 Copolymer
- High Density Polyethylene (HDPE)
- Conductive Polystyrene
- Acrylic
- Polycarbonate
- PETG
- APET
- Kydex

Vacuum Forming

We have a comprehensive design studio where we can assist customers with the design of their product or part. Our design software, SolidWorks, allows us to analyse potential moulding problems.

Almost all plastics can be vacuum formed, but if in doubt, our technical staff can advise.

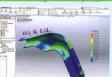
All our mould tooling are made in-house, and this saves time and money for our customers and gives us the manufacturing control we demand. Moulded parts may require additional fabrication, assembly, or print and paint finishes.

We have a prototyping facility and this is commonly used by customers to prove a part or product, prior to main manufacture. This facility is particularly useful when a "part fit" is required.

If you are looking for a specific material and would like to know more, our material specialists are on hand to advise.



ESIGN



ECH SUPPORT











POS **DISPLAY**





Product Cubes







Collapsible Bar





FSDU'S

Back Bar Display





Demo Units











FSDU

POS & Display

We are more than just a display and point of sale manufacturer; we are a design led supplier of tailored solutions, supporting display professionals seeking that extra edge.

Display & POS Products

- Leaflet Holders
- Leaflet Dispensers
- Retail Displays
- FSDUs
- Display Cases
- Display Cubes
- Back Bar Displays
- Product Dispensers
- Suggestion Boxes
- Table Talkers
- Shelf Trays
- Ballot Boxes
- Cable and Rod Displays
- Acrylic Photo Frames
- Acrylic Branding Blocks

POS Display

We understand the need for retail groups and brand owners to maximise sales from displays, at the same time as, brand building, improving compliance and most importantly, through design and innovation to improve the environmental performance of POS and POP.

We have a completely free of charge design service backed by designers and account managers who understand the display market and have over 40 years experience in providing solutions that work.

Utilising SolidWorks software, we can create stunning visualisations of how a product or display will look and the software allows us to produce simultaneously manufacturing drawings which cuts down on the production time.

As an additional service, our fitting teams are available to install and fit within all types of environments including situations where compliance factors and security is of the utmost importance.







Shop Fitting





TEL. 013.75

Sectors

- Cosmetic
- Fashion
- Beauty
- Convenience
- Schools
- Health Care
- Property
- Vehicles
- Motorsport

TI IDNPIKE TYPES

Shop Fitting

If you are a brand owner, retailer or designer, you will be under constant pressure to develop better store solutions with creative vision within critical time scales.

From initial concepts, through R&D, visualisations, site surveys, manufacture and installation, the entire process is undertaken by our highly skilled and qualified team. We can handle all aspects of the fit, from planning consents, to building, carpentry, plumbing, electrical, right through to in-store displays, graphics and signage. We are a complete one stop shop.

Our project management team will ensure that the work will start and finish on time and be delivered within budget.

Whether it is a multi-site roll out, or a single site, or even just a revamp of your existing site, we are the supply partner of choice to those seeking quality innovative solutions.





| Acrylic Furniture

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Our range of cool, classical furniture pieces in crystal clear acrylic, is enhanced by a range of new furniture in solid surface material designed by Chloé Chan.

Alexander

Design your own furniture

Don't worry if you cannot see anything you like in our furniture ranges, we can design especially for you. Simply send your designs to us and we will turn your sketch into a full colour visual. We will then send this to you together with a price.

To order from either of our ranges, please visit our website:

www.arnoldplastics.com

Acrylic Furniture

As a manufacturer whilst we offer standard ranges of occasional furniture, we are also able to make individual pieces to a client's bespoke requirements.

The classic range is manufactured in crystal clear acrylic 15 mm and 10 mm thick and in a contemporary design style that never goes out of date and that fits beautifully in all surroundings.

The White Collection range by Chloé Chan reinforces the classic style with signature pieces which will enhance any home. Kerrock Solid Surface material adds the most tactile of finishes. The White Collection is exclusive to Arnolds.

Limited to only a 100 of any one piece, the White Collection by the designer Chloé Chan comes with a brass engraved plaque to each piece signifying it is from our designer range and with the edition number.







Signs

Signage can say so much about a business and first impressions do count in today's competitive market place. Signs are an extremely effective way of promoting your store, brand or service. Impact is everything, so if you want to stand out from the crowd, we can help.

Sign Types

- Printed panels
- Panatrim Frames
- Sign trays
- Light box
- Flat cut letters
- Built up letters
- Moulded Letters
- Projection signs
- Totems
- Pole signs
- Illuminated
- Canopies
- Hoardings

Signs

We offer a wide range of signage solutions ranging from the simplest of board signs, through to built up letters, illuminated, flex face or even complete fascias.

Working closely with our clients, we seek to gain a deep understanding of our clients business needs and with our free of charge design facility, we offer a seamless solution from initial concept, through to 3D graphics illustration and then onwards to manufacture and installation. As a part of our installation service, we provide site surveys and can organise if required, planning applications. Our national team of experienced fitters can install all types of signage.

We understand that buying signs can be a tricky process and often clients have difficulty in understanding what is possible and how the finished signage will look, but we have an extensive image library of our previous work which can assist in the decision making.







Graphics

Vorking in tandem with both our sign division and also our shop fitting division, we create graphics that enhance our customers image, brand and products.

PROUD PARTNERS OF LONDON 2012

Graphic Print Applications

- Vehicles
- Windows
- Walls
- Signs
- Light Boxes
- Posters
- PVC Banners
- Pull Up Banners
- Hoardings
- Pallet Wraps
- Product Branding
- Floors

Graphics

We provide full graphic solutions ranging from large to small scale, for interior and exterior use and including all types of vehicle livery, therefore you could say we have graphics "wrapped up".

With our free of charge design service, we are able to provide not only solutions that work, but increase business for our clients.

We have extensive printing facilities, including wide format printing for graphics on vinyl and direct to almost any substrate.

Vehicle Graphics

This is a specialist area for ourselves, every company vehicle is a valuable source of mobile, eye catching advertising.

Our design service is free of charge, and we have an electronic library of all vehicle layouts, enabling us to present to customers visual illustrations of how their vehicle will look.

Fitting of vehicle graphics can be carried out at a customer's premises or in our purpose built all weather fitting bays.





We have been manufacturing since 1972 and we have a 30,000 sq ft manufacturing facility in Northampton. Being a diverse bespoke manufacturer we pride ourselves in being a 'one stop' shop for all our clients needs.

We are committed to providing a safe and secure and enjoyable working environment for all our employees and we continually strive to improve current systems and procedures to protect our most valuable asset - our staff.

We believe our approach to our staff benefits you, the customer, as you are assured a highly skilled, motivated team striving for excellence in all that they do.

Health and safety is of paramount importance to us and we have an exemplary record in this critical area.

We are proud of the craftsmen we employ and the apprenticeship scheme we operate to train the craftsmen of tomorrow.





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