

# HISTORY AND CULTURE

Established over 40 years ago, MNB Precision has expanded on its roots manufacturing for the tool making industry and now proudly supplies manufacturing services to world leading companies across the Oil & Gas, Power Generation, Rail and other manufacturing industries.

We specialise in precision engineering, offering a wide range of in house capabilities with a commitment to excellence in quality.

Continuous Investment into the latest machine tools and technology has been matched with the acquisition of our new 35,000ft² home in the West Midlands.

Recognising the importance in developing new and existing relationships we ensure our products and services always reflect our customers' values. We are proud to deliver reliable components used worldwide across multiple industry sectors.

# "The centre of manufacturing Excellence"

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# **CAPABILITIES**

MNB Precision offer a wide range of in-house services which are supplemented with a robust, controlled supply chain enabling us to offer an efficient turnkey solution to customers.

Our core in-house capabilities include:

- CNC Milling
- CNC Turning
- Vertical Jig Boring Grinding

  Horizontal Jig Boring Shot Peening
- Spark Erosion
   CNC Boring
  - Wire Erosion
- API Cold Rolling
- NDT
- CMM Inspection

# **MATERIALS**

We have extensive expertise in machining 'exotic' materials, many of which are routinely employed across the industries we serve.

The list of material types which fall commonly within our capability includes but are not limited to:

Stainless Steels	17-4, 304, 316,317, 347, 410, 420 (13cr) 431				
	FV520B				
	17-4ph (630)				
	Mild Steel				
	080M40 (EN8)				
	605M36 (EN16)				
Carbon & Alloy Seels	709M40 (EN19)				
	817M40 (EN24)				
	826M40 (EN26)				
	AISI 4140, 4145, 4330, 4340				
	Monel K500				
Exotic Metals & Alloys	Nitronic 50				
	Toughmet 3 AT 110				
	Aluminium				
	Aluminium Bronze				
	Phosphor Bronze				
API Cold Rolling	Beryllium Copper				
	Copper				
	C63000				
	Titanium				
Nickel Alloys	Inconel 600, 625, 718, 800, 925				
Duplex & Super Duplex	F51 (25cr)				
Non-Magnetic Stainless Steels					
Plastics & Nylon					

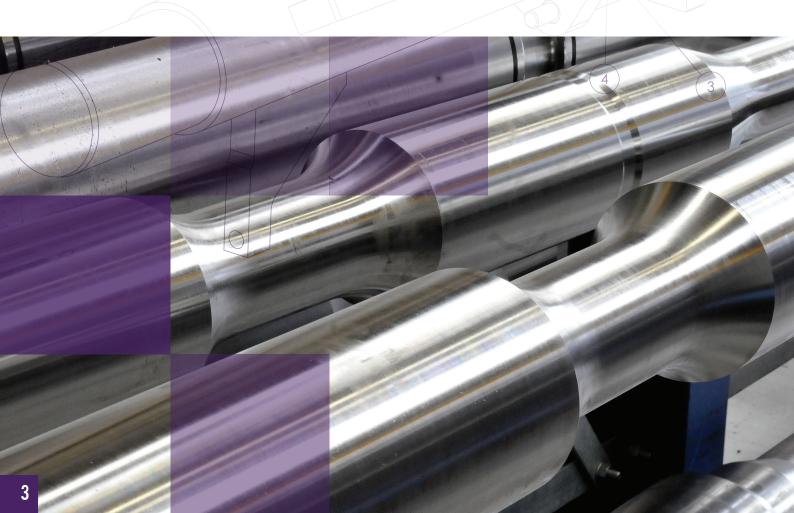
# **CNC MILLING**

The varied range of CNC milling capabilities available demonstrates our understanding of the need to keep abreast of new technologies. Significant recent investment into the latest machine tools allow us to manufacture a diverse range of components to service a variety of industries reliably and efficiently.

We have the ability in-house to manufacture small, intricate (part example) through to large, complex (part example) over 10m in length.

#### Milling capabilites:

Machine	Qty	Length	Width	Height	4th Axis Bore Size	Max Length Of Job
SORALUCE	1	8000mm	1500mm	1200mm	480mm	16000mm
SORALUCE	2	3500mm	1250mm	1000mm	175mm & 250mm	9500mm
CORREA	1	2500mm	1000mm	1000mm	204mm	3500mm
DOOSAN MNYX 9500	1	2500mm	950mm	850mm	250mm	3500mm
HARTFORD 3M	1	3060mm	1200mm	1500mm	160mm	6000mm
HARTFORD 2M	2	2000mm	800mm	600mm	80mm	2000mm
HARTFORD 1.6M	1	1500mm	820mm	700mm	80mm	80mm
DOOSAN DNM 5700	1	1050mm	570mm	510mm	80mm	1500mm
HARTFORD 1M	1	1000mm	450mm	450mm	N/A	N/A





# **CNC TURNING**

Through operating a variety of state of the art CNC turning lathes we are able to provide both capability and capacity to many industry leaders.

Our innovative teams work in conjunction with our customers in order to explore new concepts, develop ground breaking manufacturing methods and take on the most demanding of CNC turning projects.

Our turning facilities enable us to manufacture parts of varying sizes.

Machine	Qty	Between Centres	Max Swing	Hollow Spindle	Max Length using Through Spindle
DOOSAN PUMA 800XL	1	5050mm	900mm	320mm	10000mm (320mm OD)
DOOSAN PUMA 700LM	1	3250mm	900mm	165mm	5000mm (165mm OD)
DOOSAN PUMA 480XL	1	3150mm	650mm	165mm	4500mm (165mm OD)
DOOSAN PUMA 480L	1	2130mm	650mm	165mm	3500mm (165mm OD)
DOOSAN PUMA 2100 LY	1	1280mm	375mm	117mm	2500mm (117mm OD)
DOOSAN PUMA 400L	1	2180mm	550mm	117mm	3000mm (117mm OD)
DOOSAN SMX 3100	1	660mm	300mm	102mm	1540mm (102mm OD)
DOOSAN SMX 5100	1	830mm	520mm	102mm	8100mm (165mm OD)

### IN-HOUSE CAPABILITIES

In support to the main CNC milling and turning operations, MNB also provide a number of other internal capabilities.

In-house capabilities:

Service	Machine	Qty	Length	Width	Height	
	Sip	1	1,000mm	710mm	700mm	
JIG BORING	Newal	1	750mm	500mm	700mm	
	Dev	1	152.4mm	101.6mm	558.8mm	
SPARK EROSION	Sodick A65R	1	970mm	700mm	400mm	
WIRE EROSION	Sodick 530D	1	500mm	320mm	270mm	
	Sodick 750LH	1	750mm	500mm	600mm	
GRINDING	Churchill Universal Grinder	1	1828.8mm	N/A	16" dia	
	Myford	1	304.8mm	N/A	5" dia	
	Lodi Surface Grinder	1	1500mm	500mm	750mm	
	Jones & Shipman 540 Surface Grinder	2	450mm	150mm	200mm	
	Jones & Shipman 1350 Universal Grinder	1	1016mm	N/A	10" dia	
HONING	Rexroth Horizontal Honer	1	2500mm	240mm dia	min bore 65mm dia	
HARDNESS TESTING	Proceq Equatip 3 Hardness Tester	1	N/A	N/A	N/A	
SHOT PEEN	Wheelabrator Ventus 150PR	1	10,000mm	400mm	N/A	
NDT	M.P.I	PCN Level 2				
MDI	DYE Pen		PCN Level 2			

# **SUPPLY CHAIN**

We understand the necessity to offer our customers a turnkey solution and we always take into consideration their requirements to maximise the effectiveness of services we offer.

To ensure that our supply chain is reliable, cost effective and meets our quality requirements, all suppliers are monitored and developed in accordance with our Supply Chain Improvement Plan (SCIP).

A non-exhaustive list of the processes we provide our customers are displayed below.

#### Supply Chain capabilities:

- Zinc Phosphate
- Welding
- Cladding
- Painting

- Manganese Phosphate
- Tuftriding
- Copper Coating
- Scotchkote

- Nitriding
- Case Hardening
- HVOF Spraying
- Anodise

# **QUALITY & INSPECTION**

On time in full (OTIF) and quality are seen as key performance drivers at MNB. Quality is not seen as subjective, it is measurable and it differentiates us from our competitors. It is the first reaction from our customers, when asked about the performance of MNB.

Our commitment to delivery of quality products is underpinned by our continued investment in the latest CMM inspection equipment. Our temperature controlled, central metrology area houses three CMMs and a team of skilled inspectors.

Our 4.2m Zeiss Accura II provides outstanding performance where high accuracy and measuring speeds are required. Its design and material specifications make it particularly tolerant to temperature variations and its modular design allows ongoing upgrades and enhancement throughout its working life. It can be tailored to suit multiple applications with its large range of sensor options. These include active and passive scanning sensors, single and multipoint sensors, camera and line scanning sensors.

Machine	Working Range			
	Length	Width	Height	
ZEISS ACCURA II	4940mm	1590mm	1064mm	
MITUTOYO EURO C9166	2300mm	1200mm	800mm	
IMS IMPACT 2	750mm	750mm	500mm	



