## WORKSHOP CAPACITIES

## **MAXIMUM CAPACITY**

**TURNING** 4,100mm dia. x 10,000mm long / 1,870mm dia. x 35,000mm long

**GRINDING** Cylindrical Roll Grinding to 1,000mm dia. x 10,000mm long

**HORIZONTAL BORING** 22,000mm x 5,000mm x 2,000mm

**VERTICAL BORING** 15,000mm diameter

HIGH VOLUME PRODUCTION MACHINERY 5-axis CNC Machining Centres up to 22,000mm x 5,000mm

**GEAR GRINDING** 

Climate controlled environment Accuracy to DIN 2 (AGMA 15)

**CNC Gear Form Grinders** Internal and external gears to 2,400mm dia. x 1,500mm face width

**GEAR CUTTING** 

Climate controlled environment: Accuracy to DIN 5 (AGMA 12)

External Gears: 15,000mm dia. x 2,500mm face width (3 units; 15m, 14m, 11m dia.)

15,000mm OD x 500mm face width Internal Gears: Worms & worm gears: 4,000mm dia. x 30 module

4,000mm dia. x 310mm face width (DIN 3) Bevel gears (Spiral/Slew/Straight):

Sprockets: 15.000mm dia.

2,000mm dia. x 1,000mm face width Crown Gear Couplings: Double helical gears: 14,000mm dia. x 2,500mm face width

INSPECTION

Climate controlled environment Full gear inspection. Measuring Accuracy MPEp (ISO 10360-2) =  $2.0\mu m$ .

Envelope dimensions: 3,000mm x 1,500mm x 1,000mm plus 16t rotary table

Portable CMM's with Gear Inspection software

Laser Scanners

**DESIGN & ENGINEERING SERVICES** CAD, CAM and FEA including SolidWorks and Kissoft Gear Design Software

**HEAT TREATMENT** 

Atmosphere controlled: Gas carburising:

1,900mm dia. x 5,000mm - Pit furnaces and fluidised bed.

**Induction hardening:** 

- Tooth by tooth induction hardening machine.

Full metallurgical laboratory for failure analysis

Gears, pinions, track pads. Full contour profile up to 15,000mm dia.

Quench and tempering:

- Oil tank 30,000L 1,900mm x 5,000mm long

- Water/polymer quench

Nitriding:

- Carbo nitriding Furnace 900mm dia. x 1,800mm - Nitro carburising Furnace 900mm dia. x 1,800mm

**Tool Steels:** 

- Fluidised bed 1200°C Furnace 900mm dia. x 1,800mm Furnace 6.000mm dia, x 3.000mm **Tempering** Furnace 15,000mm x 15,000mm wide Stress relieving - Gas

Stress relieving - Electric Marquench

Shot-peening Sandblasting

FABRICATION/WELDING Fabricated gears, transmission boxes and mining equipment - 200 tonnes.

> Plate Rolls 6,000t, 3,650mm width x 220mm thick

4,000t, 3,200mm width x 150mm thick

Furnace 12,000mm dia. x 2,000mm

PRODUCT SUPPORT AND FIELD SERVICE **LUBRICATION AND CONDITION MONITORING** 

**QUALITY ASSURANCE** Certified to ISO9001 and AS9100 by Lloyds

**LIFTING & HANDLING** Overhead Gantry Cranes to 200 tonnes

Yard Cranes & Straddle Carrier

The above capacities are indicative only, please contact us with your specific requirements. Information supplied is subject to change without notice.