

Company Presentation





Company Information

- Since WD Hearn was established in 1937, we have built an outstanding reputation throughout South Africa, with excellence through service. In 1987 we sold our first leadwell CNC machining center, and since then over 1500 Leadwell machines have been installed across South Africa.
- We have dedicated admin staff for handling the import and export of machine tools, spares and accessories.
- WD Hearn has a large stock holding of cnc machines, metrology equipment, conventional machines and tooling.
- WD Hearn has one of the top service departments in the country, with highly-skilled CNC machine engineers, as well as two of the countries most experienced Applications Engineers. We also have an in-house training room for courses in relevant CNC operating systems.









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

- Eric De Koker, Francis Hardiman and Tony Mullis handle the sales support to the branches for Flat Bed Lathes, Conventional Lathes, Turret Mills, small tools, machine tool accessories, Hydraulic Chucks, Vices and a huge variety of hand held engineering equipment.
- Ray Cooper, Graeme Cooper and John Whitehead offer sales and marketing support to Mike Lehmkuhl, Marius Conradie, Peet Buitendag, Myles Crosthwaite and Mick Griffiths. WD Hearn's CNC sales team offer outstanding product knowledge and machining advice to our customer base and can supply, install, commission and support a huge variety of CNC machine configurations; from Horizontal Boring to Vertical Machining to 5-axis CNC Machining to Vertical Turning and Turnkey projects.
- For those customers who require temporary additional capacity, don't hesitate to contact us for our loan machines project.



Ray Cooper Managing Directo



Eric De Koker Internal Sales



Graeme Cooper Sales Director



John Whitehead Applications Enginee



Francis Hardiman Conventional Sales



Tony Mullis



Cape Town Service Engineers Mechanical & Electrical skillset



- 1200m² of floor space Spindle Refurbishment centre
- Communication link to international principles
 All operations are managed from here.

WD Hearn Branches

Johannesburg Tech-Centre



- WD Hearn technical centre and Siemens control specialists
- Drive motor and electronic testing facility
- Large machine experts
- Large spare parts stock holding
- 700m² of floor space



Durban



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



Port Elizabeth



- Factory floor space: 800m²
- Special purpose fixturing design specialists
- Stock holding spares
- Centrally located
- Mechanical and Electrical engineers



Our PE branch also covers East London and surrounding areas



Cape Town Training Facility



Training Facility

The growing demand for CNC programmers/operators/setters also brings with it a high demand for qualified training, incorporating solutions that will quickly prepare trainees for the modern day machining environment.

At our Cape Town premisis we installed a high-tech training room which specializes in CNC programming training. The facility is equipped with Siemens Sinutrain for training on Siemens control systems. We also offer courses in Edgecam CAD CAM software, as well as custom Fanuc training.



Siemens Sinutrain

With SinuTrain, Siemens offers you a hands-on solution for CNC training that is applicable for both beginners and experts. From start to finish, 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, it goes without saying that SinuTrain offers a wide range of technologies.





WD Hearn Service

Today WD Hearn has one of the largest, most highly skilled service departments in the country. Our focus is on sharing ownership of the installation of CNC machines into machine shops, through the expertise of skilled technicians and application engineers. In Johannesburg, Cape Town, Port Elizabeth & Durban our engineers have all been for product training at the machine tool builders facilities. In the past 2 years we have sent engineers to Siemens Germany, Electronica India, Mag USA, Yushine, Flow Waterjet, Leadwell and Sanco.





Service Engineers employed:

- Mechanical
- Electrical
- Applications

Service offered:

- CNC Retrofits
- Special purpose machine design and local build
- PLC 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, 808D and 828D control requirements, including stocking of Siemens drives, controllers and motors in JHB and Cape Town.

Ford Installation

In 2011/ 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 all spares carried at WD Hearn's PE office.



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

WD Hearn MACHINE

Renishaw



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 measurement system

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



QC20-W Ball Bar directions of movement



QC20-W ballbar

The QC2O-W is a completely 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 QC2O-W to be used for testing even in "closed door" manufacturing, where access for wiring can raise safety and procedural issues.

Applications

WD Hearn has employed two highly skilled applications engineers. Their expertise and experience allows WD Hearn to offer tailor made application solutions that no other machine tool company in South Africa is capable of offering. John Whitehead handles our applications in Port Elizabeth and Cape Town, and Johan Neveling takes care of all Johannesburg and Durban's application requirements. Between John and Johan's experience we are capable of handling training on all popular control types from Siemens to Fanuc to Mitsubishi, support on a variety of CAD/CAM systems, and training 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 are striving to become the most technical machine tool company in the country.

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 requirement. 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 customer in South Africa and require quick programming assistance, we can help online and telephonically with full programming and application support.



International Supplier visits

Chiah Chyun



We visited the Chiah Chyun factory in 2011/12/13/14/15

Leadwell 2010/11/12/13/14/15



WD Hearn regularly visits its largest machine tool supplier, Leadwell

TIMTOS Trade Show Taiwan



WD Hearn meeting Siemens at TIMTOS 2011/13/15



CCM machine sign-off



Siemens technical centre



Golden Sun visit



Leadwell assembly line



Leadwell In-house exibition



Leadwell service visit to South Africa



Way Train showroom



Leadwell temperaturecontrolled factory



Agent meeting Taiwan



Kitamura visit 2015



Recent installations

Transnet

Salt River: 2012 - 1 Sanco Bed Type Milling Machine 2012 - 1 Yushine VL1200 ATC Koedoespoort: 2012 - 2 Sanco 16m Bridge Type Machines Transnet's largest CNC machines to date. Saldanah: 2012 - 1 Yushine VL1200 ATC CNC Vertical Lathe Uitenhage: 2012 - 1 Lexas WA460 Band Saw

CAMBRO

52 Machines installed, commissioned and serviced by WD Hearn.

JOY Mining 2012 - 1 MAG Horizontal Floor Borer

SWASAP

2 Leadwell LTC-35CXXL machines installed.

Daliff Leadwell V-40iT, V-30 and V-50L

Bell Equipment

12 sets of Leadwell LTC-35CXL CNC turning centers were installed successfully in Richards Bay.



CAMBRO

IOY MINING MACHINEIN

DALIFF

FORD



In 2011/ 2012 WD Hearn Machine Tools installed 80 Mag(US and Germany) Horizontal Machining Centers into the largest engine plant in Africa.

Alba Leadwell T-6, T-7 and V-40

ΔLΒΔ

512

METAL GROUP

SA Metal

LTC-50 XXL M LTC35 CXL M T-8XL

Strucmac

Skoda 10m Floor Borer, SANCO SHM13040R, SHM11020RF, SHM11030R, SDM-425 Leadwell MCV-1500, V-60iT, LTC-35 CXLM

Denel

Leadwell V-40iT, V-30, 2 x V-50L, 2 x LBV-5225, 3 x LBV-3224, 6 x VMC-40 and a Metronor duo system









Customers





Agencies

LEADWELL CNC MACHINES	HIGH PRECISION 5-AXIS AND HORIZONTAL MACHINING CENTERS	SANCO	CNC MACHINES	SIEMENS CNC CONTROLS
EDM/WEDM	BARLOAD MACHINE CO., LTD.	RENISHAWU PROBING AND CALIBRATION EQUIPMENT	GOLDEN SUN CNC ROTARY TABLES	JONES & SHIPMAN A KELLENBERGER COMPANY
Flow WATER JET MACHINES	Storrett® MEASUREMENT SYSTEMS	edgecam	Evermore	CNC FLAT BED LATHES & CENTER LATHES
HORIZONTAL BAND SAWS	KENT GRINDING MACHINES	Nikon CMM MEASURING SYSTEMS	Ann Way Machine Tools	HOLD WELL INDUSTRIAL CO., LTD.
LAZER WELDING AND LAZER ENGRAVING MACHINES	USP YU-SHINE VERTICAL TURNING MACHINES	RICHYOUNG	TORNOS LAZER WELDING AND LAZER ENGRAVING MACHINES	











T-7iSM

V-32i

MCV-1500i

CNC Machining Centers: High speed arm type toolchanger • 2 year warranty on controllers • High speed linear way machines (V-series) • Heavy duty box way machines(MCV-series) • Cutting feed at 20m/min and rapids at 48m/min • Probing systems from Renishaw tool length measuring and workpiece measurement • Siemens or Fanuc available • 15000RPM direct drive available • High pressure coolant through spindle (20bar standard 30bar optional)

CNC Turning Centers: Box Way (LTC-series) and Linear Way (T-series) • VDI or EWS (driven tooled/live tooling) turret systems • 36m/min rapids • Gang turners available • Y-axis sub-spindle and driven tool combinations machine • Siemens/Fanuc control. **Highly configured Machining Centers:** High speed tapping and drilling centers BT-30 • Ultra quick toolchange time • Vertical Turning Lathes • 4 & 5-axis machining centers • The ultra precision mould making machines.







Leadwell's mission is to constantly search for excellence and gain respect in the industry. Using 25 years of experience, the entire staff at Leadwell pledges to bring innovation, quality assurance, world class after sales service and environmentally friendly machine tools to the worldwide marketplace. Leadwell strives to win the respect of both their customers, and worldwide competitors alike.



RENISHAW







OTS TOOLSETTING PROBE

RENISHAW EQUATOR

NC4 LASER TOOL SETTER

Renishaw probe solutions can help reduce set-up times by up to 90% and improve your process control. Renishaw provides solutions for tool setting, broken tool detection, component set-up, with automatic offset updates, in-cycle gauging and first-off inspection of parts. **OTS Tool Setting Probe:** The cable less OTS with optical signal transmission allows unrestricted machine motion and ease of installation on CNC machining centres. Functions: Setting tool lengths in Z, Setting rotating tools in X and Y for radius offsets, Tool breakage detection. **NC4 non-contact tool setting system:**

The NC4 is a flexible laser system, with ultra-compact laser tool setting transmitter and receiver units that can be mounted on separate brackets, or as a single fixed unit. The NC4 allows fast, non-contact, tool setting and tool breakage detection on machines previously unsuitable for such applications.



XL80 LAZER MEASUREMENT SYSTEM

OMP-40 MEASURING PROBE

OMP40: features and benefits

- Ultra-compact only Ø40mm and 50mm in length.
- Miniaturisation of electronics without compromising performance.
- Simplified installation ideal for retrofit.
- Long battery life, minimal downtime, industry-leading economy.
- Shock and vibration resistant.





SDM-3226

SDM-16040M

SHM-11025

Sanco Machine Tools Corp was founded in 1981. They are a professional Machine Tool manufacturer with products covering a range of Double Column Machining Centers, Vertical & Horizontal Machining Centers and CNC/Conventional Horizontal Boring and Milling Machines. Being a leading manufacturer in Taiwan, Sanco has a strong management team, bearing the principal that their customers always come first. They have an outstanding group of mechanical design and R&D engineers who have the ability to create the most suitable machine, which will meet any kind of demand. Sanco has the best assembly and Q.C. personnel to ensure the quality and reliability of their products.



Spindle Head on the SANCO SDM-M. The Z-axis is designed with guideways to enhance cutting rigidity with max travel 1100mm or 1400mm



The SDM-M X-axis is mounted with four roller-type linear ways. Standard X-axis travel is extra long at 8200mm which can be extended in 2000mm sections

SANCO SDM-M Moving Column Type Machining Centre:

This machine is used for large moulds and mould bases, automotive moulds, large machinery structural components, in high speed rail and transportation industries, naval architecture, energy industry, aerospace industry, and plastic injection moulds.











CT2-52YM

CY2-52MB

CDS-32(inside)



Chiah Chyun Machinery is one of the most professional manufacturers of CNC Lathes, Auto Lathes and Bench Lathes in Taiwan. They are the first company to be certified by ISO 9002 for its Automatic Lathes and CE quality certification in Taiwan. Chiah Chyun can boast international quality and technical capability that has been recognized by customers both domestic and overseas. In order to meet the rigorous requirement for processing applications, Chiah Chyun conducts the Total Quality Controlled System during production. When a prototype is developed, its design specification must be able to endure a process of testing and many hours of running the product.



The CT2-52YM can show you how to boost your cutting productivity to a new level. This machine with twin spindle and Twin Turret lets you run high precision parts more efficiently. The main and sub-spindle combined with two 16-position Servo Turrets allow complex parts to be machined all at once. The design concept behind the CT2-52YM is to give you competitive leadership for years to come.







MV1200S WEDM MACHINE

EA12V CNC SINKER EDM

EA8S DIE-SINKING EDM SYSTEM

Mitsubishi Electric Die-sinking EDMs, Wire-cut EDMs and Fine-hole EDMs enhance productivity with highspeed and high-accuracy. Besides mold making, it is also used as a great tool in manufacturing highly reliable parts used in aircraft and IT industries. Mitsubishi Electric EDMs make work easier for both the first timer and the long time users when handling complicated shapes.

MV-1200S machine: Featuring the M700 series control with 15-inch touchscreen for ease of use. The whole MV series features new improvements in machine construction, auto-threading, internal machine communication, power supply technology and operating costs. The MV1200-R also includes a new, non-contact Optical Drive System - ODS.



Far Left: Gear cutting on a MV1200R Middle Left: Interior and control operation of the MV-Series. Left: A component cut using EDM technology.







VL3000-ATC

2VL-ATC+C SERIES

VL1600-ATC

Yu-shine was established in 1983 to design special application machine tools. Over the years they have continuously expanded to include design and production of all types of machine tools including: CNC Vertical Lathes • Twin star Vertical CNC Lathes • CNC ultra performance Vertical Turning Centers with C-axis • Heavy duty Vertical Lathes • CNC ultra performance Heavy duty Vertical Turning Centers with C-axis • Twin turret CNC Vertical Turning Centers • Double Column 5-axis Machining Centers • Special purpose machines. YSP's unique vision and spirit of innovation has allowed them to accommodate global market demands and deliver universally accepted machines. YSP's technological progress and strict quality control are indicated by CE and ISO9001 certifications across their complete product line. They have become known for very high levels of precision, accuracy, and performance. YSP machines have earned worldwide approval and trust from customers in Japan, Germany, Central America, Southeast Asia, and Eastern Europe - 38 countries in all.





Solid, heavy duty table face permits close-in fixturing for high-rigidity, vibration free machining. Smallest footprint in it's class, offering the best work flow available.



SIEMENS



SIEMENS 840D 5-AXIS SIMULTANEOUS

SIEMENS 808D

SIEMENS 828D(4+1)

Tailor made for **Milling Machines:** SINUMERIK 828D - the top performer for more advanced milling machines can handle all conceivable drilling and milling operations. It goes without saying that it can also do this in any desired swiveled workpiece plane and on cylindrical workpieces - so things really start moving on your machine. You don't need a special CNC, not even for Mold & Die applications. The SINUMERIK 828D's unrivalled performance guarantees mirror-smooth surfaces with minimum machining times. **Turning Machines:** The SINUMERIK 828D is also a real all-round talent on turning machines. It gives a wide and comprehensive range of turning operations, which are complimented by an unequalled range of Drilling and Milling operations for both the face and peripheral surfaces of the workpiece. Complete machining? Of course! Anything the main spindle can do, the counterspindle can do, too. Naturally, without any restrictions. This enables the SINUMERIK 828D to get the maximum productivity out of your machine.



Shopmill and Shopturn: Simple step-by-step programming

When it comes to manufacturing small batches or individual parts, programming time is the key factor for ensuring productivity. This is where the Sinumerik 828D is in its element. With shopmill/ shopturn sequence programming, the Sinumerik 828D boasts the most straight forward CNC program editor in the world.







MACH 2

МАСН З

MACH 4

Waterjet cutting technology is one of the fastest growing major machine tool processes in the world due to its versatility and ease of operation. There are virtually no limits to what waterjets can cut, which is why companies of all kinds and sizes are realizing greater efficiency and productivity by implementing UHP Waterjets in their operations.

Mach 2 series: 55,000 PSI field proven Jetplex pump • Paser ECL plus cutting system • Flowmaster is easy to use, simple yet powerful software.

mach 3 series: 60,000 PSI intensifier or hyplex hybrid pumps and more • dynamic waterjet for faster more accurate cutting • flowmaster intelligent user control.

Mach 4 series: 94,000 PSI Hyperjet pumps • Dynamic XD for bevel and 3d cutting • Flowxpert software for easy programming of complex parts.





DYNAMIC WATERJET XD:

Integrates 3D functionality with dynamic waterjet, giving you the ultimate in accuracy, speed & flexibility. Dynamic XD is a revolutionary waterjet advancement, and is industry altering with its unique features and capabilities. It offers advanced beveling and up to 60 degrees of Rotation. This functionality provides added versatility and allows for easy cutting of complex parts in 3D.





CNC FLAT-BED TURNING CENTRE

CDL6251 GAP-BED LATHE

CDS6266C GAP-BED LATHE

Dalian Machine Tool Group Corporation (DMTG), is the strongest manufacturer of machine tools and key components in China, and is unique by Chinese standars in conducting research and development as well as its own casting and parts manufacture.

CKE 6140Z CNC Flat-bed Turning Centre features: Siemens 808D, Manual 3 Jaw Chuck, 8 Station Turret, Manual Tailstock, Automatic lubrication, Hardened & Ground guideways.

CDL 6251 Gap-bed Lathe features: 4-jaw chuck, 2-axis DRO, Steady rest, Follow rest, Center tools, Face plate,
 Drive plate, Quick change toolpost, Toolpost guard, Chuck guard, Full splash guard, Oil gun, Foundation bolts, Foot brake.
 CDS 6266C Gap-bed Lathe Features: 4-jaw chuck, 2-axis DRO, Steady rest, Follow rest, Center tools, Face plate,
 Drive plate, Quick change toolpost, Toolpost guard, Chuck guard, Full splash guard, Oil gun, Foundation bolts, Foot brake.





LEFT: The CKE6180 CNC Flat-bed Turning Center on the factory floor. Far Left: The CDS6266C Gap-bed Lathe on the factory floor.





SWISSNANO

EVODECO 32

MULTISWISS

SwissNano: The SwissNano was designed to meet the demand for small workpieces requiring very high precision. For example, its kinematics enable the machine to produce two thirds of watch movement components, from the simple to the most complex, including cutting, with excellent finishes. Its capability extends beyond horological applications to include any type of workpiece requiring extreme quality and precision. The kinematic structure was designed for exemplary balance and thermal management enables the operating temperature to be achieved very rapidly.

EvoDECO: The EvoDECO range represents the pinnacle of the Tornos range. Designed for the most demanding machining operations and users, EvoDECO machines are the most powerful and productive on the market. They are available in four diameters: 10 mm, 16 mm, 20 mm and 32 mm. Their unparalleled flexibility allows them to efficiently produce the most complex workpieces while ensuring rapid setup changes.

MULTISWISS: The MultiSwiss is the link between multi-spindle and single-spindle machines. The Machine has 6 mobile spindles which use torque motor technology to index the barrel. It is very fast and can deliver cycle times equal to those of cam-operated multi-spindle turning machines. Thanks to its hydrostatic technology, the MultiSwiss can achieve exceptional finishes (Ra 0.15) and outstanding tool adherence even in materials considered difficult to machine. Despite its exceptional performance, the MultiSwiss is extremely easy to set up and adjust, and it is programmed in the same way as 6 machines with 3 linear axes, which means you don't need to be an expert in multi-spindle machines to operate it.



Left: SwissNano Far Left: Multiswiss: Interior of both machines







WD Hearn became Kitamura's exclusive South African agent after a visit to Kitamura's world class facility in Japan during March 2015. Kitamura is one of the most innovative and cutting edge companies on WD Hearn's agency list. Founded in 1933, Kitamura's concentration in the machining center industry, as well as its unrivalled commitment to Research and Development has led to industrial growth with the procurement of over 200 patents and patents pending in machining center design.

Mycenter HX250G Horizontal machning center: Kitamura's Horizontal Machining Centers offer the benefits of extra-large work envelopes coupled with outstanding accuracies. Beefy and rigid with the ability to handle hard materials and heavy duty cuts, consider a Kitamura Horizontal an investment in performance and precision.

Mytrunnion-4 5-Axis Vertical Machining Center: It has a standard 50-tool high speed ATC located toward the rear of the machine allowing for the economical machining of more complex parts. Tool handling is minimized and efficiency is increased using Kitamura's exclusive fixed pot ATC system. In this system, each tool is always returned to the same tool pot; the next tool to be used is kept ready in a "stand-by"tool pot, minimizing tool change time.





Left: WD Hearn's visit to the Kitamura Precision Machinery showroom in March 2015, Far Left: The very impressive Kitamura factory in Takaoka-City, Japan.



SOUTH AFRICA OVERVIEW

- POPULATION : 53 MILLION
- SA'S GDP: THE 27TH BIGGEST WORLDWIDE AT 350 MILLION DOLLARS
- GDP GROWTH: 3.1% (OVER 5% FROM 2005-2007)
- ECONOMIC POWERHOUSE OF AFRICA WITH VALUABLE NATURAL RESOURCES.
- HIGHLY DEVELOPED LEGAL, FINANCIAL, TOURISM, COMMUNICATIONS, ENERGY AND TRANSPORT SECTORS
- STOCK EXCHANGE AMONG THE TOP 20 IN THE WORLD
- FORD PROJECT: STRUANDALE PLANT
- VW PLANT IN UITENHAGE
- TRANSNET 2012 RECAPITALISATION PROGRAM.





