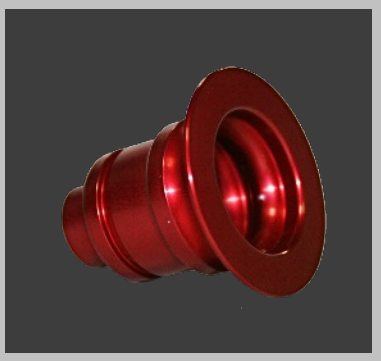
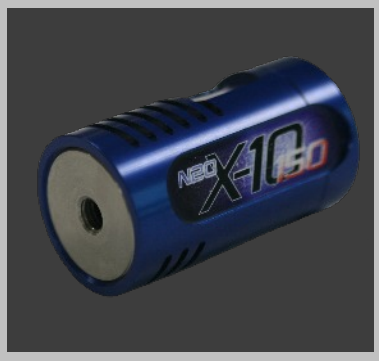
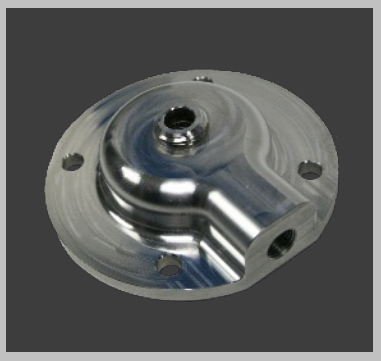
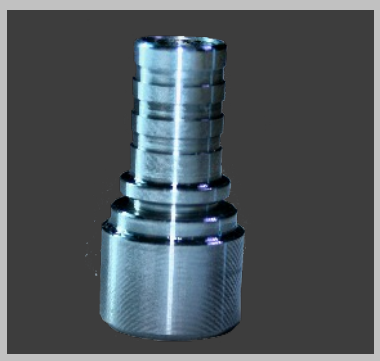
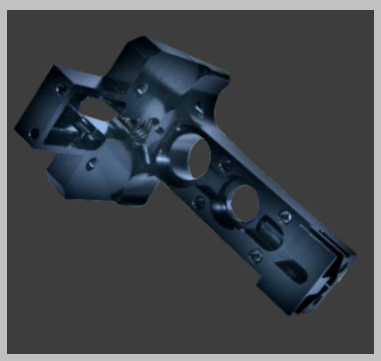






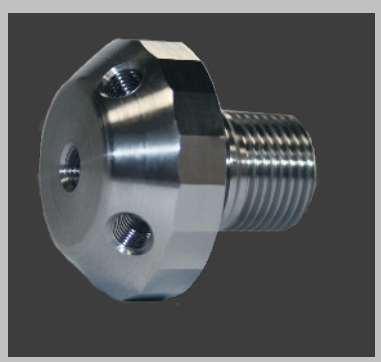



ROTEC






# Capability

Rotec Engineering Ltd was formed in 1996 and over the years has grown considerably . A total of £8 million investment has been made in the latest machines, technologies and workforce .

Due to the expansion and success of Rotec we moved to a state of the art purpose built Advanced Manufacturing Centre in 2017.

Rotec has the capability to machine in a variety of exotic and conventional materials. Supplying various industries including Oil and Gas, Aerospace and Automotive including Formula 1.

Rotec has 13 fully automated sliding head machines that operate 24/7 and we are continually investing in the latest Multi-Axis technology. All our high quality parts are manufactured to the customer's specifications. CAD Design, CAD/Cam and Rapid Proto-typing are just some of the additional services we provide. Along with our extensive sliding head section, our plant includes CNC turning and milling. With up to 5 axis milling, we aim to cater for all your manufacturing requirements.


# Material

JUST SOME OF THE WIDE RANGE OF MATERIALS WE WORK WITH:

- Aluminium
- Steel
- Aluminium Bronze
- Titanium
- Copper
- Brass
- Stainless Steel
- Standard Duplex Stainless Steel
- Super Duplex Stainless Steel
- Martensitic Stainless Steel
- Non Ferrous
- Carbon Alloy Duplex & Superduplex
- Plastics Heat Resistant
- Inconel

# PLATING

Rotec has a network of excellent subcontractors enabling us to offer a full range of:-

- Pre-Treatment Processes
- Anodising
- Zinc Processing
- Plating
- Hardening

# Capacity -Slidinghead

x5

## STAR SV32

Five machines in total

11 axis machine , 32 mm maximum diameter, Long parts ejector, 10 station turret, Live tooling, Magazine bar feed, 6000 rpm

x2

## STAR SR20 111

Four machines in total

20 mm maximum diameter, 16 tools, 4 spindles, 10,000 rpm spindle speed

## CITIZEN C16

9 axis machine, 18 mm maximum diameter,
Twin spindles. 16 tools, Live

## STAR SR-20JII TYPE B

8 axis machine, 20mm maximum diameter, main spindle 10,000 rpm, Combining a 6-tool turning platen with a 5-spindle cross drilling unit and an 8-spindle back working tool post, the SR-20JII boasts impressive tooling capacity allowing for a huge range of machining options.

## STAR SA12

7 axis machine, 16 mm maximum diameter, Sub-spindle, Live tooling, Magazine bar feed. Can run
24 hrs unmanned

## STAR SR-20J TYPE C

C-axis control machine, 20mm maximum diameter, 4- Spindle back working unit, 3-10 tooling, Magazine bar feed.

x2


## NAKAMURA NTY3

This machine is a twin spindle, 3 turret, 36 driven tool , 72 turning tool CNC lathe complete with fully auto bar feed capable of feeding up to 42 mm diameter bar

# Capacity -Fixed-Head Machines

## DOOSAN MX 2000

This machine has a maximum bar diameter of 400mm, a 10KW milling spindle, 42 position tool changer and runs at 10,000 rpm with bar feed.



## NAKAMURA NTRX 300

B-axis ATC Twin Spindle,Fusion between a 5-axis machining centre and a lathe. Distance between centres max. 1350, 40 tools ATC, 250 mm Y-axis stroke, 8000 Milling speed, 18.5 kW Built-in tool spindle motor, Up to 30 kW cutting power for turning shaft-work with synchronized spindles. Left Right spindle motor 15/11 KW, 230 degree B-axis positioning range (±225 degree)

## DOOSAN 2000 SY

Our 2000 SY has an 8" chuck, twin spindle, 12 turret, 65 mm bar feed, C2 axis technology and runs at 5000 rpm.



## NAKAMURA AS200 AY - FITTED WITH A HALTER ASSIST LOAD ROBOT

Single Turret Milling Turning Centre, Linear
Guideways on all axes, +/- 41 mm Y-axis, 15/11 kW spindle motor, Spindle speed 4500 min- 1, Driven-tool speed 6000 min-1, Faster rapid traverse 24 m/min for the X-axis,and 36 m/min for the Z-axis. Bar capacity 65 mm standard. 8" Chuck, 5 station turret, Gearless Direct Belt Driven tools

## MORI SEIKI NLX 2500 SY

The NLX 2500 is a high-rigidity, high-precision CNC lathe. Milling:- Turret equipped with BMT (Built-in Motor Turret), High-speed rotary tool spindle, 10,000 min-1: Operability: Equipped with the digital tail stock, CELOS, MAPPS. High precision: Thoroughly controlled thermal displacement, High rigidity, box slideways are used for X / Y / Z axes

# Capacity -CNC Milling Machines

## CHIRON FZ12 KW

This machine incorporates twin pallets with rotary trunnions, a Microlock work holding system, Renishaw probing system, 48 tool magazine, high pressure coolant and a 15,000 rpm spindle.

## DAEWOO V600

This machine has a gearbox spindle, 32 position tool changer, through spindle coolant lines and swarf management systems. With a 22Kwatt motor making it ideal for armour plate or large parts.

## DMU 50

This is one of our latest machines with 5 axis simultaneous machining, swivel rotary table 12,000 rmp spindle and a 24 position tool changer, and probe inspection

## DMG MORI CMX 50U

Universal 5 axis milling centre with swivelling range of B axis from -5 to 110 degrees. High dynamic in-line spindle of 12,000 rpm with power 13 kw + 83 Nm. 30-pocket tool magazine, tool change in 2.7 s. Huge table with 630 dia x 50 mm, machining parts up to 200 kg

## ECO MILL 1100V

High speed with 4$^{th}$ Axis. This Machining centre can accommodate work pieces up to 1000 kg, eco Mill 1100 V with the traverse X-axis of 1100 mm, fitted with halter assist load robot

## Halter Load Assist Robot

HALTER CNC Automation has incorporated the complex robotic technology into the most accessible solution for automation of batches from 10 to 1000 pieces. Teamed with our New Nakamura 200ASY, both working in harmony to provide flawless automated manufactured parts.

# Inspection & Quality

## MITUTOYO LINEAR

*HEIGHT GAUGE 2D MEASURING GAUGE*

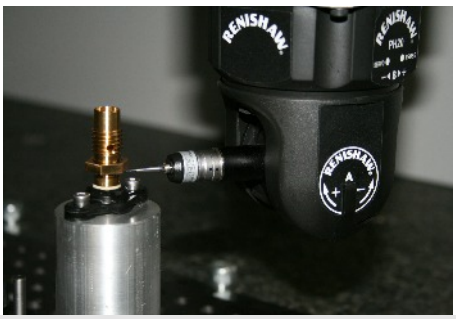
Fitted with a Linear Height, multifunctional single axis height gauge, makes 2D measurement simple and accurate. It is possible to measure from simple 1D parameters of the surface height, circle diameter, distance, perpendicular and straightness to sophisticated 2D measurement.

## SINOWON VB12 SHADOW GRAPH

VB 12 Series Profile Projector is a precise non-contact optical measuring instrument. Using a clever meld of optic, mechanic and computer technology it can be widely used in almost any industry for quality control purposes. The machine can inspect most surfaces and outlines of objects including complex threads, gear teeth and milling cutters

## KEYENCE - IM-7000 SERIES

Keyence Image Dimension Measurement System makes it possible to take faster, easier and more consistent measurements. It is able to measure width, radius and height all with one device. Contact height measurement unit, up to 300 x 200 mm stage.




## ZEISS PRISMO, RENISHAW MODUS 2

Zeiss Prismo CMM Machine fitted with Renishaw 5 axis CMM sensor technology. Using Modus 2 the innovative interface which is quicker to use and compatible with CAD CAM. This machine can perform from simple manual CMM operations through to complex part measurement on multi-axis systems.

## DEA GLOBAL CLASSIC 500 X 500 CMM

All-purpose CMM for the dimensional inspection of a variety of components. It can be equipped with touch-trigger probes or optional scanning probes, which can be used in a number of industries for first and final part inspection and fixture qualification .

Rotec operates and is committed to a Total Quality Management System. With a dedicated Quality department, regular meetings and statistical analysis of our service, we strive to maintain our dedication to quality. As part of the Quality Management System Rotec has and is fully compliant with ISO 9001:2015 accreditation which is applicable to Precision CNC components produced by turning, milling and drilling in ferrous, non-ferrous and plastic based material.

*"We are committed to ensuring that all parts are of the highest quality to meet and exceed customer requirements"*

Our parts are quality tested and inspected by our highly trained Quality department using the latest testing equipment through the manufacturing process to ensure all parts meet not only our customers but also our high standards.

We always welcome customer feedback and suggestions as these enable us to continually improve our internal processes, services and quality. Automotive industry is a major part of our portfolio, we regularly evaluate and work towards the automotive standards

COTSWOLD LIFE EMI AWARDS 2016 WINNER

CERTIFICATED ISO 9001:2008 QSL ISO QUALITY SERVICES REGISTERED FIRM

Intertek UKAS MANAGEMENT SYSTEMS

A MEMBER OF ADS

## Tool Making / Fixture Manufacture

Our tool shop is manned by experienced tool makers who are long served within the engineering industry. Due to a combination of Vertical, Horizontal, Mills, Lathes and Surface Grinders there is little we can't manufacture for our customers.

FIXTURES

Our skilled in house designers create mechanical , pneumatic, hydraulic fixtures for welding, machining, assembly lines, and inspection.

SMALL BATCH- ONE OFF's

Our tool makers work for a combination of design houses requiring one off components for their specialised machinery.

## Assembly / Stock Control / Fabrication

WELDING / BRAZING

Rotec is now able to offer its customers a one stop shop combining the flexibility of a fabrication shop with the precision of CNC engineering.

Our Lloyds approved coded welders are able to offer MIG /TIG welding on large or small items, working with Steel, Aluminium and Stainless Steel.

In our dedicated Fabrication shop we can also braze machined parts, removing the need for our customers to track their parts through numerous third parties and reducing lead times.

ASSEMBLY

For many customers we provide a one stop shop providing them with a finished and assembled, tested product, allowing them to concentrate on their business and customers.

Via our established supply chain we are able to offer competitive prices to our customers while taking the stress off managing the stocks of parts and sub assemblies. This ensures our clients are receiving high quality parts for the best price.

STOCK HOLDING

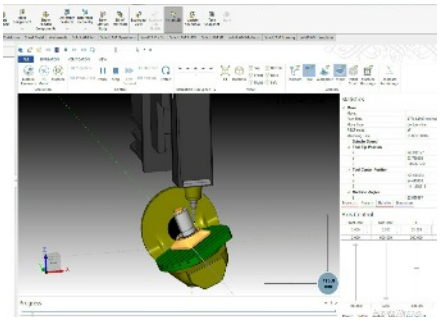
We like to develop long term relationships with our customers. One way we do this is to offer a reduced price for purchasing a larger quantity than may be at the point of order, setting up a call-off

For some customers we also provide a KANBAN service, replenishing stock bins in line with their instructions.

## CAD / CAM

CAD / DESIGN

Working with a variety of customers we can support them by creating drawings that formalise their designs prior to machining. Or, for customers who have their own in house CAD engineers, we can seamlessly transfer information and add value to the design.



CAD / CAM

Extending our CAD capability we have invested in the latest software to enable us to work from a solid model quickly generating a CNC program, and with PC DIMOS generate CMM Inspection programmes.

Working from the customers original model removes the likelihood of errors. This allows for the most complex parts to be handled quickly and efficiently.

- SLIDINGHEAD
- CNC MILLING
- CNC TURNING
- 5 AXIS
- RAPID PROTOTYPES
- CAD/CAM
- JIGS & FIXTURES
- FABRICATION
- STOCK STORAGE
- ROBOTIC AUTOMATION
- 24 HR PRODUCTION
- NEXT DAY QUOTE

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