RETECON REPORT

An information service to our clients

2024 | 1

Machine Tools | Cutting Tools | Accessories and Measuring Equipment

MACHINETOOLS AFRICA 2024

21-24 MAY

EXPO CENTRE • NASREC

JOHANNESBURG • SOUTH AFRICA

AFRICA'S BIGGEST MACHINE TOOLS EXHIBITION

SHAPING TOMORROW

THROUGH TECHNOLOGY & INNOVATION

Save the date and visit Retecon at Machine Tools Africa 2024 at stand number: H1 and H8

IN THIS EDITION

TRUMPF

Source: TRUMPF Group

2D LASER CUTTING MACHINES

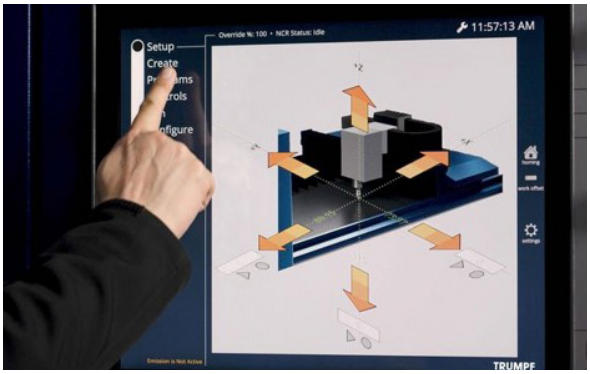
TruLaser Series 1000 Basic Edition

Economic reliable machine

Economic reliable machine

The TruLaser Series 1000 Basic Edition is the ideal start into the world of high-quality laser cutting. It is equipped with a TruFiber laser for cutting a wide range of sheet thicknesses. The intuitive programming system makes it possible to start production quickly. In addition, we are always on hand to lend our support: You can count on our experienced and competent service team to answer all your questions regarding maintenance and applications.

- **Reliable machine and safe cutting**
  High-quality components and production according to TRUMPF Quality Standard guarantee safe operation.
- **Global service network**
  You can rely on TRUMPF Remote Service, fast technical support and professional training offers.
- **High cutting performance**
  Stable results thanks to optimal machine design.
- **Easy to use and program**
  The Easy Programming software stands for a new operating philosophy: It guides you intuitively through the process. Program your machine quickly and easily directly on the user-friendly HMI panel on the machine or via offline programming from the office. Thanks to the included real time preview you can track each change and are in full control of a perfect cutting result.



BENDING MACHINES

TruBend Series 1000 Basic Edition

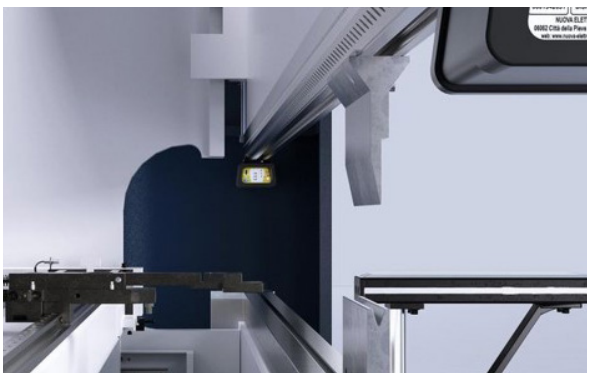
Intuitive reliable machine

Source: TRUMPF Group

Intuitive reliable machine

The TruBend Series 1000 Basic Edition focuses on the essentials: Benefit from an economical solution with TRUMPF quality. The 1000 Series impresses with its simple control and reliable operation, while also delivering high levels of precision and meeting appropriate safety standards. Thanks to its robust system design, high-quality components and intuitive programming system, the TruBend Series 1000 Basic Edition is your perfect introduction to TRUMPF bending technology.

- **Simple operation**
  The TruBend 1000 Basic Edition is equipped with its very own TRUMPF control system, which enables simple and fast numerical and graphical programming. Meaning you can program faster than ever before.
- **Precision bending**
  The 4-axis backgauge ensures correct sheet positioning with high reproducibility and allows easy bending of complex parts.
- **Simple and convenient machine setup**
  The automatic tool clamp allows for quick tool changes.
- **Part of the TRUMPF family**
  Embedded in the TRUMPF Eco System, the BendGuard Basic provides optimum safety. And the TRUMPF Remote Service provides high machine availability.



The M1 Pro - Stock Machine

SIEMENS 828D control
JobShop Package
4th axis including tailstock

Technical Specifications:

- Axis movements:
  - X- Axis 550 mm
  - Y- Axis 550 mm
  - Z- Axis 510 mm
- Table size: 850 × 650 mm
- Maximum spindle speed: 12,000rpm / SK40
- Through spindle coolant: 20 bar

Package includes:

- Chip coonveyor
- Renishaw touch probe kit
- DXF import
- Full enclosure including cabin roof
- Electronic handwheel
- 18 months warranty

Outstanding milling performance and high rigidity at a competitive price – the new M1 is all about

“Designed for your Profit!”

Please contact us for more information or for a viewing of the M1 Pro stock machine.

For further Information contact Remando on 011 976 8600 | 083 302 0119 or email machines@retecon.co.za

T-SERIES

The entry level of universal turning with long lasting DMG MORI quality

T1:
ø 300 × 400 mm workpieces on 4.5 m² footprint
(w/o chip conveyor)

Newest SIEMENS SINUMERIK ONE as standard

T2:
ø 460 × 705 mm workpieces on 5.6 m² footprint
(w/o chip conveyor)

LONG LASTING PRODUCTION

HIGHEST RIGIDITY

+ Rigid design due to robust bed structure, weight (T2 = 5,500 kg, T1 = 3,400 kg)
+ Maximum part weight between centers, T2 = 350 kg and T1 = 250 kg

MAX. PERFORMANCE

+ Turning spindle with 3,500 rpm and 319 Nm (T1: 4,500 / 140 Nm)
+ Best cutting performance: T2: Q = 540 cm³/min., T1: Q = 280 cm³/min
+ Bar capacity up to ø 80 mm (T1 = 65 mm)
+ Easy installation & maintenance friendly

LATEST TECHNOLOGY

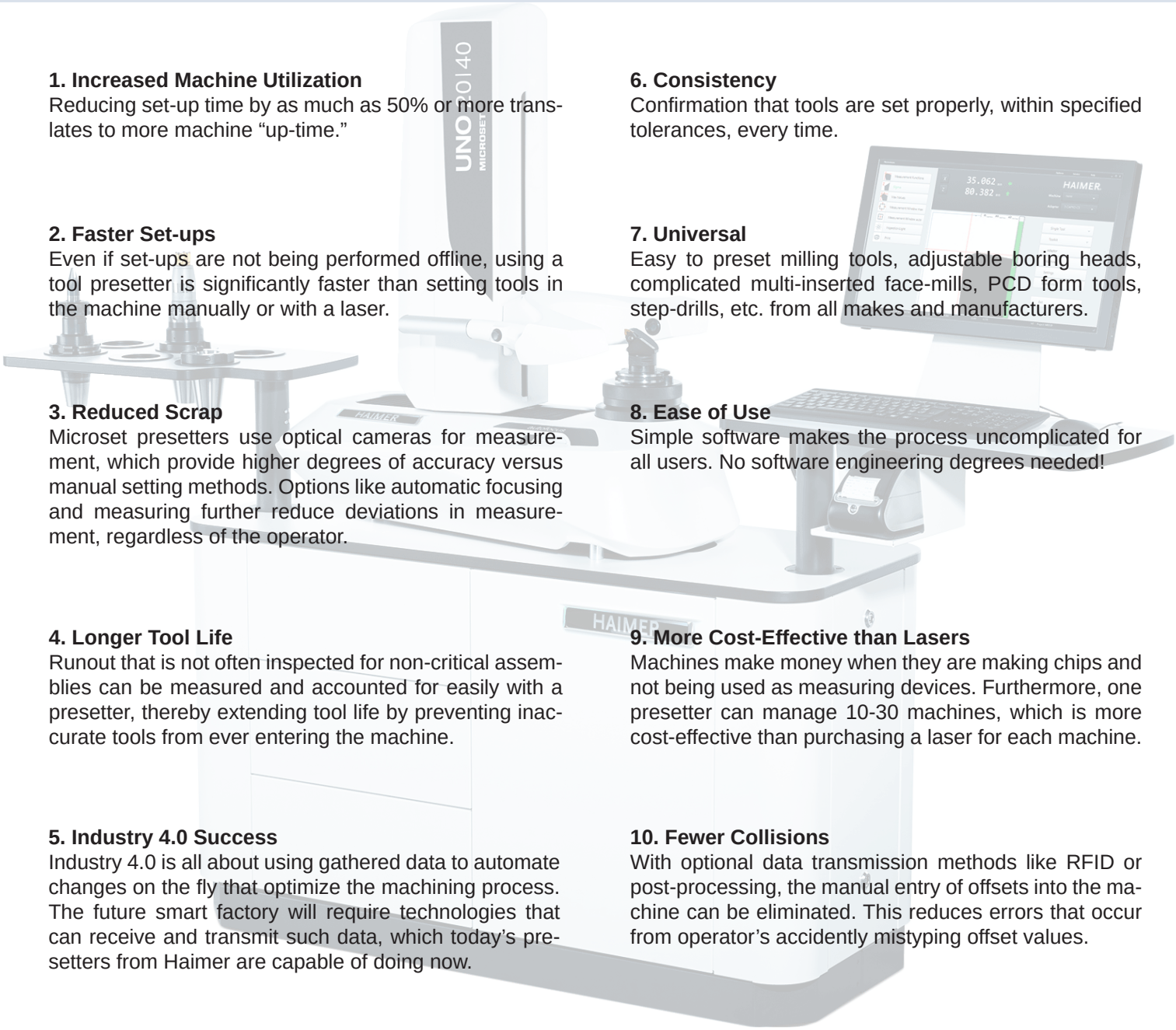
+ Direct measuring system in X-axis as a standard!
+ Newest SIEMENS SINUMERIK ONE incl. ShopTurn with 15" screen and USB 3.0
+ IoT**connector**, NET**service**

External tool-presetting equipment from HAIMER – save cost and time

HAIMER
Quality Wins.

Efficient tool presetting and measuring equipment ensures highest productivity and economy. Improved quality in the supply of pre-set tools and safe and early detection of damaged tools reduces the number of reject parts and significantly increases the quality of components.

Here are 10 good reasons to invest in HAIMER tool-presetting equipment:



1. Increased Machine Utilization
Reducing set-up time by as much as 50% or more translates to more machine “up-time.”

2. Faster Set-ups
Even if set-ups are not being performed offline, using a tool presetter is significantly faster than setting tools in the machine manually or with a laser.

3. Reduced Scrap
Microset presetters use optical cameras for measurement, which provide higher degrees of accuracy versus manual setting methods. Options like automatic focusing and measuring further reduce deviations in measurement, regardless of the operator.

4. Longer Tool Life
Runout that is not often inspected for non-critical assemblies can be measured and accounted for easily with a presetter, thereby extending tool life by preventing inaccurate tools from ever entering the machine.

5. Industry 4.0 Success
Industry 4.0 is all about using gathered data to automate changes on the fly that optimize the machining process. The future smart factory will require technologies that can receive and transmit such data, which today’s presetters from Haimer are capable of doing now.

6. Consistency
Confirmation that tools are set properly, within specified tolerances, every time.

7. Universal
Easy to preset milling tools, adjustable boring heads, complicated multi-inserted face-mills, PCD form tools, step-drills, etc. from all makes and manufacturers.

8. Ease of Use
Simple software makes the process uncomplicated for all users. No software engineering degrees needed!

9. More Cost-Effective than Lasers
Machines make money when they are making chips and not being used as measuring devices. Furthermore, one presetter can manage 10-30 machines, which is more cost-effective than purchasing a laser for each machine.

10. Fewer Collisions
With optional data transmission methods like RFID or post-processing, the manual entry of offsets into the machine can be eliminated. This reduces errors that occur from operator’s accidently mistyping offset values.

For further Information contact Remando on 011 976 8600 | 083 302 0119 or email machines@retecon.co.za

NitroCUBE™

PLUG & PLAY Nitrogen Generation Systems

PLUG & PLAY

Nitrogen Generation Systems

S33

The good value solution for individual requirements.

If you don't know today what you'll be grinding tomorrow, then the S33 will impress you with its universality and flexibility: It can be refitted in record time from grinding between centers to live grinding. You can grind even complex workpieces in a single clamping:
This is made possible by the new grinding head with two motor spindles. You also benefit from a large selection of wheelhead types.

www.studer.com – The Art of Grinding.

STUDER

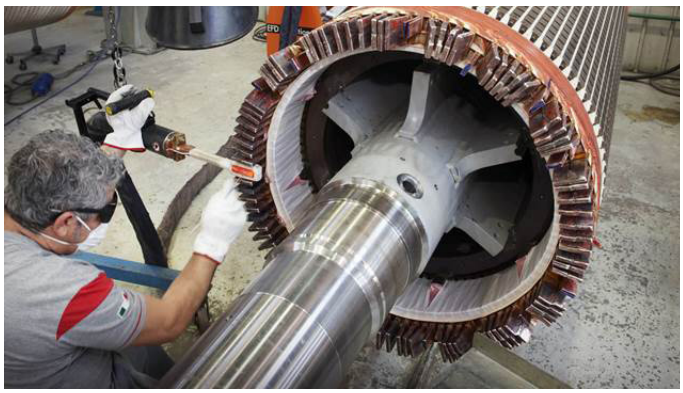
Minac:

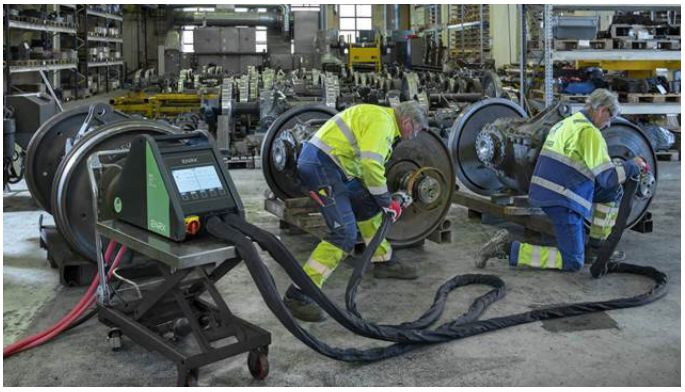
Mobile induction heating equipment

Minac is an all-in-one-solution for the heating of practically any electrically conductive material.

Minac is our family of mobile and versatile induction equipment. Examples of ideal jobs are brazing, curing, hardening, shrink-fitting and straightening. Minac equipment can be fitted with a single or twin output, various coils and coil fixtures, flexible cables, closed or separate cooling systems, and specially designed heating cables. We equip the Minac to fit your need.

- ENRX MINAC – offering mobile and static heating solutions
- Available in single and twin operation
- Ideal for shrink fitting, brazing, heat treatment, pre and post heating and straightening
- Flexible and easy to use
- Energy efficient





NEW Product Launch at Machine Tools Africa in May 2024

Pipe bevelling system

Stinger 300

Total working range Ø 36 – 269 mm (1.41“ – 10.59“)

The Stinger 300 pipe beveling machine is designed for portable use in pipe machining operations and it can be used efficiently by a single operator. The Stinger 300 is a heavy-duty ID mounted pipe beveler utilizing self-centering expandable mandrels to provide quick and proper alignment to a pipe or a tube prior to machining operations.

The Stinger 300 can bevel, face and counter-bore in a single operation, making all these weld prep operations quick and simple.

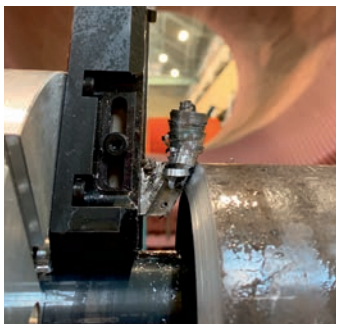
EasyLOCK - The tool bit is fastened by one screw anywhere on the holder. The holder is equipped with a scale for easier tool’s centering.

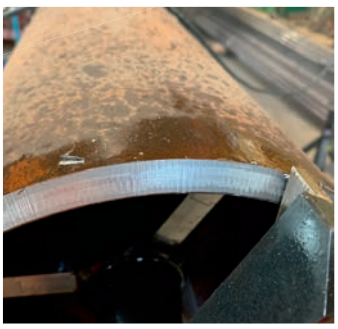
The Stinger 300 can be used with three or two tool’s holders only depending on the required bevelling job.

- Simultaneous bevel, face, and counter-bore
- EasyLOCK - locking of the tool bit by one screw
- Centering scale
- Standard or custom-made tool bits
- J-Bevel tool bits available for high welding efficiency on thicker wa pipepipe
- Centering screw to eliminate the potential vibrations.

Technical data:

Number of the mandrels	2 pcs
Mandrel Nr. 1. ID range	36 – 86 mm (1.41“– 3.38“)
Mandrel Nr. 2. ID range	86 – 269 mm (3.38“– 10.59“)
Wall thickness max.	15 mm (0.59“)
Motor electric	1800 W / 2 gears + RPM control / MT 3
Weight:	
Total with smaller mandrel	31 kg (68.3 lb)
Total with bigger mandrel	36,6 kg (80.6 lb)
Additional stand	5,8 kg (12.8 lb)





For further Information contact Moritz or Mark on 011 976 8600 or email machines@retecon.co.za

VECTRO®2

AUTOMATED NON-CONTACT INSPECTION AND MEASUREMENT

ISO 17025 accredited

THIRD DIMENSION
ADVANCING MANUFACTURING

Advanced automation made simple!

Modern manufacturing demands the high-speed transfer of information from the physical world to the digital world. The PartInspect automation platform is designed to play a central role in this process – combining straight-forward automation techniques with high-definition structured light scanner technology to remove bottlenecks from the quality control process.

Pairing a premium structured light scanner with a powerful robot arm for automated inspection offline, near-line or at-line, PartInspect offers straight-forward measurement cells with an easy-to-use kiosk interface that simplifies and accelerates repetitive inspection tasks, while a unique combination of automated scan planning and manual fine tuning deliver unmatched flexibility to the user.

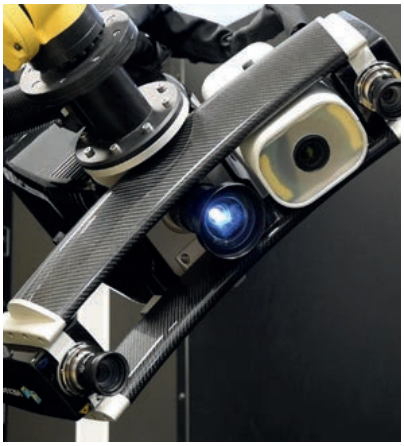
With PartInspect, project planning and execution require no expert knowledge of robot teaching, allowing for simple automation that can be operated with minimal training. This all adds up to a range of high-end automated measurement systems that move vital inspection processes into the world of smart manufacturing with a minimum of expertise and effort.

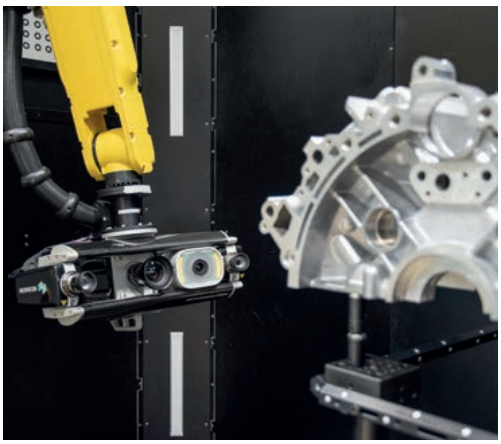
Turnkey

High-speed

Flexible

Simple





Mobile laser welding machine AL*Flak* Max

The flexible mobile laser for repairing large moulds

For many years already laser machines are getting used for a variety of highly specialized applications in many industry sectors. But also, in crafts and industry related services, laser technology is more and more popular. Here skilled hand work often delivers good results in far less time than complicated programming. A mobile laser welding system offers big advantages for the service provider and his customers especially for repairs. When it comes to repairing big moulds, it is much easier to move the mobile laser to the work piece than to dismantle the heavy mould and transport it with efforts to the repair tool. With a mobile laser welder, heavy and bulky components can get repaired on site in a fast, easy and precise way, so that transport times, and often also the installation and removal times are completely eliminated. The work piece is ready for use not only much faster after repair, but the repair costs are also significantly lower compared to other welding processes.

For particularly large moulds ALPHA LASER has developed the mobile laser welding system AL*Flak* Max. With its extremely long flexible arm and the lean, flexible laser head, the AL*Flak* Max reaches (almost) every welding spot.

This device is used for all applications where laser welds are required in large areas and deep, hard to reach, places. The highest operating point is 2 m and the deepest 80 cm. With its enormous range of almost 2,80 m, the AL*Flak* Max can weld also far inside of large tools or machine components. The movement of the digital system is designed for fine work movement in the four axes of motion X, Y, Z and R (the axis of rotation is optional). High ease of use is offered by the precise stop of the work piece feed without trailing.

Additional comfort is provided by the patented, semi-automatic user coordinate control, which adapts the motion system to the work piece geometry. Regardless of how the seams are situated – the mechanical movement system is quickly and comfortably set, allowing the user to concentrate on the welding task at hand.

The laser system AL*Flak* Max is available with or without caterpillar track.

Robomac TF

Feed & Form

Robomac 106TF

Wire capacity up to 600 N/mm²
> From 2 to 6,35 mm

Large Tube Bender - TE80

> Max tube ø: 3x0.08" at 400N/mm²
> Tube length: 98"
> Max bending radius: 12"

Slat cleaner TruTool TSC 100

The specialist for clean slats

Save resources

The TruTool TSC 100 slat cleaner enables slats on laser flatbed machines to be used for much longer. With the ability to clean slats multiple times, it is possible to save up to 75% of costs compared with regular slat replacement. What's more, cleaning the slats regularly also extends their service life – which saves resources and boosts your sustainability credentials.

Cleans slats several times, fast and thorough

In times of rising material costs and supply bottlenecks, the ability to clean the slats multiple times really comes into its own. You also save time because the slats can easily be cleaned by just one person. There's no need to remove the slats, meaning they can be cleaned parallel to production.

Versatile field of application

Application

The TruTool TSC 100 adapts automatically to different slag thicknesses up to 25 mm and achieves optimal cleaning results, even in the case of stubborn stainless steel slag. The slats themselves are cleaned, as well as the spaces in between the teeth.

TruTool TSC 100 payback period
6 - 9 months on average, depending on how often it is used.

Sheet-Metal machining in a most compact form

WEBER's small-but-mighty-model.
For deburring, rounding, descaling and surface grinding of your sheet-metal parts with a dry grinding procedure

WEBER TTSC | Deburring machine

The **TTSC** model range is the **most compact** of all WEBER grinding machines, equipped with a **variable operating** height. Different machining methods up to three machining stations can simply be combined with each other for deburring, rounding, descaling and surface grinding.

Planetary head technology for all-round edge machining with cup brushes.

Rubber-coated grinding rollers for surface finishing and deburring.

Technical data

- **Working widths 600, 1100 and 1350 mm**
- **Working height 800–900 mm (variable)**
- **Version with 1 to 3 grinding stations**
- **Workpiece thickness 0.8–100 mm**
- **Infinitely variable feed speed**
- **Grinding belt length 1900 mm**
- **Grinding belt drive up to 11 kW**
- **"i-Touch" controller**

Talyrond® 131 and 130

For economical, high precision inspection of roundness and circular geometry.

Process control right at the point of manufacture is cost effective and convenient. Correlation between multiple units is assured thanks to exacting specifications.

Quality control at a central inspection station or in the gauge room is comprehensive and in full accordance with international metrology standards.

Measuring excellence

The degree of excellence for any gauging device is its range to resolution. Taylor Hobson gauge heads, with wide range and selectable resolution, vastly improve the measure of precision in your manufacturing process.

- **Wide range - 2mm (0.078")**
  Simplifies initial set-up of the component and eliminates the need for special fixtures
- **Normal resolution**
  30 nm (1.18 µ") - is ideal for most measurement requirements
- **High resolution - 6 nm (0.24 µ")**
  Used when component deviations are less than 0.40mm (0.016")

Customized workholding devices can be used with Talyrond® 131 systems to expand capability or simply increase throughput.

Wide range gauge with wrist assembly provides high resolution in any attitude or orientation

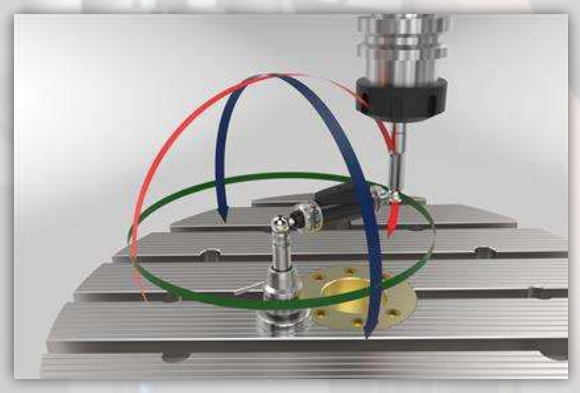
Powered by µltra Roundness software

µltra software provides comprehensive analysis and programmable measurement capabilities for the Talyrond® 131 and 130 instruments. It is the ideal tool for any environment where rapid component inspection is desired.

SPECIAL
SERVICES OFFERED:

RETECON SERVICE (PTY) LTD
Your Partner in Metal Working

Ballbar, Laser, Clamp Force, Vibration and so much more...



Benefits of ballbar testing:

+ Ensure accurate parts, first time, from CNC machines
+ Reduce machine down-time, scrap and inspection costs
+ Demonstrate compliance with machine performance and quality management standards
+ Implement fact based predictive maintenance

Benefits of measuring spindle drawbar force:

The use of this economical spindle drawbar force checking tool will maximize machine up time and minimise spindle down time costs associated with:

+ Wear and damage of drawbars
+ Clamping collets
+ Pull studs
+ Toolholders
+ Tool tapers
+ Eliminates vibration

Machine verification

The laser is able to directly measure geometric errors in a machine independently, unlike laser tracker systems. This gives confidence in the measurements and makes it possible to isolate errors.
Machine accuracy can then be improved by:

+ Making targeted alterations to the machine's assembly
+ Using the data to apply error compensation

Benefits of measuring power quality:

With comprehensive data, an informed decision is key to ensure the correct solution is implemented. There are many solutions available to improve the quality of power supplied to your machinery:

+ Automatic voltage regulators
+ Overload protection devices
+ Power factor correction devices
+ Line filters
+ Transformers

For further Information contact Jacob on 011 976 8600 or email service@retecon.co.za / applications@retecon.co.za

CUT E series

Efficiency at the touch of your finger

- T-shaped base for large and heavy workpieces up to 1,000 kg
- Clear view of the process management with the 19-inch touch screen
- More compact: 30% less floor space

FICEP NEW

PLATES

BEAMS

For further Information contact Bradley C. on 011 976 8600 | 083 442 9646 or email machines@retecon.co.za

TECHNOLOGY
STEEL CONSTRUCTION

AUTOMATIC CNC DRILLING, MILLING AND THERMAL CUTTING SYSTEM FOR LARGE PLATES

TIPO G25LGE
NEW!

The new automatic CNC line TIPO G25LGE for drilling, milling and thermal cutting is a machine designed for the processing of large plates up to 100 mm thick, introducing a number of production innovations and offering a high level of precision and versatility, along with significant ROI optimization:

- New gripper handling system and two carriages to ensure greater precision and capacity for feeding thicker plates.
- New plates contrast base with a vertical sheet metal support that moves transversely to prevent the tool from touching the contrast base, which together with the hold-down, clamps the plates much better than the previous models: less vibration, greater precision, longer tool life.
- Improved kinematics of the unloading table for small parts, that tilts and allows parts separated from the plate to slide underneath the working bench.
- Equipped with the latest Polaris HMI developed by Ficep, which improves machining program management and usability.



AUTOMATIC CNC SINGLE SPINDLE DRILLING, MILLING AND DISC SAWING LINE FOR SECTIONS

XBLADE
NEW!

The new XBLADE CNC line for drilling, tapping, milling and cutting with disc blade is capable of processing steel construction beams of different sizes, with sections up to 305x305 on three sides, 450x450 on one side and variable lengths thanks to its modular configuration. It performs complex operations of drilling, countersinking, tapping, milling and cutting with disc blade and is a “universal” machine lending itself also to the machining of light alloy profiles.

The innovative feature of this machine is the ability to perform three-axis machining even on inclined planes, in two different directions. The 5-axis head consisting of two rotating wrists positions the tool virtually anywhere in the working space. In addition, the introduction of the disc blade expands the range of processing that can be carried out without manual intervention: the integration of the blade with the 5-axis head makes it possible to work around the workpiece by intervening on 5 faces.

Through Ficep's Steel Project software, profile nesting can be programmed and optimized, and through the CAM software that generates the ISO program, the working cycle is launched with great ease.

bedra
intelligent wires

BRASS WIRE

BRASS WIRE 0.25mm - SOFT | ECONOMICAL

Berco Cut 372-392 Nmm 4kg soft
Berco Cut Special 500 Nmm 16kg soft
Berco Cut Pro 500 Nmm 5kg soft
Berco Cut Pro 500 Nmm 8kg soft

BRASS WIRE 0.25mm - HARD 900/Nmm²

Berco cut Special 900 Nmm 5kg hard
Berco Cut Special 900 Nmm 16kg hard
Berco Cut Pro 900 Nmm 5kg hard
Berco Cut Pro 900 Nmm 8kg hard

COATED WIRE

GAPSTAR WIRE - THE NEW EDM HIGH PERFORMANCE WIRE

Gapstar.9 – COATED WIRE 900 N/mm 0.25mm 5kg
Gapstar.9 – COATED WIRE 900 N /mm 0.25mm 8kg

- New Bedra Technology (TRIMPAC)
- Suitable for all EDM wire cutting machines.

TOPAS WIRE - HARD | HIGH TENSILE | FAST | ACCURATE

Topas Plus H - ZINC COATED 800 Nmm 5kg hard
Topas Plus H - ZINC COATED 800 Nmm 8kg hard
Topas Plus H - ZINC COATED 800 Nmm 16kg hard
Topas Plus H - ZINC COATED 800 Nmm 25kg hard

COATED WIRE (CuZn) - HIGH PERFORMANCE

Bronco Cut 520 N/mm² 4kg soft
Bronco Cut 520 N/mm² 8kg soft
Bronco Cut 520 N/mm² 16kg soft
Bronco Cut 520 N/mm² 25kg soft

Great Value for Money!!

EDM WIRE

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