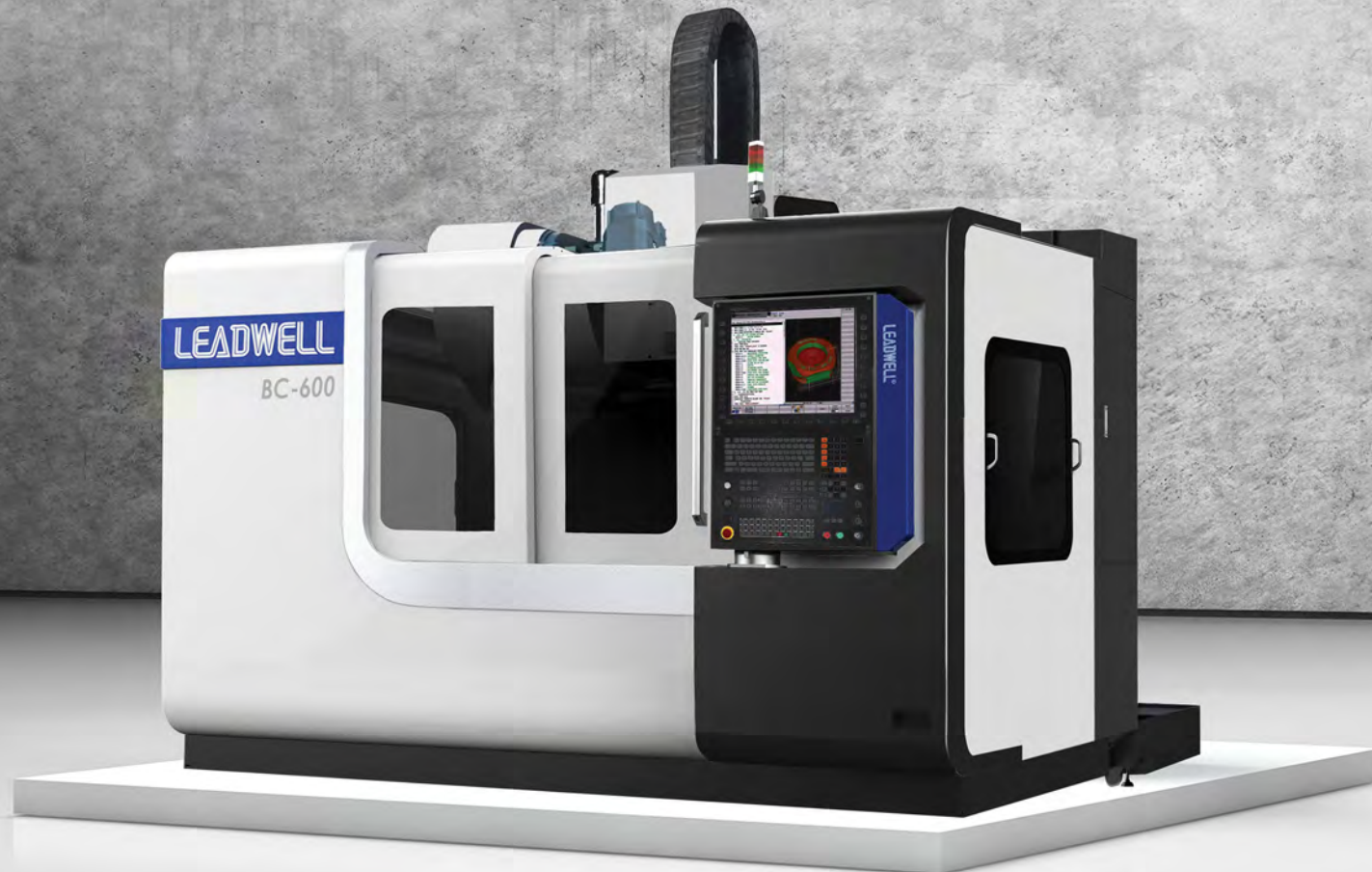


W D Hearn MACHINE TOOLS

ESTABLISHED 1937

Company Presentation



Relationships...



WD Hearn Offices

Cape Town • Johannesburg

Durban • Port Elizabeth

Distances:

CPT to JHB: 1400km

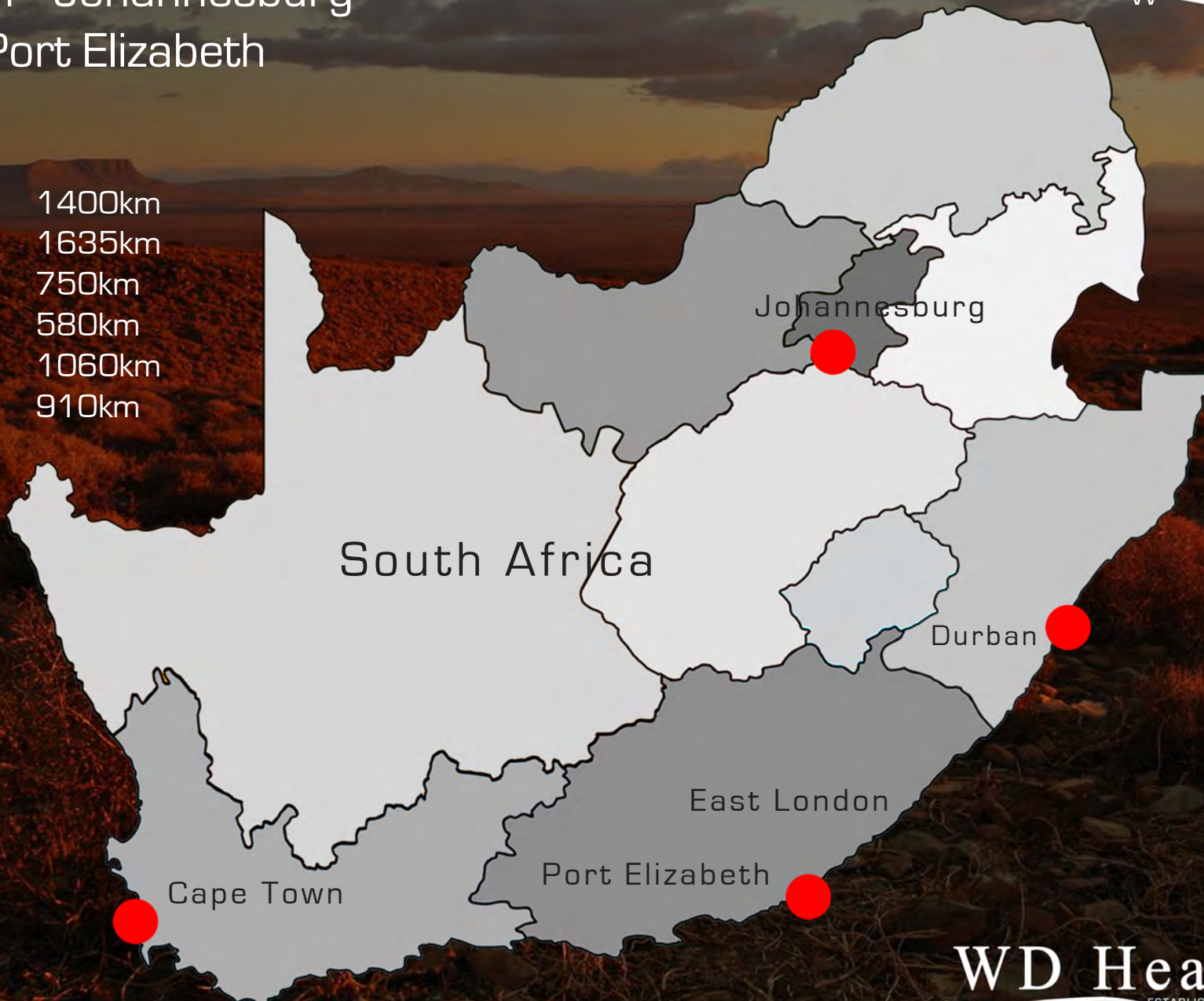
CPT to Durban: 1635km

CPT to PE: 750km

JHB to Durban: 580km

JHB to PE: 1060km

PE to Durban: 910km





COMPANY INFORMATION

- WD Hearn was established in 1937.
- First Leadwell CNC machining center sold in 1987.
- Over 1200 Leadwell's installed across the country.
- Outstanding service reputation in S.A.
- Skilled admin staff to handle imports & exports.
- Large stock holding of machine tools of all configurations.
- Four branches across South Africa.
- One of the top applications departments in S.A.
- Highly-skilled service, sales and applications engineers.
- Purpose built in-house training rooms in CT and JHB.
- Huge molding service department

WD Hearn is consistently up to date with the latest worldwide machine tool developments and current market trends. We also make a point of understanding all customers needs to ensure that professional and customer-specific advice is given.






CAPE TOWN: HEAD OFFICE



- 1200m² of floor space.
- All operations are managed from here.
- Communication link to all WD Hearn's international principles.
- Sales and marketing support to other branches in South Africa.
- Spindle Refurbishment centre.
- Sales team offers outstanding product knowledge and machining advice.
- Supply, installation and support of a huge variety of CNC configurations.
- For customers who require temporary additional capacity WD Hearn runs a loan machines project.




Ray Cooper
Managing Director




Graeme Cooper
Sales Director



Johan Neveling
Technical Director


CAPE TOWN: HEAD OFFICE




Eric De Koker
Internal Sales Manager



Matthew Noah
Internal Sales




Andre Eslin
Sales/Applications



Satish Dayal
Applications Engineer



Mike Clayton
Service Coordinator



Thys Thiert
Service Engineer



Ismail Mohamed
Service Engineer




Juan Joubert
Service Engineer




Dylan Eva
Metrology Engineer



Beatrice Coakley
Imports Manager



Yulinda Theys
Accounts Manager



Ruqayah Ryland
Reception/Admin



Cheryl Noah
Office Assistant



JOHANNESBURG CNC TECHNOLOGY CENTER



- **WD Hearn CNC Technology Centre and Siemens control specialists.**
- **Drive motor and electronic testing facility • Large machine type experts.**
- **Large spare parts stock holding • 700m² of floor space.**

State of the art facility

- The Johannesburg multi-purpose CNC Technology Center was launched in 2016 to perform the following functions.
- A showroom to display products and perform demos/simulations.
- To function as our Johannesburg sales and service office.
- To host special events, exhibitions, and presentations.
- A training facility offering courses in CNC programming.
- New machine training for WD Hearn service engineers.
- A motor and drive service center, including a test bench for motor repair.



Peet Buitendag



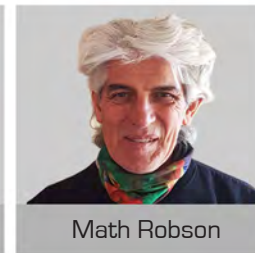
Marius Conradie



Johan Neveling



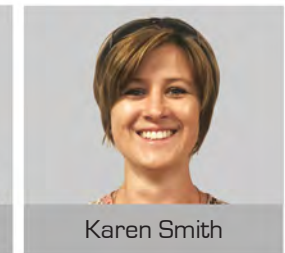
Satish Dayal



Math Robson



Dawie Malan



Karen Smith



DURBAN



- **Factory floor space: 220m²**
- **A Cad Cam training facility for Edgecam/Sinutrain.**
- **Fully operational sales office and accounts department.**
- **IMM group specialists**
- **PLC Experts**
- **Stockholding of cnc machining and turning centres here.**
- **Second-hand division.**



Myles Crosthwaite



Dale Otto



Victoria Angles



Brett Shelley



Kershlan Odier



Christian & Philani



PORT ELIZABETH



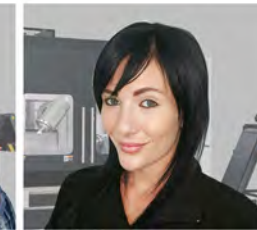
- **Showroom and office space: 800m²**
- **Special purpose fixturing design specialists**
- **GSK Specialists**
- **CNC Machine Tool Service experts**
- **Stock holding spares**
- **CNC retrofit services**
- **Centrally located**
- **Mechanical and Electrical service engineers**



Simon Griffiths



Mick Griffiths



Nikky Marais



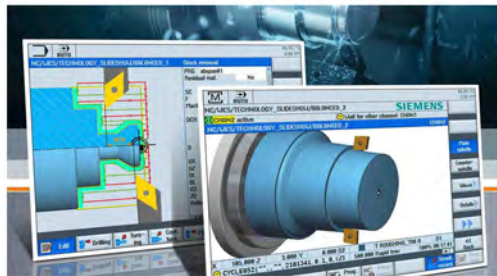
Lloyd Gawe

APPLICATIONS DEPARTMENT



Training Facility

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



Siemens Sinutrain

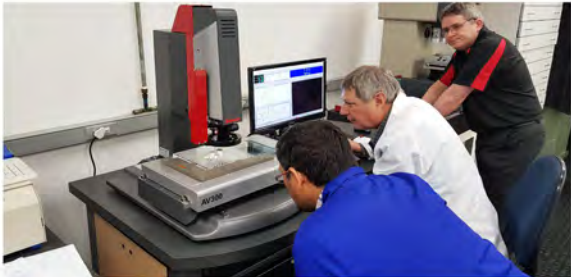
- SinuTrain, Siemens offers a hands-on solution for CNC training beginners and experts.
- SinuTrain allows you to expand your programming and operation expertise of the innovative numerical control features found in SINUMERIK.
- The intuitive, PC-based solution consists of control-identical software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





SERVICE DEPARTMENT

- WD Hearn has one of the largest, 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, Leadwell and Sanco.



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 official Siemens partners in 2007 and have been handling the aftersales service on all our Siemens 802dsl & 828D control requirements, including stocking of 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 Africa. The project is running triple shifts with more machines likely to be ordered.



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



RENISHAW



APPLICATIONS

WD Hearn owns Renishaw probing/laser 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.

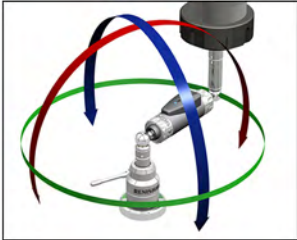
Renishaw XL-80 laser measurement system

The XL-80 laser interferometer offers the ultimate in high-performance measurement and calibration for motion systems, including CMMs and machine tools. Linear measurement accuracy is an assured $\pm 0.5\text{ppm}$ over the whole environmental range. Readings are taken at 50kHz, with a maximum linear measurement speed of 4m/s and a linear resolution of 1nm.



QC20-W ballbar

The QC20-W is a brand new design featuring a Renishaw developed linear sensor and Bluetooth wireless technology. This design offers benefits in ease of use and enhanced durability, and allows the QC20-W to be used for testing even in "closed door" manufacturing, where access for wiring can raise safety and procedural issues.



- 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.
- Satish Dayal and Andre Enslin handle our applications in Port Elizabeth and Cape Town
- Johan Neveling takes care of all Johannesburg and Durban's application requirements.
- We are capable of handling training on all popular control types.
- We offer support on a variety of CAD/CAM systems.
- 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.

Training

WD Hearn offers full CNC training on-site, or at our training room in Cape Town; fully equipped with Sinutrain for training on all Siemens control systems, as well as courses in using Edgecam's CAD CAM software.



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

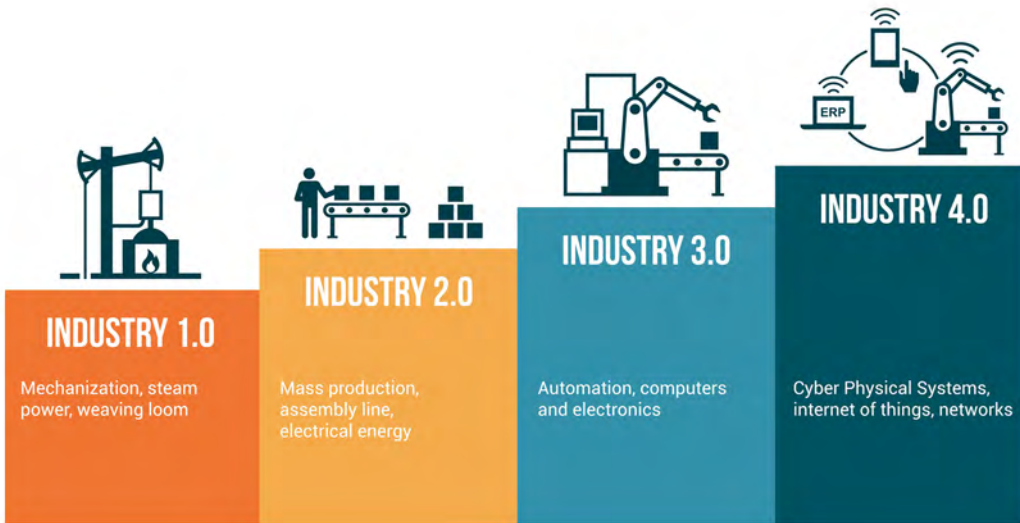
If you are a WD Hearn CNC client in South Africa and require quick programming assistance, we can help online and telephonically with full programming and application support.





INDUSTRY 4.0

Industry 4.0 creates what is known as a "smart factory" and allows for immediate real time information and data direct to your smart device so you can access your machines from anywhere in the world. It includes cyber-physical systems, the Internet of things, cloud computing and cognitive computing. Industry 4.0 is commonly referred to as the fourth industrial revolution.



Within the modular structured smart factories, cyber-physical systems monitor physical processes, create a virtual copy of the physical world and make decentralized decisions. Over the Internet of Things, cyber-physical systems communicate and cooperate with each other and with humans in real time, and via cloud computing, both internal and cross-organizational services are offered and used by participants of the value chain.

NC Touch[®] CNC CONTROL REMOTE SYSTEM



In 2017 WD Hearn launched the NC Touch system. This step made WD Hearn one of the first companies to introduce Industry 4.0 to the wider South African engineering community. NC Touch, from Siemens solution partner Mill IT, is capable of capturing all information from the SINUMERIK 828D and SINUMERIK 840D sl control systems and using it to generate easy-to-understand graphics on a simple HMI.

With ncTOUCH, users can create their own web-based interfaces for SINUMERIK 840Dsl and 828D, and link these to data from the SINUMERIK CNC. The provided scripting language allows for quick implementation without any in-depth programming skills. A large number of different templates and ready-to-use applications for ncTOUCH already exist, which can be adapted with ease, from layout to additional functions.

ncTOUCH forms the interface between the SINUMERIK CNC and the web browser. Due to the complete integration within the SINUMERIK software, no additional components are required. The programming is done by simply editing normal text files, with no need for a special development environment. Thanks to the integrated networking suite, information from multiple cross-linked machines can be collected on a server, allowing for centralized access, with ncTOUCH handling the encryption and data transmission.



INTERNATIONAL SUPPLIER VISITS



TAIWAN

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



JAPAN

2015, 2016, 2017



TAIWAN

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



GERMANY

2014, 2015, 2016, 2017, 2018



GERMANY

2012, 2013, 2014, 2015, 2016,
2018



UNITED KINGDOM

2016



TRADE SHOW

2011, 2013, 2015, 2017



TRADE SHOW

2007/09/11/13/15/17/19

Other Overseas Visits: Flow Waterjet in Germany, Nikon Metrology in France, SANCO in Taiwan, and Renishaw in the UK.





CUSTOMERS



SUPEREXCEL



D & J
TOOL AND DIE






AGENCIES

LEADWELL[®]
CNC MACHINES

 **MITSUBISHI**[®]
EDM/WEDM


metrology
CMM SYSTEMS AND SOFTWARE

 **KITAMURA**[®]
5-AXIS AND HORIZONTAL
MACHINING CENTERS

 **Flow**
WATER JET MACHINES

Nikon
3D MEASURING SYSTEMS

 **sisma**
LAZER WELDING AND
LAZER ENGRAVING MACHINES

RENISHAW
PROBING, CALIBRATION
AND CMM EQUIPMENT


FAIR FRIEND GROUP

YSP
YU-SHINE
VERTICAL TURNING MACHINES

TORNOS
SWISS MACHINE-TOOL
MANUFACTURER

SIEMENS
CNC CONTROLS


DMTG
EUROPE
CNC FLAT BED LATHES
& CENTER LATHES

 **SANCO**
HEAVY DUTY
MACHINE TOOLS

 **L.K. MACHINERY, INC**
CNC MACHINING CENTERS

KENT
GRINDING MACHINES


VERTICAL MILLING MACHINES

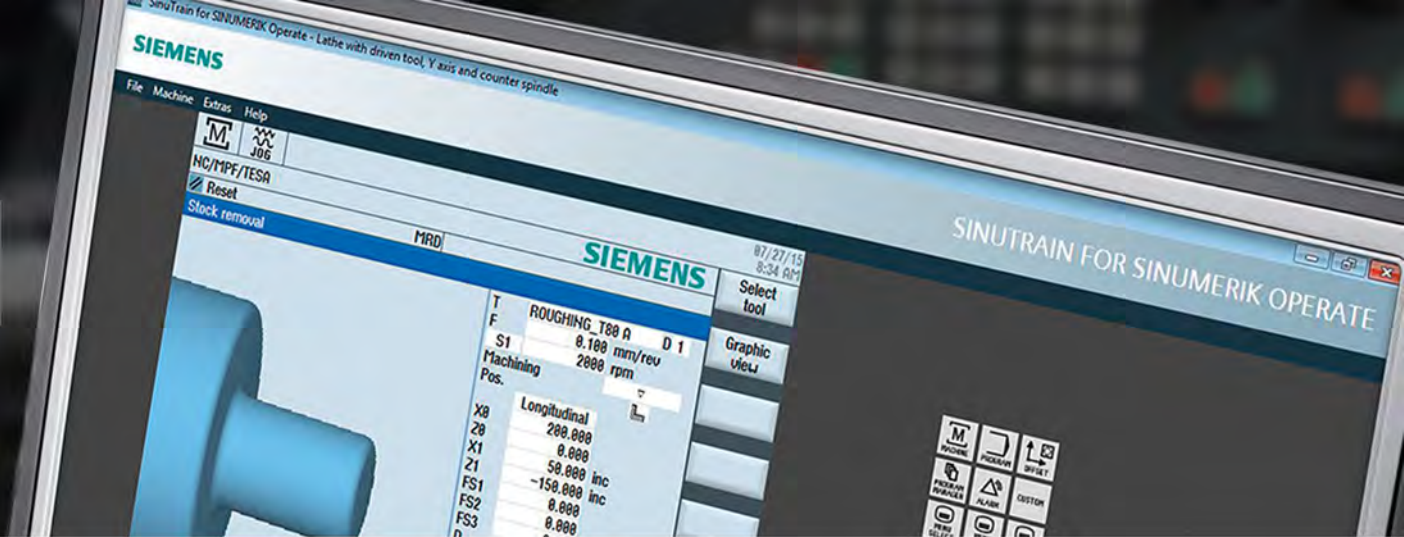
ANCA
CNC MACHINE TOOLS

FERMAT
HORIZONTAL BORING AND
MILLING MACHINES

Starrett[®]
MEASUREMENT SYSTEMS

WD Hearn MACHINE
TOOLS
ESTABLISHED 1937

CNC CONTROLS



SIEMENS

FANUC

MITSUBISHI ELECTRIC

SYNTEC

KITAMURA

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

LEADWELL®

WD Hearn Machine Tools have been selling Leadwell since 1987 when we sold our first CNC. Since then over 1000 Leadwell CNC machines have been installed around South Africa.

■ **Vertical Machining Centers** NV Series, MCV Series, VE Series

■ **5-Axis Machining Centers** T Series, BC Series, MU Series

■ **Horizontal Turning Centers** T Series, LTC Series

■ **Multi Tasking Turning Centers** TM Series, TW Series



LEADWELL®

INSTALLATIONS



SA METAL GROUP



T-8M



SA METAL GROUP



MCV-1500



Nampak



V-40L



V-30S



V-40iT (5-Axis)



V-20i & V-30i



LTC-25iVL - MINING INDUSTRY



V-50L

LEADWELL®

INSTALLATIONS

BELL



BELL



BELL




GOLDMANN ENGINEERING
Food Processing Technology



 **CHANTEX**
HEAVY MACHINERY



 **AMF**
ALLGEMEINE MASCHINEN FABRIK



 **aspen**
PHARMACARE



 **mpact**
smarter, sustainable solutions





KITAMURA[®]

Machining Challenges-Simplified[®]

For over 80 years, Kitamura machinery has created innovative machining centers that meet the strictest demands of manufacturers worldwide. In March 2015 WD Hearn visited Kitamura precision machinery in Japan. The visit was a huge success and WD Hearn has agreed to become the company's sole representation in South Africa. Kitamura is one of the most impressive and innovative companies to join WD Hearn's agency list.

5-Axis Machining Centers

4G | 5G | 7G

Horizontal Machining Centers

HX 250iG up to HX 1000G

Vertical Machining Centers

3XG | 3XG | 2XD | 2XD SP | 3XD | 4XD

Double Column Machining Centers

6G | 8G | 10G | 12G


KITAMURA[®]

Machining Challenges-Simplified[®]

INSTALLATIONS

CONFERHEUR ENGINEERING

 **Mould & Die**

 **Executive Engineering BK**



MYCENTER 4XiD



BRIDGECENTER 8G



MYTRUNNION 4G

SAAO South African Radio Astronomy Observatory

 **TIAGEN**
Industrial

HENTIQ



MYTRUNNION 4G



MYCENTER HX250G



4G & 4XiD

FERMAT

FERMAT is a highly professional Horizontal Boring Mill Manufacturer with a tradition of producing metal working and processing equipment in the Czech Republic.

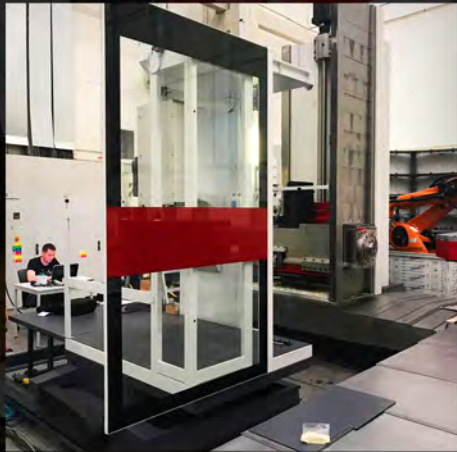


TABLE TYPE HORIZONTAL BORING MILL

Table Type Horizontal Boring Mill



FLOOR TYPE HORIZONTAL BORING MILL

WF 13 CNC



FLOOR TYPE HORIZONTAL BORING MILL

WRF 130/150/160 CNC



HORIZONTAL BORING MILL

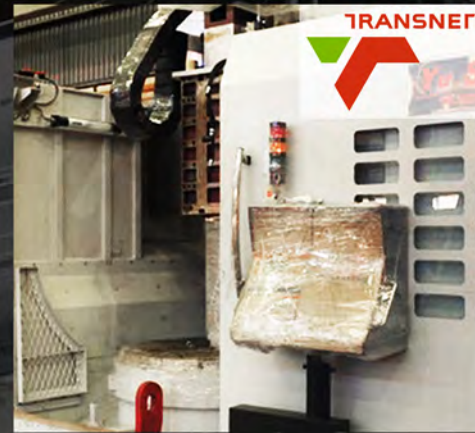
WFC 10 CNC



YSP | YU-SHINE

VERTICAL TURNING CENTERS | VERTICAL BORING MILLS

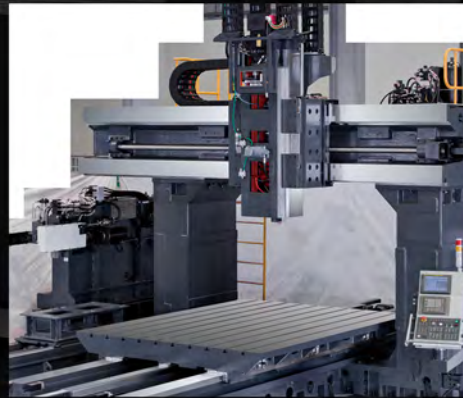
Yu Shine has developed a variety of lathe machines to meet diverse market demands. The Vertical Turning Lathes made by Yu Shine have multiple capabilities suitable for high rigidity and high-precision machining. Spindles powered by servo motor, high rigidity linear guide way and stable rotary hydraulic cylinder are all crucial to the constant advancement accuracy and efficiency of a lathe machine.



SANCO

LARGE MILLING & BORING MACHINES

SANCO is a Taiwanese heavy duty machine tool company specialising in the manufacturing of CNC bed type universal milling machines, moving column type CNC's, double column machining centers with up to 25 meter travels, and CNC and conventional horizontal boring machines.



SANCO

INSTALLATIONS



SVW-4222



SHM-800L



SHM-11020RF



SBM-4000L



SDM-16040MA



SVW-4222



MACHINERY

CHIAH CHYUN MACHINERY is one of the most professional manufacturers of CNC Lathes, Auto Lathes and Bench Lathes in Taiwan. They were the first company certified by ISO 9002 for Automatic Lathes and CE quality certification in Taiwan.



SWISS TYPE TURNING CENTER

CDS-32



HORIZONTAL TURNING CENTER

CB-32M



52 CNC machines installed, commissioned and serviced at Cambro in Cape Town



TORNOS

SWISS TYPE TURNING

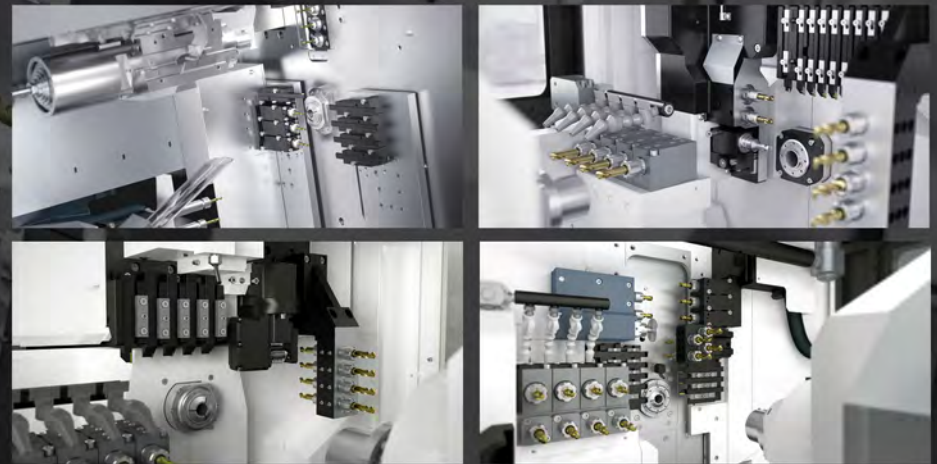
Tornos is a Swiss machine tool manufacturer that uses a range of machining technologies with swarf removal capabilities to produce parts requiring extreme precision and quality. Whether machining simple or highly complex parts, in small or large runs, Tornos machines can offer you a solution guaranteed to meet your needs.

SWISS TURNING CENTERS

SwissDECO, EvoDECO, Swiss GT, Swiss DT, SwissNANO, CT-20

MULTI SPINDLE TURNING CENTERS

MultiSwiss



RENISHAW®

METROLOGY SYSTEMS

With core skills in measurement, motion control, spectroscopy and precision machining RENISHAW products are used for applications as diverse as machine tool automation, machine calibration, gauging, co-ordinate measurement, additive manufacturing, Raman spectroscopy, position feedback, CAD-CAM dentistry, shape memory alloys, large scale surveying, stereotactic neurosurgery, and medical diagnostics.

METAL ADDITIVE MANUFACTURING SYSTEMS (3D PRINTING)

AM250, AM400, RenAM 500M



LASER MEASUREMENT SYSTEMS

XL-80



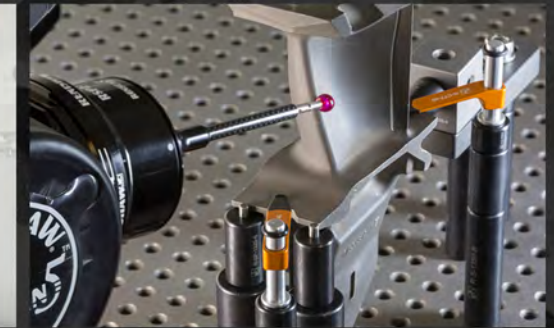
MACHINE TOOL MEASURING PROBES

OMP40, OMP60, NC4, OTS, TS27R, RMP40



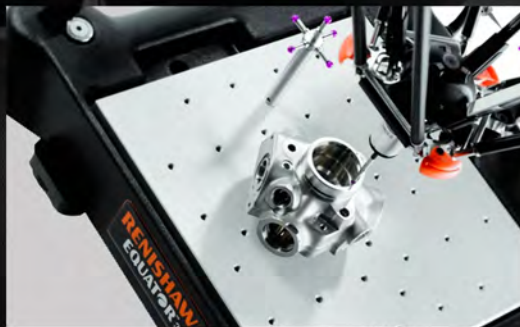
CMM FIXTURES AND VISION FIXTURES

MODULAR AND CUSTOM FIXTURING



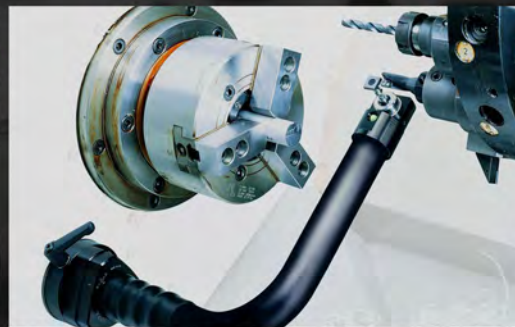
HIGH-SPEED INSPECTION GAUGE

EQUATOR



HIGH-PRECISION MOTORISED SWINGDOWN TOOL SETTING ARM

HPMA



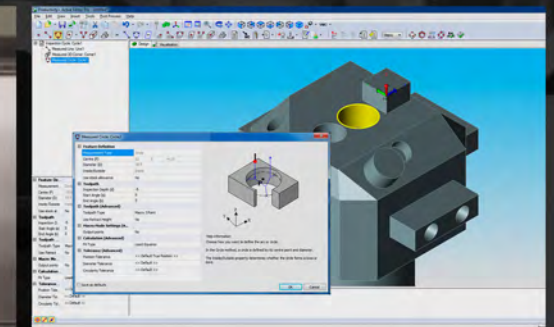
HIGH-PRECISION WIRELESS BALLBAR SYSTEM

QC20-W



PROBE SOFTWARE FOR MACHINING CENTERS

PRODUCTIVITY+



RENISHAW®

INSTALLATIONS



OMP40 TRANSMISSION PROBE



SA METAL GROUP



OMP40-2 and NC4



NC4 ON KITAMURA HX-250G

SUPEREXCEL



OLP OPTICAL LATHE PROBE



RMP-40 TRANSMISSION PROBE



NC4 TOOL SETTING PROBE



MITSUBISHI ELECTRIC

EDM & WEDM

Mitsubishi Electric's state-of-the-art EDMs are used in the manufacturing processes of medical equipment, semiconductors and electronic devices. A plethora of innovative technologies are incorporated to ensure highly precise, fast processing.

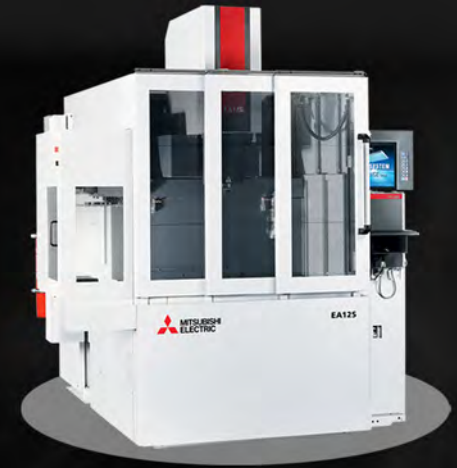


MV2400S



WIRE EDM MACHINE

MV1200S



SINKER EDM MACHINE

EA-12S ADVANCE



START HOLE DRILLING

START YGS-43C



ULTRA PRECISION WEDM

MX600



MITSUBISHI ELECTRIC

INSTALLATIONS



EDM AND WEDM TRAINING FOR
WD HEARN SERVICE ENGINEERS AT
MITSUBISHI RATINGEN GERMANY



MV2400S WEDM
INSTALLED AT DEFY IN DURBAN



MV1200S WEDM
1ST NFM INSTALLED IN DURBAN



MV1200S WEDM
2ND INSTALLED AT NFM IN DURBAN



EA8S EDM
CLASSIC CLOSURES IN CAPE TOWN



START YGS-43C
INSTALLED AT AMF IN GEORGE



MV2400R WEDM
INSTALLED AT SUMITOMO RUBBER



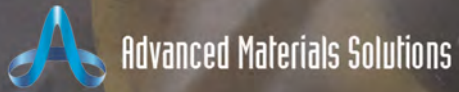
MV4800S WEDM
INSTALLED AT UTP IN JOBURG - AUTOMOTIVE



Waterjet Machines

Flow is the global leader in Waterjet Cutting Solutions. Waterjet cutting technology is one of the fastest growing machine tool processes worldwide due to the versatility and ease of operation. There are virtually no limits to what waterjets can cut. Since Flow first invented abrasive waterjets, the technology has evolved to include waterjets that do more and cost less.

COMPONENTS ARE PLASTIC CARBON FIBRE



MACH 3 (7x2m) 6000BAR



MACH 2



MACH 2b



MACH 2b

METROLOGY DEPARTMENT



COORDINATE MEASURING MACHINES



RENISHAW
apply innovation™



PROBING AND GAUGING SYSTEMS
LASER MEASUREMENT
METAL ADDITIVE MACHINES/3D PRINTERS
FIXTURING

Nikon



COORDINATE MEASURING MACHINE
X-RAY AND CT INSPECTION
LASER RADAR
ARTICULATED ARM & SCANNING HEAD

Starrett



CNC VISION SYSTEMS
OPTICAL PROJECTORS



2D INSPECTION
3D INSPECTION & REVERSE ENGINEERING

Nikon

Metrology Equipment

Nikon is the new global market leader in the high precision metrology sector offering a vast range of CMM's, scanners, articulated arms and lazer measuring systems to the worlds best OEM's. WD Hearn Machine Tools have already completed major Nikon installations throughout South Africa.



MCAx & H120

Articulated Arm & Scanning Head



MV331/351

Laser Radar



Nikon LK40.12.10



MV Series Laser Radar



Nikon Altera 8.7.6



MCT225

X-Ray and CT Inspection



FOCUS INSPECTION

Metrology Software

Starrett®

Precision Measuring Tools

The broad Starrett product line includes Precision Measuring Tools (Micrometers, Calipers, Rules), Levels, Electronic Gauges, Dial Indicators, Gauge Blocks & Granite Surface Plates, and custom engineered products. The company also offers metrology equipment including Vision Systems, Optical Measuring Projectors and Multi-sensor Measuring Systems, many of which are custom engineered.



AV300

CNC Vision System



HB400

Horizontal Optical Comparator



MV300

Manual Vision System



PROFILE 360

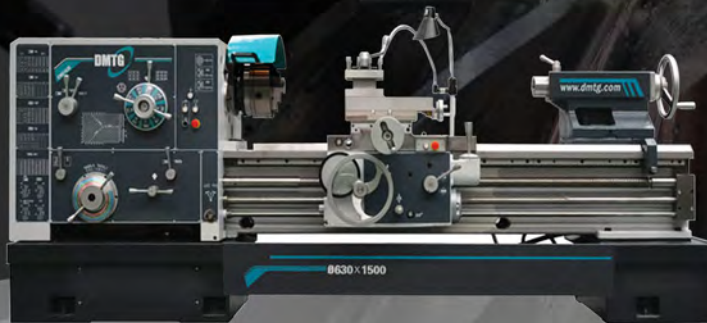
Profile Measurement System

CONVENTIONAL

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



2VS/3VS/4VS Milling Machine



CDL SERIES DMTG Conventional Lathe



Z5035/Z5050 Geared Head Drill



RF 400HS Milling Drilling Machine

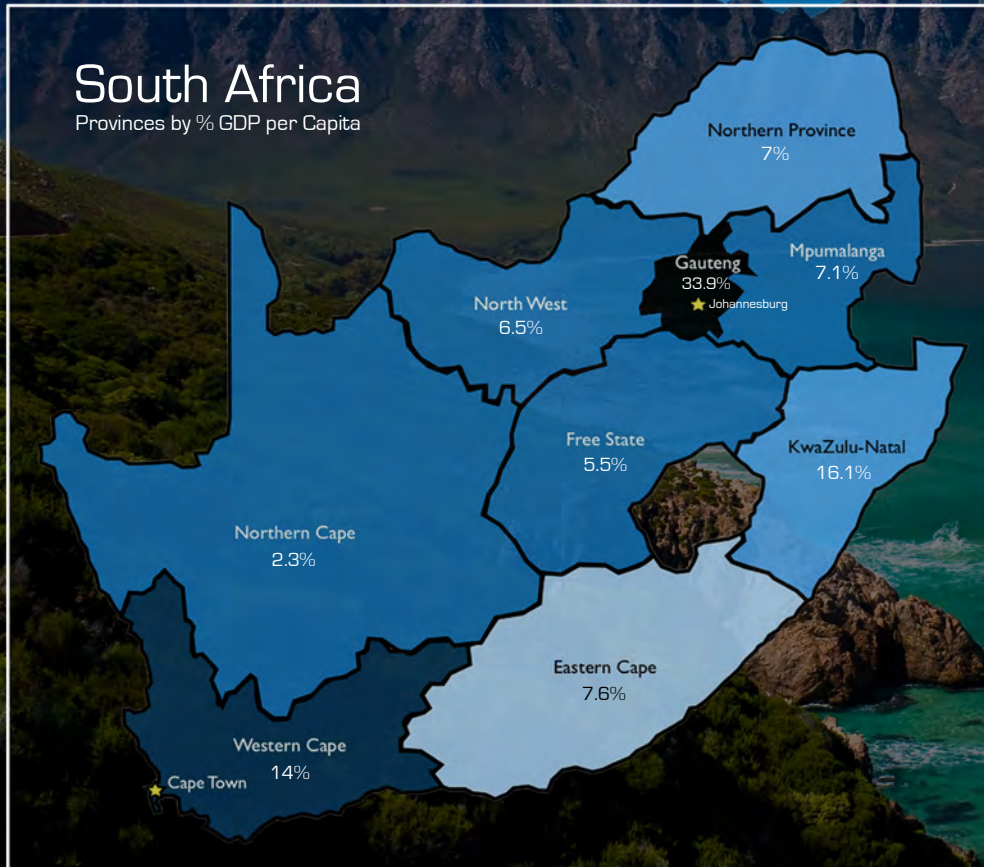


RF 912G Geared Drive Band Saw



KB30, KB36, KB45 Vertical Band Saw

SOUTH AFRICA OVERVIEW



- Population: 56 Million
- SA's GDP: The 33rd biggest worldwide at 360 Million Dollars.
- GDP Growth: 2012 - 2.5% | 2013 - 1.9% | 2014 - 1.4% | 2015 - 1%, 2016 1st Quarter - 0.5%
- Economic powerhouse of Africa and her 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

Tel: +27 (0)21 534 5351

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