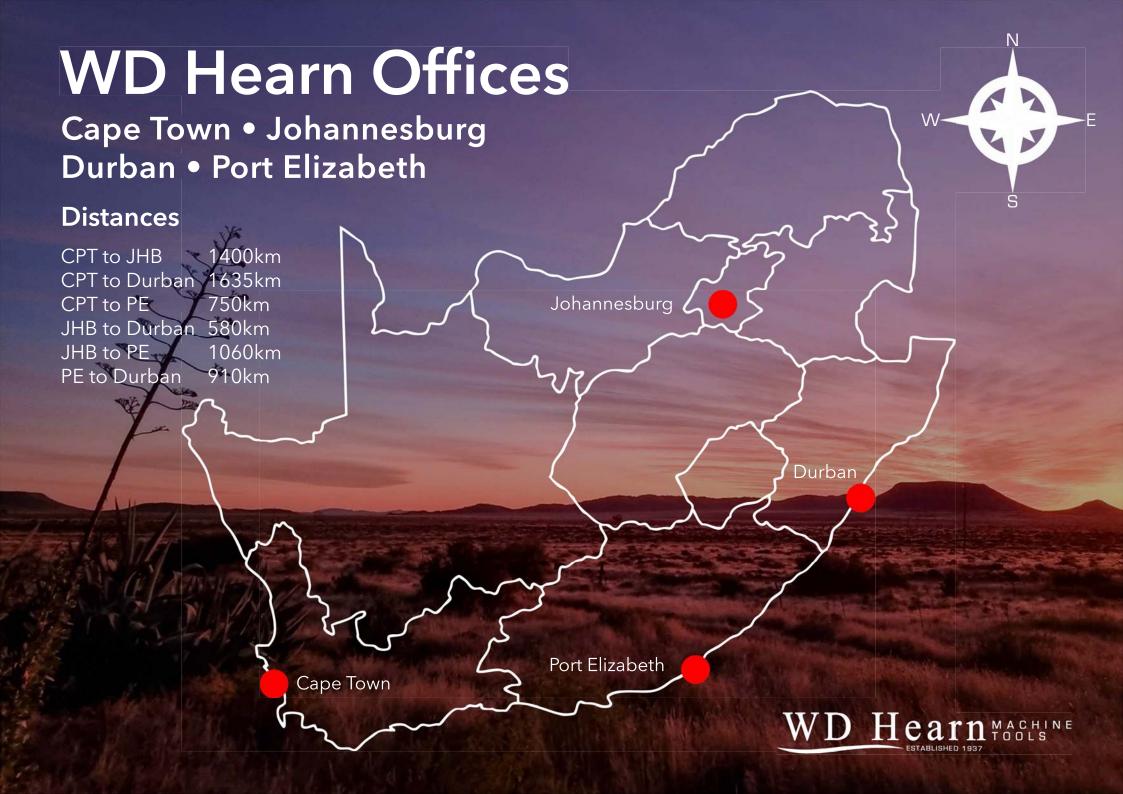


ESTABLISHED 193

Company Presentation



CNC Machinery, Metrology Equipment and Tooling





# Cape Town: Head Office





Ray Cooper



Graeme Cooper
Managing Director



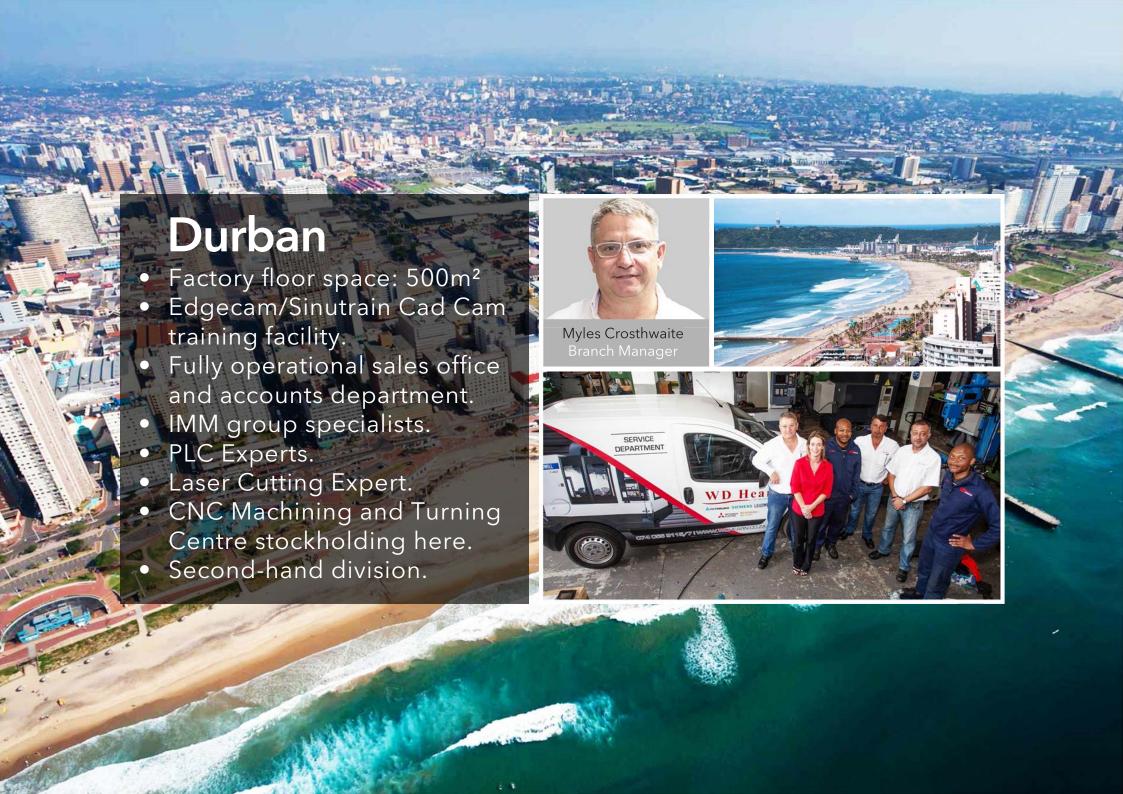
Johan Neveling
Technical Director

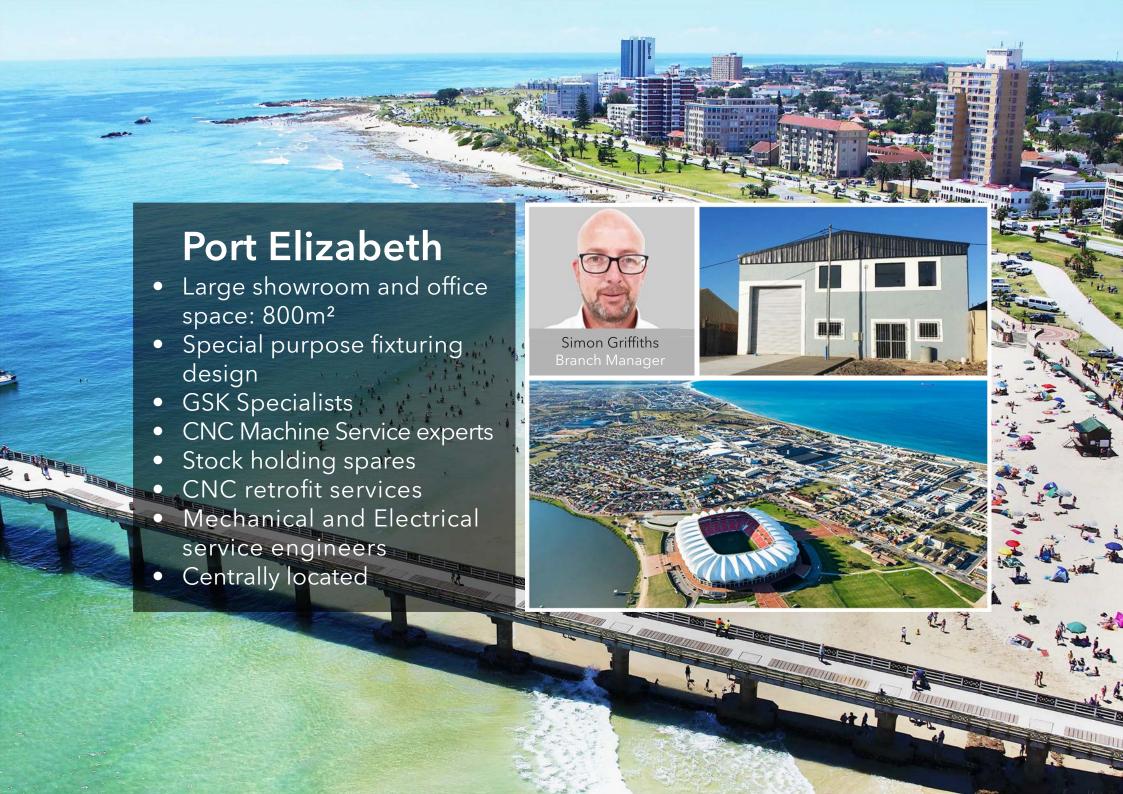




- All WD Hearn operations are managed from here.
- Two premises in Cape Town 1200m² and 1400m².
- Communication link to all our international principles.
- Sales and marketing support to our other branches.
- Spindle Refurbishment centre.
- Our sales team offers outstanding product knowledge and machining advice.
- Supply, installation and support of a huge variety of CNC Configurations and Technologies.
- For our customers who require temporary additional capacity WD Hearn runs a loan machines project.



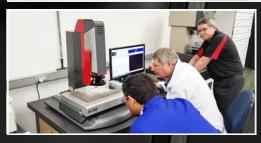




# Training

### **Training Facility**

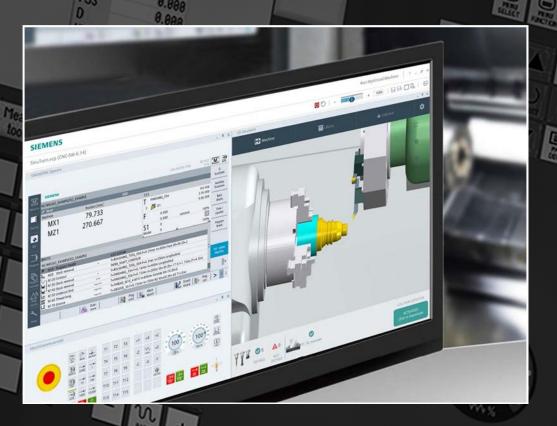
- The growing demand for CNC Programmers/Operators/Setters has resulted in a demand for qualified training.
- Training facility was installed at our Cape Town premises in 2015.
- Specialising in CNC programming training.
- Equipped with Siemens Sinutrain for training on all Siemens control systems.
- Courses in Edgecam CAD CAM software as well as custom Fanuc training.





# Siemens Sinutrain

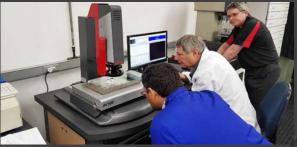
- SinuTrain from Siemens offers a hands-on solution for CNC training.
- SinuTrain allows you to expand your programming and operation expertise of the innovative numerical control features found in SINUMERIK.
- The intuitive, PC-based solution consists of control-identical software that is perfectly tailored to meet your needs.
- Beyond milling and turning SinuTrain offers a wide range of technologies



# **Service Department**

#### **Our Service Team**

- WD Hearn has one of the largest and most highly skilled service departments in the country.
- We focus on sharing ownership of the installation of CNC machines into machine shops through the expertise of skilled technicians and application engineers.
- All of our engineers have been for product training at the machine tool builders facilities; Siemens Germany, Yushine, Flow Waterjet in the UK, and Leadwell and Sanco in Taiwan.





#### Service Engineers employed

- Mechanical
- Electrical
- Applications

#### Service offered

- CNC Retrofits
- Special purpose machine design and local build
- PLC: Writing & Programming
- Turn key projects: Programming, Fixtures

#### **Applications**

- CNC Programming
- Cycle times
- Renishaw retrofits & system solutions

### **SIEMENS**

WD Hearn became an official Siemens partner in 2007 and since then have been handling the aftersales service on all our Siemens CNC controls, as well as stocking Siemens drives, controllers and motors in JHB and Cape Town.



#### Ford Installation



In 2012 WD Hearn Machine Tools were responsible for the installation of 80 Horizontal Machining Centers into Ford, the largest engine plant in Southern Africa. The project is running triple shifts with more machines likely to be ordered in future.





We have extensive product knowledge within the WD Hearn group in both application and service and repair. For an outstanding reference list, please don't hesitate to contact your nearest branch.

# **Applications**



WD Hearn's application engineers' expertise and experience allows WD Hearn to offer tailor-made application solutions that no other machine tool company in South Africa can.

John Whitehead and Andre Enslin handle our applications in Port Elizabeth and Cape Town. Johan Neveling takes care of all Johannesburg and Durban's application requirements.

Training offered on a broad range of machine configurations, from C-axis Lathes to 5-axis Machining Centers, to Swiss Type Turning and Horizontal Machining Centers. We also offer training on all popular CNC Control Types and a veriety of CAD/CAM systems.



#### **Turn Key Projects**

WD Hearn offers a broad range of fully designed & delivered turnkey solutions to fit any production or jobshop requirements. Our solutions come complete with extremely accurate cycle times and advice on the correct equipment to purchase.



#### **Remote Programming Assistance**

WD Hearn offers a broad range of fully designed & delivered turnkey solutions to fit any production or jobshop requirements. Our solutions come complete with extremely accurate cycle times and advice on the correct equipment to purchase.

# RENISHAW. apply innovation™

# In-house Equipment

WD Hearn owns Renishaw probing/lazer systems and software for machine accuracy testing, repairs and maintenance. Renishaw probes offer the highest precision and accuracy, while providing solutions for tool setting, broken tool detection, component set-up, in-cycle gauging and first-off inspection of parts, with automatic offset updates.



#### Renishaw XL-80 Laser System

The XL-80 laser interferometer offers high-performance measurement and calibration for motion systems, including CMMs and machine tools.



#### QC20-W ballbar

The QC20-W is used for assessment of machine tool positioning and servo control performance. features linear sensor and Bluetooth technology.

Metrology Calibration kit | BT40, BT45 & BT50 Test Bar | Webber Bars | BT40 & BT50 Concentricity Test Gauge PBLS-502 Precision block level | Parallel Test Bar | SPM Model BC100 Bearing Checker | Granite Square

### International Supplier Visits

# CC Machinery

2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018

#### **Kitamura**

**JAPAN** 

2015, 2016, 2017

#### Leadwell

**TAIWAN** 

2010, 2011, 2012, 2013, 2014, 2015, 2016, 2023

#### Mitsubishi

**GERMANY** 

2014, 2015, 2016, 2017, 2018

### Siemens

**GERMANY** 

2012, 2013, 2014, 2015, 2016, 2018

#### Renishaw

UNITED KINGDOM

**Annual Visits** 

### Nakamura-Tome

**JAPAN** 

2023

#### **EMO**

**TRADE SHOW** GERMANY

2011, 2013, 2015, 2017, 2023

### HMTOF

TRADE SHOW JAPAN

2022

#### CCMT TRADE SHOW CHINA

2024

# CONTROL TRADE FAIR GERMANY

2022

# **TIMTOS**TRADE SHOW TAIWAN

2007, 2009, 2011, 2013 2015, 2017, 2019, 2023

































































5-AXIS AND HORIZONTAL MACHINING CENTERS



JAPANESE-BUILT MULTITASTING MACHINERY





FIBRE LASER MACHINES



PROBING, CALIBRATION AND CMM EQUIPMENT





LAZER WELDING AND LAZER ENGRAVING MACHINES















& CENTER LATHES



**HEAVY DUTY MACHINE TOOLS** 













MILLING MACHINES





### **Agency Map**



Taiwan Leadwell, Yu-Shine, SANCO, LK Machinery, GSM CNC, Kent | Germany Siemens, Mahr England Renishaw, LK Metrology, Nikken | Japan Mitsubishi, Kitamura, Nikon, Nakamura-Tome Switzerland Tornos | China DMTG | Australia ANCA | Czech Republic Fermat | USA Starrett, Flow

### **CNC Controls**

#### **SIEMENS**









HEIDENHAIN





















#### Sinumerik

808D Advanced 828D, 828D Basic 840D sl

#### **Oi-Series**

31i-MB

Oi-MF Oi-TF

#### Mitsubishi CNC

M70/700 M800/M830W D-Cubes

#### Syntec CNC

21MA

#### **Arumatik**

Exclusive to Kitamura Machines

#### Most Machines come with Heidenhain iTNC 530 as optional. Other models:

TNC 640, TNC 620, TNC 320, TNC 128

**GSK 218M** Milling/Drilling

**GSK 983M** Milling/Drilling

GSK 980MDc Milling/Drilling CNC

# LEADWELL

WD Hearn's best selling CNC Machines

#### **Vertical Machining Centers**

3 Axis Linear Way+Box Way
NV & MCV Series

**V-50L** 

Flagship VMC



#### **CNC Turning Centers**

**High Speed Linear Way**T Series

**T-7A** 

High Speed, Powerful





**5 Axis Linear Way** VE, MU & BC Series

**V-40iT** 

**Built in Trunnion Table** 



Heavy Duty Box Way

LTC Series

LTC-20DY

**Heavy Duty Turret** 

#### **VMC Spindle Options**

8000RPM Steel Bearing + Chiller | 18 000RPM DDS 10000, 12000, and 15000RPM Ceramic Bearing Type ZF Gearbox option on Box Way | BBT40 Spindle std BT30/BT50 available on certain models

#### Available on Leadwell Turning Centers SMY

S - Sub Spindle M - Milling (BMT and VDI turrets available)
 Y - Y-Axis (increases flexibility), \*LIVE TOOL TURRET\* - Driven Tooling



Machining Challenges-Simplified®

**Highest precision Japanese-built Machines** 

# MyTrunnion 7G 5 Axis Machining Center

The Mytrunnions 7G is ideal for ultra-high precision simultaneous 5-axis machining.



### MyTrunnion 4G

5 Axis Machining Center

The Mytrunnion 4G is ideal for large capacity, high precision Aerospace applications.

#### **Bridgecenter 8G**

Double Column Machining Center

Ideal for parts requiring heavier cutting loads. Excellent for Mold and Die applications.



# ANTAMAR

#### **Mycenter Series**

Horizontal Machining Center

HX-250iG & HX-630G

Positioning Acc Repeatability 0.000198cm 0.000099cm

The world's fastest rapid feed rates of 60m/min.

All Kitamura machine parts are hand scraped before assembly.

Access Machine data from wherever you are using 'Anywhere Remote®' monitoring suite.

Kitamura's Arumatik-Mi CNC Control is offered as standard on all Kitmura machines.

# W Nakamura-Tome



#### SC100X2

**CNC Turning Center** Single Turret

Born to be Fast!
Single Turret.
Milling and Y-ax

Milling and Y-axis are Standard.



#### **NTJ 100**

Multi Tasking Turning Center Upper Turret with B Axis

B-axis Swiveling Range 182°.

Upper and lower turrets have milling and Y-axes.

#### **AS200L**

**Multitasking Turning Center** Single Turret

Y-axis, Milling Standard, Turning & Milling with full power.



#### **MX100**

Multi Tasking Turning Center Opposed Twin-spindles

Tool Spindle, ATC and Lower-turret.
CNC Multitasking

Machine, Opposed Twin-spindles.





#### **NT Smart X CNC Control**

- Easy, Fast and Accurate for Everyone
- 19 inch color LCD touchcreen panel

Thermal Growth Compensation is Done Easily and Accurately Using Al Analysis.

Programming time is drastically Reduced.

# FERMAT

## **WFT13**

#### Table Type Horizontal Boring Mill

Powerful and precise Milling, Coordinate Drilling, Boring, and Threading.

#### **Spindle Options**

**V130** - 3400rpm (opt 4000rpm) **V150** - 3000rpm (opt 3500rpm)



# WRF 130/150 160/180

#### Floor Type Horizontal Boring Mill

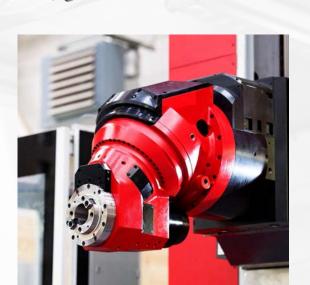
Ideal for powerful and precise machining of enormous, heavy workpieces. Largest model.

Spindle Speed/diameter 2800rpm/Dia 150mm (180)



Rotary Tables that can hold up to 100 metric tons!





# Fermat Built Milling Heads

#### UHA mi 30

Universal Automatic Micro Indexing Head

#### PHA mi 60

Right Angle Automatic Micro Indexing Head



### **VL2500 ATC+C**

**Vertical Boring Mill** \*RAM TYPE\*

### **VL850R**

**Vertical Turning Center** 

### **Vertical Boring Mill** \*TURRET TYPE\* \*RAM TYPE\*



**Automatic Tool Changer** and C Axis

2800mm Turning Diameter Spindle torque of 46000Nm



15000 Spindle X/Y Axis Travel 500/800mm Max Cutting Height 750mm



**VL1200 ATC+C** 

**Automatic Tool Changer** and C Axis Table Load/Dia 5000kg/1250mm X/Z Axis Travels 1000/900mm

# SANCO

**Taiwanese Heavy Duty Machine Tool Manufacturer** 

### SVW4222

Double Column Bridge Type CNC

3 Axes with Linear Guide Ways

#### SHM13040R

**Horizontal Boring Mill** 

Extendable Spindle German Precision Spindle

### SHM800L

Horizontal Table Type Boring Mill

3 Axes with Linear Guide Ways



#### **B** Axis Mini. Increment

0.001° Automatic, 4 positions (90°)

**Maximum Loading Capacity** 

7 tons

**Bed Size** 

3.8 x 1.8 x 1.8 m



#### X/Y/Z Axis Travels

1500 / 1600 (Opt 1180) / 1200 mm

**Maximum Loading Capacity** 

3 tons

**Gear Box Driven Spindle** 

4000rpm (Opt 6000)



#### X/Y/Z Axis Travels

4200 / 2100 / 800mm (opt 100)

**Massive Loading Capacity** 

14 tons

**Gear Box Driven Spindle** 

6000rpm



Based in Taiwan, CC Machinery is one of the world's leading manufacturers of Swiss Type CNC Lathes, Auto Lathes and Bench Lathes.

# SY2-42E Double Spindle Lathe

Main and sub-spindle with C-axis contouring capabilities.

Machining with or without Guide Bush

# CDS-42 Double Spindle Lathe

Two Independent Gang Tool Slides

6000rpm 7.5kW built-in spindles with C-Axes. Double X-Axis Tool Slides

### CB-36M Sliding Head Lathe

Complicated parts machining.

Twin spindle with driven tooling. Y-Axis spindle reducing time and cost.



**Spindle Speed** 6000rpm

Max Bar Cpacity 42mm



Turning Diameter 42/52mm

X/Z Axes Rapids 30m/min



Bar Capacity 32/36mm

X/Y/Z Rapid traverse 30m/min

# TORNOS

Tornos is a world market leading Swiss Type Machine Tool Manufacturer, producing parts requiring the most extreme precision and quality available.

#### SwissNano 10

Swiss Type Turning Center

# The micro and nano precision specialist

40% higher productivity increases profit.

Highest precision Turning center on the market.





#### MultiSwiss 6x32

Swiss Type Turning Center

# 32mm, 20Nm, Perfect for large diameters

6 independent spindles, can turn bars up to 32mm in diameter. 3 Y axes as option. 11Kw motor, 19 Nm of torque.



#### **Swiss GT13**

Swiss Type Turning Center

# Complete package, great price. Simple and ergonomic.

Operation with/without guide bush, B axis, Simultaneous 5-axis machining option.

#### **Swiss DT26 HP**

Swiss Type Turning Center

# One of the most flexible solutions from Tornos.

15min guide bush conversion. Available with 5/6 Linear Axes. Plug and play B axis as option.



# **GLORYSTAR**

**CNC Fibre Laser Cutting Machines** 

#### **GS** Series

1-6kW

**Fibre Laser Sheet Metal** Open Type | Single Table



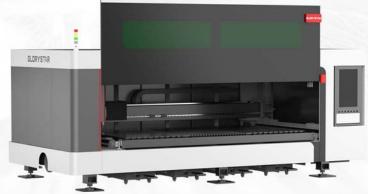
#### **GS-C Series**

1-40kW Fibre Laser Sheet Metal **Enclosed I Single Table** 

**Cutting Machine** 

#### Sizes:

3x1.5m 4x2m 6x2m 6x2.5m



#### **GS-CE Series**

1-40kW

Fibre Laser Sheet Metal **Cutting Machine** 

**Enclosed | Exchange Table** 

#### Sizes:

3x1.5m 4x2m 6x2m 6x2.5m



### **GS-CEG Series**

1-12kW **Enclosed | Exchange Table** 

**Sheet and Tube Combined Laser Cutting Machine** 

#### Sizes:

3x1.5m 4x2m



# **GLORYSTAR**

#### **Laser Welding Machines and Fibre Marking Lasers**



### **GS-FM Series**

#### Fibre Marking Laser

Simple design, Easy to operate. Highly flexible and Convenient. Fast welding speed and high accuracy minimises the need for post-weld grinding.

Marking Area 100x100 | 200x200 | 300x300mm

**Laser Power** 

20, 30 or 50W

**Marking Speed** 7000mm/s

**Dimentions** 74x115x150cm



#### **GW-H Series**

#### Handheld Laser **Welding Machine**

Designed for permanent marking of metals. High marking speed and accuracy, low operating cost, and simple operation.

> Laser power 1-2kW

Laser wave length 1070um

Collimated focal length 50mm

Focusing focal length 100mm

Wire feeding speed

17m/min



#### **EDM & WEDM**

#### **MV2400S**

Wire-cut EDM Machine Largest MV Series model

Auto Wire Threading and Tubular Motor System



### MX600 ADVANCE TUBULAR

Wire-cut EDM Machine
- Oil Based -

Only wire cut machine that uses oil as the dielectric medium





#### **SG12S**

**Spark Erosion EDM**Offering a wide range of unique erosion options.

Rock solid machine base C-Axis | Z-Axis Drive unit



### START 43C

**EDM Hole Drilling Machine** 

Perfect complement to Mitsubishi Electric wire-cutting systems.

#### 10 year quality and accuracy gaurantee!

All Mitsubishi MV, MX and SG Series machines come with Mitubishi's state-of-the-art M800 D-Cubes Control

#### M800 D-CUBES CONTROL

All Mitsubishi MV, MX and SG Series machines come with Mitubishi's state-of-the-art M800 D-Cubes Control

19" Smartphone-like intuitive touch screen operation





XD

### **Metrology Department**

WD Hearn's Metrology department has grown massively over the past 10-15 years and we now stock a wide variety of equipment from basic measuring instruments all the way through to highly complex high-end Laser Measuring Systems, and everything inbewteen. WD Hearn's service department also makes use of a range of in-house Metrology equipment.























TOMELLERI ENGINEERING



#### 4TH & 5TH AXIS ROTARY TABLES



# **CNC105**

4th Axis Rotary Table

Recognised globally for wear resistance, rigidity, increased production, speed and accuracy. Suitable for a wide range of applications - small Drilling Machines to large Machining Centers. Available in Standard or High-Speed Z Models.

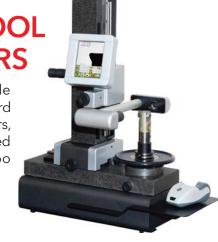
# **5AX-201**5th Axis Rotary Table

Tightening power of Nikken's Ultra-Lock Milling Chuck on the tilting axis brake eliminates vibration at any angle and allows heavy duty operations, including heavy drilling and face milling. Patented carbide worm system ensures wear resistance, rigidity, and rapid speeds.



# NIKKEN TOOL PRESETTERS

WD Hearn offers a wide range of Nikken standard and advanced presetters, designed & manufactured by sister company Elbo Controlli NIKKEN.



NIKKEN SPINDLE SPEEDERS

NX and PX 20000-40000rpm output speed

Alberti SRI AX5 25000rpm output speed



#### Alberti Standard

Cast Iron bodies (GS600) 100% machined

#### Mimatic Standard

Compatible with all types of machine tools

#### **Alberti Special**

Allows full customisation of unit to suit complex workpieces





#### **Metrology Equipment**

Mahr is a world-class market leader in the manufacture of extremely high precision Metrology Equipment. The German company has a global reputation second to none!



MarCal
Digital Calipers



**Millimess**Dial Comparators



**Micromar**Digital Micrometers



**MarSurf**Surface Measuring Instruments



**MarTest**Test Indicators



**MarVision**Video Measuring



MarCator Digital Indicators



**Digimar** Height Gauges

# **RENISHAW**

apply innovation™

#### **CNC** Probing







#### **Fixtures**



#### **In-house Equipment**



**Equator Gauging Systems** 



#### **CMM Probes & Software**



**3D Printers** 





#### High-end British-built Metrology Equipment















#### Globally renowned precision Metrology Equipment

#### MV331 / MV551

Laser Radar Systems

#### XT H 225 / XT H 320

X Ray & CT Scanning Systems

Nikon

XT H 225

#### **Modelmaker H120**

Handheld Laser Scanner







#### **SPACE PLUS**

The most accurate Portable Arm of its kind

from 1.8 up to 4m Diameter and configured with 6 or 7 Rotation Axes

#### **Options Available**

**S** With Tomelleri Magnetic Mount A Autojoint (Interchangeable Probe system) W Wireless configuration

#### **MICRON**

The most accurate Portable Arm ever made



Model

Measuring field Accuracy

Micron 250 Micron 400S

250x250x250mm 4+L/60 ≤ 8micron 5micron 400x250x250mm 5+L/60 ≤ 11micron 7micron

#### **SPACE**

Most appreciated solution, Excellent **Performance** 

> 1.8 up to 3.2m in diameter **Max Volumetric Accuracy** 0,045mm **Max Repeatability** 0.032mm



#### **EXPLORER** 7000

**Largest Measuring** Range for a Portable **Measuring Arm** 

> 5 up to 9m Diameters 6 or 7 Axis Configurations

Maximum expression of Tomelleri's Portable **Arm capabilities** 

#### Models

Explorer 5000 Explorer 7000 Explorer 9000 5000/7000/9000mm Measurning Fields



AVR300 CNC Vision System **HF-750**Optical Comparator

MVR200 FOV
Manual Field of View System







# **SCANTECH**

**3D Scanning Systems** 

#### **SIMSCAN**

Wireless 3D Scanning System

#### **NIMBLETRACK**

Nimble Wireless 3D Scanning System

#### **SIMSCAN**

Wireless 3D Scanning System







### 2VS/3VS/4VS Milling Machines



KB30, KB36, KB45 Vertical Band Saws

#### **CONVENTIONAL MACHINES**

WD Hearn offers Conventional Machines and stocks a vast range of Tooling and Spares



**DMTG CDL SERIES** 

Conventional Lathes



KAIDA

Conventional Lathes





SG4080 AHD
Surface Grinders

### **SOUTH AFRICA OVERVIEW**



- Population: 60.8 Million
- SA's GDP: The 39th biggest worldwide at 400 Million Dollars - 2023 figures
- GDP Growth: 2017 1.2% | 2019 0.3% | 2021 4.9% 2023 0.6% (First half)
- Economic powerhouse of Africa, natural resources.
- Best performing sectors: Automotive, Mining, Agriculture, Banking, Communications, Tourism, Wholesale and Retail trade, Finance and Business Services.
- Stock Exchange JSE among the top 20 in the world.
- Automotive OEM's in SA: Mercedes in East London, Toyota in Durban, BMW in Rosslyn Pretoria, VW in Uitenhague, and the Ford Struandale plant in Port Elizabeth.
- Transnet 2012 recapitalisation program.

# Many Thanks!

# For more information please contact one of our four branches

### CAPE TOWN: HEAD OFFICE

Tel: +27 21 534 5351

Sales: E-Mail - graeme@wdhearn.co.za

Tel: +27 76 337 9011

E-Mail Service: hearn@wdhearn.co.za

#### **DURBAN**

Tel: +27 (0) 31 054 6388

Sales: Email - mylesc@wdhearn.co.za

Tel - +27 83 268 4232

E-Mail Service: hearn@wdhearn.co.za

### **JOHANNESBURG**

Tel: +27 11 970 7005

Sales: Email - mariusc@wdhearn.co.za

Tel - +27 83 285 1655

E-Mail Service: hearn@wdhearn.co.za

#### **PORT ELIZABETH**

Tel: +27 41 453 2142

Sales: Email - simong@wdhearn.co.za

Tel - +27 72 067 5778

E-Mail Service: wdhearnpe@wdhearn.co.za