



SOUTHERN AFRICA

July/August 2023 Volume 32 No.4

DynaPath 🖊







Efficient Slot Milling

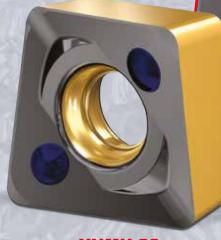
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Machine Tool Market

SOUTHERN AFRICA

JULY/AUGUST 2023 Vol. 32 - No. 4

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Tool Changer: Umbrella Type 16 Tools

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Spindle: BT40

Max Spindle Speed: 8000Rpm

Tool Changer: Arm Type 24 Tools

OPTIONS:

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FEATURES:

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Swing: 500mm

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Tool Turret: 8 Tools

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MACHINE TOOLS AFRICA 2024

By Joanne Canossa, MTMA Chairperson

I think we can all agree that the past few years leading up to this much anticipated show have been nothing short of manic. Machine Tools Africa 2024 is a great step towards the recovery and upgrading of local manufacturing businesses in South Africa.

Metal processing is a critical sector of the South African economy and serves as an essential input to multiple industries. According to the Metals and Engineering Indaba, the industry contributes around 28% towards the country's manufacturing GDP, and according to NUMSA employs an excess of 360 000 people. Despite its importance, this industry faces challenges that need addressing to ensure its sustainability.

Challenges such as high energy supply costs, energy interruption, increasing raw material costs as well as inadequate infrastructure are what our industry faces on a day-to-day basis. However, an even bigger concern for our industry is how we, as key stakeholders, keep it alive and fit for the future!

Our higher education minister confirmed last year that South Africa has a shortage of over 30'000 qualified artisans yearly and is forcing businesses to import skilled artisans from other countries. A shortage of skilled artisans in our industry arises from two fundamental issues. Firstly, there is a lack of career guidance, resulting in fewer young people entering the field. And secondly, there are challenges in the sector itself, such as the use of old-fashioned

technology and machines, limited access to infrastructure and complexities in the industrial process which make it challenging to acquire anything other than an informal experience to training.

While this unique challenge facing the metal processing industry can be significant, it can likewise present unique opportunities.

Investment in training, mentorship programs, and collaboration with Technical Vocational Education and Training institutions will improve both the quality and the number of metal processing skills in the country. It is imperative for the government and industry stakeholders to promote and provide a conducive environment for individuals to take advantage of these opportunities with worthwhile incentives.

South Africa has an opportunity to transform the metal processing industry by working collaboratively to address these issues. The industry can deliver significant economic benefits, provide more job opportunities, and create a more competitive and sustainable trade. The Machine Tool Merchants Association has been working closely with Specialised Montgomery to incorporate skills development at the Machine Tool Africa 2024 in a professional and competitive way.

More importantly, industry players have an opportunity to highlight technological advancements and how technological infrastructure for human-machine collaboration can streamline processes and improve high



Joanne Canossa, MTMA Chairperson.

level decision making. It is this combination of technology and human creativity that defines smart factories and industry 5.0. It will be very exciting to see how our members as well as other companies utilise this platform to target and entice the manufacturing sector.

The Machine Tool Merchants Association intends on keeping the momentum going throughout the year and ensure that through hard work we can align ourselves with the upcoming Machine Tools Africa trade show as well as other great industrial associations in South Africa.

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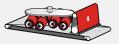
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- + EDGE ROUNDING
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Low TCO (total cost of ownership) is not merely a buzzword to us.





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- High speed vertical and horizontal machining centres
- Vertical and horizontal CNC lathes
- Multi-tasking machines
- CNC lathes with milling functions, sub spindles and multiple turrets
- Metal additive manufacturing equipment
- Ultrasonic assisted machining centres
- Production line management software

TONGTAI ARE THE MARKET
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Aerospace • Automotive • General Engineering • Medical • Composite Materials
 • Tube and Pipe Processing • Additive Manufacturing







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PRODUCTS:

horizontal machining centres • 5-axis machining centres • 3- and 5-axis gantry type machining centres • Heavy duty and big bore lathes • Swiss type (long turn) lathes • Multi-tasking CNC lathes • Teach-in lathes • Automated production lines • Turnkey projects • CNC rotary tables • BT holders and pull studs • Hydraulic and manual chucks • Hard jaws and soft jaws • Ringrollers • Top benders • Mandrel benders • CNC pipe benders • Cut-off saws • Special purpose machines • Rotary transfer machines • Gantry-type loaders • Barfeeders • Thermo-forming machines and waterjet cutting • Additive manufacturing and hybrid CNC • Milling and sawing plants • Rail

Vertical and horizontal CNC lathes • Vertical and

SERVICES:

milling • Drilling plants

Service and maintenance • Fixture design and robot integration • Turn key solutions • Production lines • Machine monitoring software

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e-mail: info@pumamachines.co.za web: www.pumamachinetools.co.za

<u>Key Personnel</u>

Director: Mike Lee

Managing Director: Chris Kroeger

BRANCHES:

Cape Town

Unit 9, Peter Park, Montague Drive, Montague Gardens

PO Box 1167, Milnerton 7435 Tel: (021) 555-2270/1 Fax: (021) 555-2272

Key Personnel

Branch Administrator: François Nel

Durban

Unit 32, Ivy Park, 3 Ivy Road, Pinetown PO Box 1186, Pinetown 3600

Tel: (031) 701-8149 Fax: (031) 701-0313

Key Personnel

Branch Manager: Lee Williams

Port Elizabeth

2A Haupt Street, Sidwell PO Box 414, Port Elizabeth 6000

Tel: (041) 453-2720 Fax: (041) 453-6678

Key Personnel

Branch Manager: Johan Raubenheimer

AGENCIES:

CSM • Chevalier • Chin Fong • DN Solutions • Vision Wide Tech. Co. Ltd • Citizen • JFY • Cosen

• MSS • Further details on request

PRODUCTS:

CNC lathes (2, 3 & 4 axis, vertical and horizontal)
• Machining centres (vertical and horizontal)
• Barfeeders • Accessories • Tooling • Training •
Service and repair • Punching machines • Bending
machines • Laser machines • Band saws

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0......



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Tel: (031) 701-4732

e-mail: info@redmanengineering.co.za web: www.redmanengineering.co.za

Key Personnel

Member: Shane Redman
Internal Sales: Ann Frederiksen

AGENCIES:

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PRODUCTS:

CNC machining centres & bridge-type machines • CNC turning centres • CAD/CAM software systems • CNC multi axis turn and mill • RedCut tungsten carbide milling cutters • Redcut CNC toolholders

SERVICES:

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e-mail: machines@retecon.co.za web: www.retecon.co.za

Key Personnel

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Key Personnel

Branch Manager: Johan Raubenheimer



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082 804 9241

Tel:





AGENCIES:

Trumpf • EFD • Kapp Niles • Agie Charmilles • Heller • Hexagon • Schuler-Beutler • DMG MORI • TBT • Mahr • Studer • Kasto • Ficep • Alpha Laser • MSS • Further details on request

PRODUCTS:

High-speed vertical machining • Automatic turning (vertical and horizontal) • Multi-slide automatic turning • Universal milling and boring for production • Tool and cutter grinding • Vertical and horizontal machining • Induction hardening machines • Induction heating equipment • Deephole drilling • Punching and nibbling of sheetmetal • Automatic component cleaning • Automatic sawing equipment • Roll forming and spinning machines • Hot and cold forming (forging) • Automatic punching and forming machines • Tube bending machines • Special purpose machines • Manufacturing lines and small plant • Multi-spindle lathes • Production grinding machines (cylindrical and flat) • Laser cutting systems • CO, lasers • Water jet cutting machines • Rotary transfer machines · Assembly machines · Toolroom milling with 3-D digitizing • Universal milling and boring for toolroom • Automatic surface grinding • Cylindrical grinding machines (external and internal) • Deephole drilling for mould industry · Spark erosion equipment (wire cutting and die sinking machines) • Drilling machines • CNC lathes • Vertical machining centres • Horizontal machining centres • Cutting tools • Tool holders • Measuring equipment • Tool pre-setting • Laser measuring • Machine calibrations • Power tools Thread rolling

RGC ENGINEERING (PTY) LTD

O-------O



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Tel: (011) 887-0800 Fax: (011) 351-0778

e-mail: lizette.gerber@ rgcengineering.co.za or info@rgcengineering.co.za

web: www.rgcengineering.co.za

Key Personnel

CEO: Aurelio Grech-Cumbo Co-ordinator – Sales; QA; Technical & Sanas Manager: Lizette Gerber Manufacturing Manager: Dan Andrei

AGENCIES:

Mitutyo • GOM • Marposs • Hermle • Schuler Group • Elb Schliff • JS EDM • Renishaw • Ital Presse • Lilian •LTF • Tacchella • Samputensili • Zani • IEM

PRODUCTS:

Leading importer and distributor of high-tech precision contact and optical measuring equipment, CNC machining centres and equipment • Represent leading OEM's in Metrology and Measuring, CNC, CMMS, verniers, micrometers, scanners, reverse engineering, press tools, spline/broaches and gauging equipment • Installation, maintenance, service, calibration and training of products • In-house services, such as measuring, calibration, reverse engineering, deformation testing, quality assurance and control, maintenance and servicing of all products and equipment is available

SERVICES:

Developing highest level of quality in production and services for every customer • Design and manufacture of specially produced form tools, jigs, fixtures and NC & CNC machining of high precision components • Training, installation, SANAS calibration, ISO9001:2015 & ISO17025:2017 and more

SKOK MACHINE TOOLS

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Key Personnel

Director: Brian Wright
Sales Manager: Jeff Burrows
General Manager: Prawin Athimoolam
General Manager (USA): Benjamin Cole
Sales Director: lan Daines

BRANCHES:

Port Elizabeth

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AGENCIES:

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- Equiptop Ocean Machinery

PRODUCTS:

Production machinery for metal cutting and metal forming • High speed vertical and horizontal CNC lathes and single- and double column CNC machining centres • Universal milling and boring • Tool and cutter grinding for toolroom and production • Deep hole drilling, punching and forming of sheetmetal • Automatic sawing machines • Tube bending • Surface grinding • Cylindrical grinding • Slotting – manual and CNC • Beam lines • NC rotary tables

SERVICES:

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Key Personnel

Managing Director: Christo Hugo Operations Manager: Nico Hugo Admin & Finance Manager: Carina Cronjé

AGENCIES:

Bekamak • Hugong • Hurco • Intellicut • Intellifab • Sahinler • SMAC • SYIL • THMT, • TradeAir • TradeWeld

PRODUCTS:

Bending presses • Circle cutters • CNC machining centres • CNC turning centres • Compressors • Croppers & Ironworkers • Drilling machines • Flame cutters • Flanging machines • Folders • Grinders • Guillotines • Jenny machines • Lathes • Line boring machines • Lockformers • Milling machines • Notching machines • Pipe benders • Plasma machines • Plate rolling machines • Press brakes • Presses • Punching machines • Sanders • Saws • Section benders • Slotting attachments • Slotting machines • Welding machines

SERVICES:

Spares, service back-up, transport and rigging

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SHEETMETHL MACHINERY

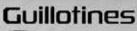
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Optional Plasma Sources HyPerformance Plasma

CNC Press Brakes









Croppers



Lockformers



Section Benders



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VICTOR MACHINE TOOLS



Victor House, 41 Loper Avenue, Aeroport, Spartan

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Key Personnel

Operations Director: Dudley Meredith
Sales Manager: Ian Simpson
Service Manager: Cobus Els
Sales Service Manager – Plastics: Gary Grainger

BRANCHES:

Kwa-Zulu Natal

Tel: 082-469-2648

Key Personnel

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Key Personnel

Manager: Abraham Heystek

Cape Town

5 Mauritius Close, Capri 7975 Tel: (021) 785-3202 Cell: 082-568-1333

Key Personnel

Trevor Cooke

AGENCIES:

Victor Taichung Machinery • Kuraki • Kao Ming • Palmary • Yu Shine

PRODUCTS:

CNC lathes • CNC machining centres (horizontal and vertical) • CNC boring mills • CNC gantry type vertical milling machines • CNC vertical lathes • CNC automatic robot and work feeders • Bar feeders • CNC grinders • Plastic injection moulders

SERVICES:

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Key Personnel

Chairman: Ray Cooper Managing Director: Graeme Cooper Technical Director: Johan Neveling Conventional Machines: Erik de Koker General Sales Manager: Mark Burn Metrology Manager: Dylan Eva

BRANCHES:

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Cnr Templehof South & Atlas Road, Banaero Park, Kempton Park

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Key Personnel

Director: Mick Griffiths

Durban

Unit 9 Marlmead, 4 Reed Place, Maxmead, Durban

Tel: (074) 055-9115

Key Personnel

Sales Manager: Myles Croswaithe

AGENCIES:

Leadwell • Kitumura • Nikon • LK Metrology • Mitsubishi EDM/WEDM • Chiah-Chuyn (CC Machinery) • Flow Waterjet • e-Tech • Fermat • Nakamura Tome • Skoda • FFG • Sanco • Fong Ho • Way Train • GSM • DMTG • Maximart • Golden Sun (GSA) • Renishaw • Starrett • Nikken • Mahr • Glorystar

PRODUCTS:

Vertical CNC machining centers (3 & 5 axis) • Horizontal machine centers • Vertical turning

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SERVICES:

Mechanical and electrical repairs to machine tools lazer calibration and ball bar service (CNC & CMM) • Renishaw programming • CNC training • Siemens training

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3610

Tel: (031) 700-6621

e-mail: jasmine@magnumtools.co.za web: www.magnummachinetools.co.za

Key Personnel

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Marketing Assistant: Jasmine Haskins

BRANCHES:

Ground Way Trade and Investment T/A Magnum Tools

36 Knights Road, Germiston 2047 Tel: (011) 437-8903

Key Personnel

Director: Giuliano Palumbo

Maurice Platt Machine Tools - Port Elizabeth

Cell: 082-464-3154

Key Personnel

Maurice Platt

Magnum – Cape Town

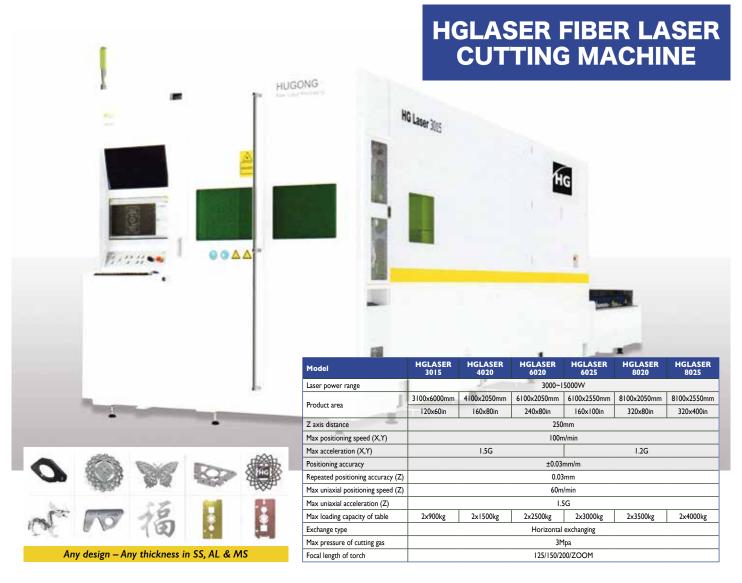
Cell: 082-595-5784

<u>Key Personnel</u>

Brad Walker

AGENCIES:

Quicktech • ZMat • Ajan • Ileri Teknik • Coil-Tech





HGLW SERIES HAND-HELD LASER WELDER

Model	HGLW-1000B\ 1500B\2000B\3000B
Operating mode	Welding, Cleaning, Cutting
Wave length	1070~1090nm
Max pulse frequency	20kHz
Torch type	HUGONG Wobble Welding torch (With wire filling function)
Swing type	Single axle swing (Linear)
Weld width adjustment range	0~5mm
Torch body weight	0.8kg
Torch cable length	5m
Power requirements	AC 3P 380V,50Hz
Dimensions(LxWxH)	800*510*1130mm
Weight	280kg
Maximum power consumption	5000W\8000W\I1000W
Fiber length	5m
Laser safety protection level	Class 4 (GB 7247.1.IEC 60825-1)
SS welding penetration range	I~3mm(1000W); I~4mm(1500W); I~6mm/2000W); I~8mm(3000W)
MS welding penetration range	I~3mm(1000W); I~4mm(1500W); I~6mm(2000W); I~8mm(3000W)
AL Welding penetration range	I~3mm(1000W); I~4mm(1500W); I~6mm(2000W); I~8mm(3000W)
Copper welding penetration	I~3mm(1000W); I~I.5mm(1500W); I~2mm(2000W); I~8mm(3000W)



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SERVICES:

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3 Brand Road, Pinetown 3610

Tel: (031) 700-1575 Fax: (031) 700-3001

e-mail: walker@walkertools.co.za web: www.walkertools.co.za

Key Personnel

Managing Director: Mike Walker Sales Manager: Vincent Koekemoer Chris Walker

AGENCIES:

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PRODUCTS:

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O.....O

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LASER TUBE CUTTING FOR BEGINNERS AND EXPERTS

New TRUMPF machine for getting started with laser tube processing or as an addition to existing machinery – Cost-effective even with low capacity utilization – Easy to operate thanks to numerous automated features

TRUMPF recently announced the launch of a new laser tube cutting machine, the TruLaser Tube 3000 fiber, a cost-effective choice even at low to medium capacity utilization. It is therefore equally suitable for companies that are entering this technology as it is for companies seeking to expand their production capacity. The machine enables the versatile processing of tubes and profiles and replaces conventional tube processing steps such as sawing, drilling and milling.



Starter kit to enter the world of tube processing

The TruLaser Tube 3000 fiber covers a broad range of applications including profiles, round tubes and flat steel bars. It also offers the option of L and U profiles. The two-kilowatt solid-state laser performs high-speed cutting of mild steel, stainless steel, aluminium and nonferrous metals such as copper and brass. An extensive set of cutting data is already stored on the machine. The TruLaser Tube 3000 fiber can cut tubes with diameters of up to 152 millimetres and profiles with an outer circumference of up to 170 millimetres. The self-centring clamping technology, which is designed to hold the tube in place and position it correctly during machining, adapts automatically to the tube dimensions without requiring manual setup by the operator. The TruLaser Tube 3000 fiber also configures other important settings automatically. The AdjustLine



The self-centring clamping system fixes and positions the tube, thus ensuring optimal finished part quality.

function modifies cutting parameters at the touch of a button to ensure reliable cutting of lower-quality materials. SeamLine Tube detects weld seams and markings on the inner and outer surfaces of the tubes, helping operators check that the tubes are correctly aligned in the machine and that the weld seam is in the desired position in the finished part. With its easy setup and high degree of automation, the TruLaser Tube 3000 fiber is a user-friendly machine that represents a cost-effective option for small batch sizes.

Reliable and precise parts handling

The TruLaser Tube 3000 fiber cuts tubes weighing up to 18.5 kilograms per meter with material thicknesses of up to 8 millimetres. It is available in two lengths that accommodate either 6.5 or 8 meters of material. Thanks to the optional LoadMaster Tube automated loading system, the machine is also a cost-effective choice for high-volume production runs.



Thanks to the LoadMaster Tube loading automation, the machine can profitably perform large-scale production as well.

An integrated materials store known as the "bundle space" provides a buffer store that can hold up to 4 metric tons of raw material, or up to 5 tons with the machine version designed for an 8-meter loading length. The LoadMaster Tube system separates and measures the tubes parallel to production and transfers them to the machine. To ensure top-quality parts, step rollers support the tubes and guide them to the machining

station. These rollers can be adjusted to the current tube diameter in one simple action. The machine also features guide rollers on the

unloading side which provide more support to long tubes during processing. The TruLaser Tube 3000 fiber ejects finished parts onto a rack. Set to the correct ergonomic height, this allows the operator to remove them comfortably while the machine continues working. Shorter parts can be ejected straight into a box. The TruLaser Tube 3000 fiber automatically separates cutting slugs and scrap metal from the finished parts and disposes of them in containers.



Step rollers support and guide the tubes to the processing station. They can be manually adapted to the respective tube diameter in no time.

Key components easy to access at any time

Thanks to the design of the machine's beam guard, the operator can easily access the loading and unloading sides of the machine at any time – for example to load individual tubes into the machine to process a smaller job between bigger ones. There is no need for a complete housing. A large, laser-safe viewing window makes it easy to keep an eye on the machining process.

Ready for the smart factory

Users can make changes to the machine's production schedule or keep an eye on the machine using an app, making it even easier for the operator to keep track of the entire machining process in the TruLaser Tube 3000 fiber. A secure, OPC UA-based data interface is included to connect the machine to an ERP or MES system or to a cloud application, for example. TRUMPF machine apps provide information on program runtimes and machine capacity utilization.

Solar in South Africa, expect an increase in local manufacturing



Loadshedding, copper cable theft, and transformer failures are common talking points around the weekend braai in South Africa. We have seen a massive spike in Solar installations nationwide for both households and industry alike. The increase in solar installations in South Africa has been driven by several factors, including falling solar PV costs, increasing electricity prices, lack of electricity supply, and the country's commitment to reducing its carbon emissions.

The South African government has set a target of installing 6,000 MW of solar PV by 2030, which is expected to attract significant investment across the solar industry. The country also has a favorable solar resource, with high levels of solar irradiance, which makes it an attractive location for solar projects. In addition, the South African government has introduced several policies and initiatives to support the growth of the solar industry, such as the Renewable Energy Independent Power Producer Procurement Program (REIPPPP). The REIPPPP is a competitive bidding program that aims to increase the share of renewable energy in South Africa's electricity mix.

Solar Farms in particular have a high requirement for Tubes, Profiles, and Structural Steel needed for the mounting frames / structures of the PV panels.

We should expect a huge increase in demand for this type of manufacturing process locally and manufacturers should be thinking about gearing up for this increased demand for Tubes. By using tubes in Solar PV panel structures, manufacturers can create high-quality, durable, and cost-effective mounting structures that are well-suited for this application.



World No. 1 - German machine tool manufacturer- TRUMPF, is renowned for its innovative and reliable Fiber TubeLaser technology. For the manufacturing of Solar PV panel mounting structures, Trumpf offers several benefits - Speed, Quality, and Efficiency provided by Trumpf - TruLaser Tube make it an ideal choice for customers, where precision, accuracy, and efficiency are essential. With local support and service available through Retecon (Pty) Ltd, customers can be confident that their tube production needs will be met with minimal downtime, ensuring manufacturing remains profitable and efficient.



Sole agents for TRUMPF in South Africa for over 40 years.

Contact: Graham Rome

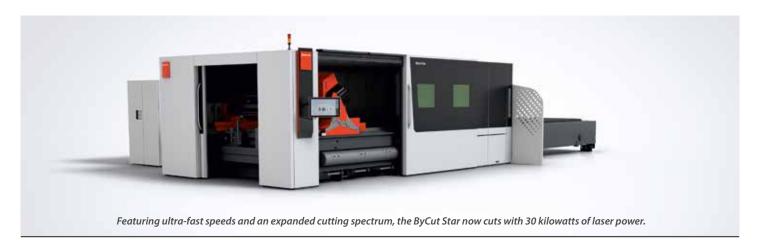
Tel: 011 976 8600 • machines@retecon.co.za • www.retecon.co.za

Cape Town: 021 555 2270/1 • Port Elizabeth: 041 453 2720 • Durban: 031 701 8149





EFFICIENT LASER CUTTING WITH INTELLIGENCE THE ALL NEW BYCUT STAR



Impressive high cutting speed, intelligent cutting process and a new design – this is how the new ByCut Star presents itself. With 30 kilowatts and an optimized cutting process, it now cuts steel, aluminium, stainless steel, brass and copper precisely and reliably for even more quality.

Higher cutting quality and productivity is provided thanks to more laser power and smart features. Bystronic has advanced into a new dimension of fiber laser cutting, the ByCut Star with impressive 30 kilowatts of laser power. The high-end fiber laser stands for high-precision Bystronic technology, a stable cutting process up to the highest laser powers and for a wide range of applications.

However, sheet metal workers not only need a lot of laser power, but also intelligence, reliability and sustainability; this combination makes the laser cutting process really satisfying and successful.

Thus, at Bystronic, customer success is built on a concept of three pillars, namely Power, Intelligence and Cutting Process Improvement, including MixGas technology.

Smart features, such as the "Intelligent Cutting Process (ICP)", the "Nozzle Control Tool (NCT) with KerfScan" or the "Parameter Wizard" optimize the entire cutting process, while ensuring that it stays on track. Users enjoy optimum capacity utilization and remarkable production uptime.

30 kilowatt of laser power

The technological leap from the previously available 3- to 20-kilowatt levels to the new 30-kilowatt level is considerable and opens new possibilities for Bystronic customers to optimize production and thus remain at the forefront of the ever more fiercely contested competition.



The "Advanced Applications" option enables expanded applications in steel and aluminium of up to 50 millimetres (15 kilowatts laser power and above).

Cutting speeds on the ByCut Star increase twice as fast compared to 15 kW and MixGas with sheet thicknesses between 6 mm and 15 mm, and more than twice as fast with thicknesses starting at 20 mm. Piercing times are shorter for sheet thicknesses of 15 mm and above. Sheet metal processors thus benefit from higher productivity at low unit

costs, because with 30 kilowatts, the new ByCut Star cuts steel, aluminium and stainless steel precisely and reliably. The 30-kilowatt laser power enables maximum flexibility for large series and spontaneous customer orders. Whether aluminium or steel, the powerful Bystronic cutting head impresses with maximum precision in thin and thick sheets. In addition, with the "Advanced Applications" option, high laser power (starting from 15 kilowatts) now also enables expanded applications in steel and aluminium of up to 50 millimetres. The new power level is exclusively available on the ByCut Star 4020.

Smart features make the difference

NCT & KerfScan is a smart feature package for oxygen cutting which increases process reliability, even in low-manned operations. This feature offers process monitoring, problem solving and continuation of the cutting process in a fully automatic way.

The "Parameter Wizard" ensures that the correct quality of the cut parts is always selected within minutes. This feature determines the perfect parameters with N₂ and MixGas for steel from 4 to 15 mm in thickness.

Intelligent Cutting Process ICP is a new feature, where a coaxial camera is filming through the nozzle and looking directly into the cutting process. This feature currently offers the following functionalities:

- Cut Quality Detection The system automatically detects cut interruptions during the cutting process and re-cuts the area where it occurred.
- Cut Quality Protection Al-controlled cutting process maintains reliable quality throughout low manned production.
- Nozzle Loss Detection Down time and material waste caused by nozzle loss are significantly reduced.

While Bystronic customers benefit from outstanding cutting results with clever features, the new powerful Bystronic flagship is also controlled from a 21.5-inch touchscreen. Handling is as simple as operating a smartphone.

The new ByCut Star's modern, sharp contours provide a striking appearance and match the performance of the machine.

Significantly increased user-friendliness and outstanding flexibility are major advantages provided by the new ByCut Star. Thus, there is front and/or side access as well as several windows with a view directly to the cutting process. In general, the new design offers better accessibility to the interior, and the machine is easier to place on the store floor thanks to more flexible layout.

Cont. on page 26 🖾



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ByCut Smart

Efficient laser cutting with intelligence: the all new ByCut Star

An impressively high cutting speed, an intelligent cutting process, and a new design: this is how the new ByCut Star presents itself. With 30 kilowatts and an optimized cutting process, it now cuts steel, aluminum, stainless steel, brass, and copper precisely and reliably – for even more quality.



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VALSTER - NEW AMADA LASER CUTTING MACHINE

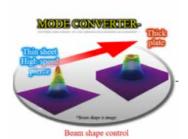
By Barry Page, Amada

The new Amada Valster laser cutting machine was recently introduced after the great success of its predecessor, the LCG. With the remarkable reliability of the LCG as a basis, the Valster was developed with ease of use, reliability, repeatability, stability and robustness in mind.

What sets the 2 models apart is that the Valster is now supplied standard with the unique feature of the "Mode Converter" or "Beam Shape Control" – amongst other features. The beam control technology is a feature which allows the machine to automatically adjust the laser beam mode shape – at high speed – according to the material being processed.



Thick materials require a sharper mode to pierce then a flat mode to cut efficiently. Thin materials need a sharp mode to be pierced and cut efficiently. This automatic mode adjustment feature allows for the



optimum processing speeds of all material types and thicknesses, thanks to its automatic adaptation capabilities.

Much like all the other Amada lasers, the Valster boasts an on-board oscillator, AMNC 3i-touch screen control and a full safety enclosure which offers 100% protection against harmful radiation emitted

by the laser during operation. A monitoring camera is mounted inside the laser enclosure which shows a real time display of the cutting process on an LCD monitor mounted outside the machine.

The Amada Valster offers many additional features, all designed to make operation a streamlined process. These features include an i-Optics sensor which monitors the condition of the protection glass and i-Process monitoring which monitors the piercing and cutting process through a luminance sensor. Add to this WACS II, which is a water assisted cutting method spraying an oil/water mist around the cut in order to stabilise the cutting process on thick materials and an automatic nozzle changer which holds up to 8 nozzles allowing for automatic changeover between different material types and thicknesses. Another feature, Oil shot, eliminates the adhesion of spatter when piercing, while the HP-EZ Cut system allows for the filtration of

compressed air to collect nitrogen that is used as an assist gas when cutting. This drastically reduces the cost of assist gas. The skeleton cut function is used for the trimming of sheets without the need to input co-ordinates.

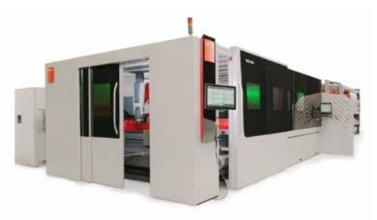
The Valster-AJ Laser is available with 3kW, 6kW or 10kW power sources, all fully capable of offering optimal cutting speeds through their respective processing ranges.

The interactive AMNC 3i Plus control ensures ease of operation for the operator by offering improved machine controllability. Programs can be simulated during the cutting process, and should there be an interruption due to power failures, the resume function ensures a speedy, hassle free resumption of production.

The Valster range of lasers is supplied standard with a shuttle table system which incorporates the standard feature of free roller bearings allowing the operator to position any thickness material on the table with ease and without the need for tools. The machines can be retrofitted for automation as required either at installation or later on. The options of automation include the MPL (Sheet manipulator), The ASFH (Sheet storage and manipulation tower) or the MARS (Multiple storage rack and sheet manipulation system).

As has been proven over many years, all machinery is fully supplied and supported by Amada's in-house service team, who are periodically trained in Japan and subsequently fully capable in the maintenance requirements of the Amada range.

For more information, please contact Amada – Tel: 011 453-5459.



Additional accessibility with the all new, sharp designed ByCut Star thanks to several gates.

Fiber laser cutting with mixed gas ensures better cutting quality and higher productivity

In laser cutting, cutting gas (especially N_2 and MixGas) is used to keep both the laser and the sheet free of impurities and remove molten material. Nitrogen is used for so-called fusion cutting and oxygen for flame cutting. Gas mixing combines the benefits of O_2 and N_2 and thus is an alternative to pure nitrogen or oxygen cutting. Cutting with MixGas (a specific blend of Nitrogen/Oxygen) ensures perfect quality on steel at increased cutting speed. This helps even an inadequate steel to achieve a good result after the cutting process.

For in-house gas production with a $\rm N_2$ generator, Bystronic has a solution ready that is attractive from a cost perspective and environmentally friendly. The advantages are obvious: There is no need for transports by trucks when gas is delivered. One produces only as much nitrogen as is needed, and all the previous additional costs are eliminated – from filling the cylinders to replacing them. The sheet metal processor works completely autonomously and – independent from any gas supplier – is doing something for the environment in the process.

For more information on the please see www.bystronic.co.za or contact Bystronic on 010 410 0200.



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DURMA HDF/HDFL 3015

An integrated shuttle table maximizes productivity and minimizes material handling times. The shuttle table and pallet change system allows convenient loading of new sheets or unloading of finished parts, while the machine is cutting another sheet inside the working area. The available shuttle table is fully electric and maintenance free; there are no hydraulic oils to handle and table changes are fast, smooth and energy-efficient.

An optional lateral automatic scrap conveyor allows the removal of scrap pieces from the working area without the need to interrupt the cutting process. The sideways operation of the short conveyors allow for easy maintenance and trouble-free running.

The Durma HDF/HDFL 3015 fiber machine achieves highest dynamics and fastest laser processing cycle times thanks to the combination of rigid mechanics and a state-of-the-art numerical control and drive system. Programmes can be loaded easily into the machine with a USB stick or over a fast Ethernet connection with the company network.

In the high-pressure auto-focus cutting head for the fiber laser the cutting lens is shielded from the laser process by an exchangeable low-cost protection window. The 1µm wavelength light is very sensitive to dust

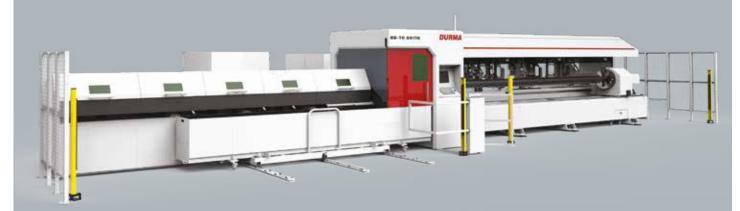
or other contamination produced in the cutting or piercing process, therefore the cutting head is being well protected in an additional cover to ensure that all critical parts remain as clean as possible. The integrated capacitive distance sensor is capable of having the head follow height differences in the sheet even at the extreme high cutting speeds that can be achieved with the fiber laser technology, while state-of-the-art linear motors promote accuracy and increase productivity.

The CAD/CAM software provided has all the tools to import or draw parts, prepare and optimize automatically different geometries for the laser cutting process and make efficient nests.

The all-solid-state fiber laser technology reduces maintenance requirements, and offers the lowest possible running cost with a wall-plug efficiency of 30% and without the need of any laser gas. When the application requires a broader spectrum of material types to be cut and the maximum thickness range is limited, the fiber laser is the ideal solution and it will cut faster at lower cost than any CO² laser at the same laser power.



HD-TC PROFILE-PIPE CUTTING LASER



DURMA shortened process time by improving centering with the newly added laser sensor centering option added to the HDTC machines. It is possible to control the size and irregular structure of the profile during cutting or before cutting with the help of sensors to ensure that the internal contours to be cut are at the right point.

In existing HD-TC machines, the centering measurement is achieved by scanning the profile surface through capacitive sensors. The advantage

of the laser sensor system is that it gives more precise results in a shorter time. The user can take measurements at the distance determined by the user, and precise results are obtained in a shorter period of time as the process of measuring by the sensor is shortened for parts requiring precise measurement with internal contours.

The advantage being fast set-up time, less problems during cutting, best solution in a short time and measurement frequency is dependant on operator request.

For more information, please contact Spectrum Machine Tools – Tel: 011 865-4090.





The Winning Force

AD-S SERIES PRESS BRAKES



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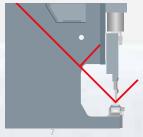
Crowning System



Linear Guide Front Sheet Supports



Ce Laser Safety System



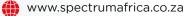
90 Degree Endless Bend

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sales@spectrumafrica.co.za









SAFAN M-SHEAR

The Safan M-Shear's extremely functional design satisfies current and future requirements with possible expansion plans, such as material-handling systems, already provided for. At its core is the advanced hybrid drive for the cutting beam consisting of a servo-electronic motor and hydraulic pump, a combination producing a remarkably quiet and energy-saving system.

While the robust hydraulic systems are controlled by modern electronics increasing both productivity and quality of products, the servo-electronic motor powering the hybrid drive only runs when the cutting beam is in motion thus saving energy and reducing noise levels while cutting.

Maximum ease of operation is provided by the Safan Touch Screen control TS 200 while the settings are indicated by clear symbols on the TFT colour monitor. The control operates with Microsoft Windows®.

With blades having four cutting edges, on both top and bottom, shearing is done very economically as blade wear is spread over the blade's entire length, thanks to the programmable starting position of the cutting beam. Another feature includes independent left and right clearance adjustment and built-in measuring sensor with an accuracy of ± 0.01 mm.

Due to the special frame construction, clearance is self-compensating so that, even with a load in the middle of the shear, the clearance remains constant over the entire length. When the clearance is changed, the back gauge setting is automatically corrected. Size of cut can be directly entered, after which the position of the back gauge is adjusted. The back gauge adjustment occurs by means of play-free guides and ball screws. Setting precision is 0.01mm and repetitions are accurate to within ±0.03mm.

The shear has extensive guards on the back and sides. These consist of mechanical side covers on the right and left sides plus a photo-electrical guard on the back. The machine's foot-operated console is fitted with an emergency stop. Robust finger guards have been installed. For up to and including 6mm cuts, openings have been made in these guards, allowing the operator to safely get closer to the blade.

As an option, the M-Shear can be supplied with pneumatic sheet support equipment making cutting easier, especially when dealing with larger-size blank sizes. The sheet to be cut is supported at the back of the shear, ensuring it can be accurately positioned against the back gauge, which can be equipped with sheet support arms, if requested.

In combination with the pneumatic sheet support system, a scrap separation feature is available.



SAFANDARLEY E-BRAKE ERGONOMIC

With the Ergonomic design of the E-Brake, Safan Darley enables the operator and the press brake to work as a unit. The operator is partially seated inside the machine, surrounded by an edging table with his legs in a spacious cut-away below the lower beam, where the foot pedal is located.



Ergonomic ease of operation is assured as the seating position as well as the height and angle of the footrest can be adjusted.

The SafanDarley E-Brake Ergonomic can easily be adapted to changing work situations, such as a different product or a different operator. The edging table can be adjusted enabling users to achieve perfect pick-up height, working height and cast-off height every time. In addition, the edging table can be fully or partially collapsed, enabling the operator to bend whilst standing up. Finally, the entire edging table can easily be removed from the machine to make the front freely accessible.

While the height of the rotating 17" Touch Screen is adjustable, the unit can be placed to both the left and right of the operator, meaning that left-handed operators can use the machine with the same level of ease as right-handed operators.

The double-function safety light screen, integrated into the control panel secures the bending zone and allows the axis to move, while the operator turns, picks up or removes the product. These simultaneous actions of operator and machine lead to very fast cycle times.

While the innovative back gauge can be used across the full working length, it has a maximum depth of 1000mm and a height adjustment of 150mm. Combined with the possibility of setting the upper beam at a 5° angle, this means unparalleled flexibility. The back gauge comes with an X axis and an R axis as standard features, but can be expanded, depending on the model, with 5 optional axes.

For more information, please contact CML Machine Tools – Tel: 083 232 9470.

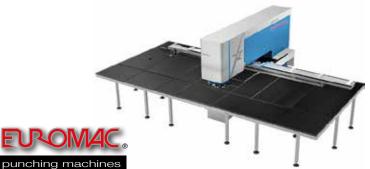
SENFENG FIBER LASER METAL CUTTING MACHINES FROM CML



BEVEL TUBE LASER SF020GT

• Laser power: 3kw/4kw/6kw/8kw

• Round tube: Φ15-220mm





SPACE SAVER FIBER LASER CUTTER 3015H

- Save cost
- Save installation time
- Smaller footprint
- Laser power: 1.5kw to 6kw



FIBER LASER CUTTING MACHINE FOR METAL SHEET SF3015G

- Open type; single-table; economical; different sizes available
- Laser power: 1.5kw/2kw/3kw/4kw

Euromac meets your ambitions





ULTRA LARGE METAL LASER CUTTER SF2004OR SERIES

- Large size iron sheet laser cutting machine
- 20 000mm * 4 000mm



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HANDHELD FIBER LASER WELDER

- Laser power: 1kw/1.5kw/2kw
- Welding speed: ≤120mm/s
- Welding gap: ≤1/5 of the sheet thickness
- Welding range: 0.5–4mm carbon;
 0.5–4mm stainless steel;
 0.5–3mm aluminum





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EFC II LASER CUTTING MACHINE

A high-performance mid-price laser machine equipped with TruFiber Cut Laser up to 6 kW. Smart design and material flow ensure maximum productivity at minimal investment costs.

The EFC II laser cutting machine from leading Chinese manufacturer JFY, a member of the Trumpf Group, is locally available from Puma Machine Tools.

The machine's CNC control system is based on the Windows platform and has been proven to be extremely reliable and high-performing.

The cutting head is designed with built-in protective glasses, ensuring reliable and optimized cutting quality. These protective glasses safeguard the optics from potential debris or damage that may come from the









process zone. Overall, this results in a significantly higher durability of the cutting head, as well as higher cutting precision.

TruFiber is the ultimate fiber laser solution for all cutting needs. In fact, TruFiber delivers excellent process stability and consistent process results. Furthermore, the technology requires a minimum of maintenance.

Using offline programming software can improve material utilization and process efficiency. On the one hand, programming software can optimize the nesting process to reduce material waste, and on the other hand, it can simplify the programming process by converting simple and complex part drawings into processing programs, which results in faster production times. The Lantek programming software is a proven solution based on latest technology.



TPR8 CNC PRESS BRAKE

Cost-effective bending machine from JFY sold to more than 5.000 customers – Proven technology with high stability and reliability.

The machine body is optimized by finite element design to ensure high strength and high rigidity during operation. Compared with traditional CNC bending machines, the frequency of the Y-axis movement is 25% higher.





A broad range of options and bending tools allow the processing of large and complex workpieces, while the high-performance CNC control TJS-90 as standard configuration ensures maximum workflow efficiency and operating convenience.

The automatic mechanical crowning compensation system as standard configuration solves the influence of ram deformation on the workpiece during bending and Push-Pull Quick clamping as a standard configuration avoids part interference when bending at a small angle.

For further information, please contact Puma Machine Tools – Tel: (011) 976 8600.







For More Information Contact Gábor or Mike info@pumamachines.co.za www.pumamachinetools.co.za

Johannesburg: 011 976 8600 Cape Town: 021 555 2270 Durban: 031 701 8149 Port Elizabeth: 041 453 2720



FASTER THAN THE FASTEST — CNC MULTITASKING LATHE WY-100V

Nakamura-Tome Precision Industry Co introduced a new twoturret two-spindle precision CNC multitasking lathe the WY-100V. The new machine features many new technologies which reduce cycle time drastically.

Shogo Nakamura, CEO at Nakamura-Tome Precision Industry says: "Seven years after the predecessor WY-100II was released, the WY-100V was developed to present a higher value-added multitasking machine. The most significant feature is its high-speed capability. To minimize idle time, we have developed a new technology called "ChronoCut" and achieved significantly higher spindle speeds and milling speeds, while improving

Nodom Po-Tone

WY-100V

CNC Multitasking Lathe WY-100V.

torque on the hardware side. As a result, we have successfully reduced cycle time by 30% in an actual machining case."

New hardware and software solutions have been developed to improve accuracy, while promoting faster mass production. Moreover, in terms of control, various techniques have been incorporated to



Sample Workpiece of a Hydraulic Valve Component

reduce idle time. It is a completely new multitasking machine that is faster, while enormously enhancing productivity.

In a multi-turret machine, speed is of utmost importance. By reducing cycle time with a fast machine, customers can make a large number of workpieces within the same amount of time and effort. This subsequently is saving manufacturing costs in challenging cost-cutting situations, while alleviating concerns about tight delivery deadlines.

"The WY-100V is a machine that embodies the concept of "Faster than the fastest." It aims to reduce the burden on the shop floor. Even a few seconds of cycle time reduction can bring great satisfaction. Still, we have set a high goal of aiming for a 30% reduction with the sample workpiece demonstrated above and developed the machine from scratch with the dedication of our team. It is a machine that incorporates all our hardware, software, and machining expertise. We invite you to experience our new flagship two-turret machine," concludes Shogo Nakamura.

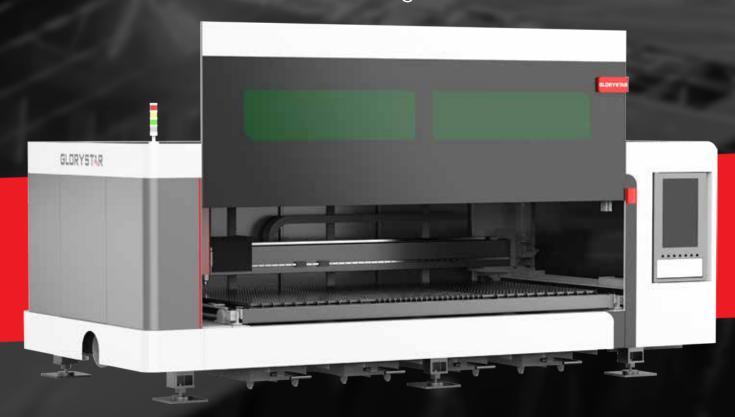
For more information, please contact WD Hearn – Tel: 021 534 5351.



GLORYSTAR GS 3015 C

FIBRE LASER MACHINE

Enclosed | Single Table



Powerful Raycus Laser Source Excellent beam quality

Glorystar Laser Cutting Head
Automatic focusing for high efficiency

Stable & reliable Machine Bed Double Layer, Hollow







3 ARRIVING FOR STOCK

Max Load Capacity 1000kg | Working Area 3000x1500mm | X/Y/Z Axis Travels 3050/1550/95mm Laser Power 1.5-6kw/380V | Material width 3000×1500mm | X/Y Axis Positioning Accuracy 0.03mm/m



TIMESAVERS 22 RB SERIES ROTARY BRUSH MACHINE

At the end of last year, WWD Metaal from Nederweert took a new tube laser into use. It is now the first company in the Netherlands to purchase a Timesavers 22 RB series rotary brush machine. Owner Waelbers let his company grow, even during the corona crisis. "We look further ahead. No longer busy with tomorrow, but with next week."

Wil Waelbers walks through the large hall of his factory in Nederweert. A few people are working on making frames. His company is relatively young, just 21 years old. Waelbers founded his company in 1999 in an old barn in a farmer's yard. In the past two decades, WWD Metaal has grown to its current size – thirty employees, 3,150 m² of surface area and a production capacity of more than 50,000 hours per year.



The 22 RB series is the most compact model in the Timesaver rotary brush machine range for deburring, edge rounding, finishing and laser oxide removal of various sheet metal parts.

WWD Metaal mainly processes stainless steel and aluminium in the broadest sense of the word, performing machining, glass bead blasting, water jet cutting (2D and 3D), tube and plate welding, robotic welding, (certified) welding and lately even manual laser welding. The company supplies the food industry, machine construction, medical sector and various mechanical applications in a wide range of industries. In addition, it produces customised design articles. The 'design' is also the explanation of the third letter in the company name: WWD stands for Wil Waelbers Design.

Products without burr

in the manufacture of frames that serve as the basis for customers' machines. Especially in the food and medical sectors, it is crucial to work with stainless steel and to be able to deliver burr-free.

"We have to think along with our customers. That means that we have to find solutions together with the customers, while not losing sight of the economic aspect," he says. Because price always plays a role and WWD can offer good quality at a price that is in line with the market, precisely because it pays a lot of attention to its own processes.

"When you start an assignment, you get to look at the way your customer has set up his business. We take a look at the way they are set up, and together we find out how we can make things run even more efficiently. Which order is best? Where are the possible obstacles? Helping a customer starts with looking and listening."

Planning

This attention to our own processes is also a must to be able to compete in this day and age. WWD therefore invests, even when the economy is tough in the Netherlands. During the previous crisis in 2014, Waelbers had a new building built that was three times the size of the previous one. He invested in the machinery by purchasing, among other things, a blast cabinet and a water jet. WWD Metaal therefore had the space, the machines and the knowledge to be able to offer a total concept when the economy picked up. Thus, the investments had helped.

A second improvement to his own process is through better planning. "It is difficult to get skilled workers, because everyone is looking for them.

So we looked for a new approach. Instead of trying to speed up the process, we started to make it smarter.

Process optimisation with a deburring machine

In the past, a product that was processed in one department would sit for too long before being processed again in another department. Because the flow of work in the departments has improved, employees ask for work sooner. They can therefore move on to the next product sooner, which means that more work can be generated. Waiting times are shortened and rush orders or firefighting are now a thing of the past. In the past, orders would pile up in every department and rush jobs would result in a lot of overtime.

Chosen Timesavers compact deburring machine 22 RB series

Even now WWD Metaal is investing. At the end of last year, the company bought a tube laser from Bystronic. This was intended to speed up the production process of the frames. Now Waelbers has purchased the Timesavers 22 RB series. It is a new step in a better process at WWD Metaal, says Waelbers. The 22 RB series is a compact dry machine for deburring, edge rounding, finishing and removing laser oxide from sheet metal. The machine offers a solution for companies that do not have large capacity needs, but still want to have the commonly used features of the 32 RB and 42 RB series. Customers with limited production demand and budget can still use it to optimally deburr, round and finish parts. The 22 RB series can cost-effectively automate heavy-duty tasks such as grinding and manual edge routing, helping to optimise processes. Thanks to the Siemens PLC and HMI, the process and parameters can be adjusted automatically. In addition, the 22 RB series supports the use of cobots and can be integrated into a Smart Industry software platform.

WWD Metaal deliberately chose a small machine. "Our customers are mostly small and medium-sized enterprises in the central Netherlands. They come with smaller products and smaller series. A machine that is too large would not fit. For that matter, the size also plays a role. If you set up a line like us, it is also important that you can manage it spatially. Now the Timesavers is in line with the laser cutter.

Nesting

"This new development by Timesavers provides a more compact machine, but with the performance of a 'big boy'. We see that the quality is high. It has to be, because we have to make finishes that are perfect. The user in the food industry cannot damage his hands. That is a hard requirement. With this concept of Timesavers with the rotating brushes, the product is perfectly finished."



22-RB-Series Brushes.

Again, Waelbers cites the bigger picture. "In the overall

picture, it is very important that our people do not have to work with a grinder or file." For a good flow, pieces must be completely deburred. The work process at WWD is structured in such a way that the laser is controlled by the work planner. The software takes care of the nesting. The operator then places the plates on the laser. After picking, the journey continues through the Timesavers deburring machine. Each product passes 'through the Timesaver' to be deburred.

For more information, please contact First Cut – Tel: 011 614-01112.

MACHINE TOOLS

GOLDEN LASER TUBE LASERS P2060B

- ✓ From 200mm diameter x 6000mm
- ✓ Up to 350mm diameter x 8000mm





BAYKALS FULL ELECTRIC / SERVO CNC PRESSBRAKE

Benefits of this machine:

- ✓ High speed
- ✓ High accuracy
- ✓ No oil or cylinders
- ✓ Low maintenance
- Extremely quiet



- √ 1500mm x 3000mm x 3KW
- ✓ Max size 6000 x 2500mm x 20KW





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ACHIEVING TITANIC PERFORMANCE

Milling with large tool overhangs is practiced in diverse manufacturing processes and is influenced by tool configuration or work holding fixtures. Milling deep cavities characterized by shoulders, steep walls, wide edges and undercuts are typical applications that require tools with large overhangs. An increased tool overhang reduces tool rigidity which affects machining stability. The outcome is pronounced by vibrations, poor surface finish and decreased tool life.

The integral-body design of a long-reach tool provides maximum rigidity solutions. This design concept has found limited applications due to significant production costs and a high risk of functional loss. For example, insert breakage can cause damage to the tool body, which may cause great loss when using expensive tools.

Tool design assemblies are common and used to avoid possible tool breakage. A long-reach tool comprises a regular-sized milling cutter and a toolholder that mounts the cutter. If need be, the toolholder itself is a modular assembly and includes standard elements, such as a base unit for machine spindles, extensions, reducers and more. The assembly tool principle has important advantages such as versatility, optimized tool configuration and effective customization. If the cutter is damaged, it can be replaced easily, while other assembly elements remain in their working state.

The assembly leads to a loss of tool rigidity, which may influence the tool's dynamic performance compared to an integral body. The assembly principle enables using tool holders with vibration-dampening capabilities that significantly improve the assembly's dynamic response. In this case, the cutting conditions should often be reduced to eliminate vibration and noise that causes decreased productivity.

The performance of indexable milling is improved by factors such as chip-splitting cutting edges, unequal angular pitches and a different cuttingedge inclination. These attributes relate to cutting geometry and are associated with the tool itself.

Reducing the weight of the cutter body contributes to better dynamic stability. However, weight reduction should not impair the strength characteristics of the tool. Steel is the traditional material from which tools are made. Titanium can be used to replace steel and possesses lower density, yet is characterized by high strength. Titanium also features excellent corrosion resistance with anti-wear properties being an important factor for the prolonged tool life of the cutter body. Compared to steel, titanium is characterized by poor machinability, which inevitably leads to increased manufacturing costs. A tool body design with cavities will



reduce the mass of the cutter yet will increase its manufacturing costs.

Modern production technologies enable solutions to overcome these obstacles. Additive manufacturing (AM) provides an effective method to achieve the complex configuration of a cutter body, while minimizing machining operations. 3D printing facilitates the production of titanium made tools while assuring sustainability. Leading cutting tool manufacturers have adopted AM processes to produce milling cutters intended for machining with large overhangs. It is becoming more common to design lightweight indexable mills with titanium bodies using additive manufacturing. One of the new shell mill designs was recently introduced by ISCAR. The mills expand the product range of HELI2000 90° milling cutters where indexable inserts with helical cutting edges are mounted. The implementation of lightweight titanium body cutters with helicaledged inserts is symbolic of ISCAR, renowned for its original and innovative milling solutions.

The shell mill body is shaped by the use of selective laser melting (SLM) techniques, being one of the 3D printing techniques. As a result,

tool body elements such as chip gullets and weight-reduction cavities feature sophisticated forms, uncommon for machining metals. Additive manufacturing technologies enable maximum use of computational fluid dynamics for optimizing the profile of inner channels to ensure efficient pinpointed coolant through the cutter body. Traditional machining processes have limitations in shaping the channels, while AM capabilities provide endless options. The mill design concept also utilizes the unequal angular pitch principle to improve the vibration resistance of the cutter.

The new design based on the combination of untypical body material with AM advantages has brought robust lightweight indexable shell mills intended for long-reach machining applications. The new tool provides stable cutting with high overhangs, which ensures increased productivity and tool life. At the initial stage, ISCAR introduces titanium-body shell mills in diameters of 50 and 63 mm (metric product line), or 2.00 inches. To improve results and to achieve an excellent surface finish, it is recommended to mount the milling cutter on tool holders with an anti-vibration mechanism, such ISCAR's WHISPER LINE adaptors.





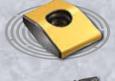
For more information, please contact ISCAR South Africa (PTY) LTD - Tel: 011 997-2700.



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New Y Axis Tool Holder for Multi-Tasking Machines, Replaces Several Kinds of Turning Tools.











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Lead Angle Can be Changed Which Enables Insert Versatility Options



EXPANSION OF THE MINCUT FAMILY FOR DEEPER AND WIDER FACE GROOVING AND TURNING

ISCAR introduces new MIFR 15 inserts and tools for face grooving and turning for up to 15 mm grooving depths.



The new MIFR 15 inserts are screw clamped into a long pocket on the MIFHR15 bars with a very rigid clamping, enabling high machining parameters and resulting in prolonged tool life.

The tool features an internal coolant channel directed to the cutting edge and uninterrupted

chip flow on the insert rake and can be used for grooving in deep holes and for rotating applications.

The new MIFR 15 inserts are available in 2.5, 3.0 and 3.5 mm widths. Full radius 2.5 and 3.0 mm inserts made from IC908 grade are also available and special widths within this range can be ordered on request.

For more information, please contact ISCAR South Africa (PTY) LTD – Tel: 011 997-2700.

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ı		
	CNC MACHINES	
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ı	LODI NC SURFACE GRINDER, MODEL: T11060CN, MAGNET SIZE: 1000MM X 600MM	P.O.A.
ı	SHOPSABRE CNC ROUTER WITH TOOL CHANGER, 3500MM X 2300MM WORKING AREA	P.O.A.
ı	CNC PLASMA BED MACHINE, 3000MM X 1500MM	P.O.A.
ı	COMPRESSORS	
ı	INDUSTRIAL PISTON TYPE COMPRESSOR, 3 HEAD, 22KW	P.O.A.
ı	PISTON TYPE COMPRESSOR. TANK: 500LT. MOTOR: 11KW	P.O.A.
ı	ATLAS PISTON COMPRESSOR, MOTOR: 5.5KW, TANK: 400LT	P.O.A.
ı	ABC COMPRESSOR, MODEL: 4HA-6-TRIS-LT, BAR:42	
ı	ABC COMPRESSOR, MODEL: 4HA-6-LT, BAR:42	P.O.A.
ı	TEVA COOLING TOWER, MODEL: RMA-130 D ABC	
ı	SULZER COOLING TOWER, TYPE: EWK144/09/30/6	P.O.A.
ı	DRILLING MACHINES	
ı	MEDDINGS BENCH DRILL, 13MM	R2 500.00
ı	MAS RADIAL ARM DRILL, 800MM X 32MM	
ı	MITCO HEAVY DUTY BELT DRIVEN DRILLS, 16MM	P.O.A.
ı	TOPTECH GEAR HEAD PEDESTAL DRILL, MODEL: 36HF, 32MM	P.O.A.
ı	GRINDING MACHINES	
ı	BRIERLEY DRILL SHARPENER, CAPACITY IUP TO 25MM	
ı	USED OKUMA CYLINDRICAL GRINDER, MODEL: GU 33 900	
ı	LODI SURFACE GRINDER, TABLE SIZE: 1000MM X 600MM	
ı	MICROSTATIC RATATING GRINDER, TABLE SIZE: 800MM	P.O.A.
ı	SPRINGFIELD VERTICAL INTERNAL GRINDER, TABLE SIZE: 630MM	
ı	PEAR AUP LIP FINDER, MODEL SE1-8728	P.O.A.
ı	TOS IN/EX GRINDER, MODEL BU28, 700MM X 280MM SWING	P.O.A.
ı	GUILLOTINES	DO 4
ı	HYDRAULIC GUILLOTINE, 4MM X 2500MM	
ı	LVD HYDRAULIC GUILLOTINE, 16MM X 3100MM	
ı	MVD CNC HYDRAULIC GUILLOTINE, 6MM X 4000MM	P.O.A.
ı	EDWARDS HYDRAULIC GUILLOTINE, 4MM X 2500MM	P.O.A.
ı	IRON WORKERS GEKA 55 TON HYDRAULIC IRON WORKER, PUNCH, SHEAR, NOTCHING	DO A
ı	EDWARDS HYDRAULIC PUNCH	P.O.A.
ı	FICEP HYDRAULIC IRON WORKER, MODEL: 604N	P.O.A.
ı	LATHES	r.O.A.
١	USED CENTRE LATHE. MODEL: ML2160G. 1500MM X 500MMX 55MM SPINDLE	DO 4
١	CENTRE LATHE, MODEL: ML2160G, 1500MM X 500MMA 55MM SPINDLE	PO A
ı	CENTRE LATHE, 2000MM X 600MM SWING, 103MM SPINDLE BORE, 2 AXIS DRO	PO A
ı	BENCH LATHE, 2000MM BC X 220MM SWING X 20MM SPINDLE	
١	BENCH LATTIE, 350MM DC A 220MM 5WING A 20MM 5F INDEE	r.O.A.

MILLING MACHINES	
BEMATO MILLING MACHINE,1400MM X 370MM, 3 AXIS DRO	P.O.A.
MITCO TURRET MILLING MACHINE, ISO40 SPINDLE, X-FEED	
STANDARD TURRET MILLING MACHINE, ISO40 SPINDLE, 5HP	P.O.A.
PLATE ROLLERS	
HYDRAULIC PLATE ROLLER, 1000MM X 2MM	P.O.A.
PIPE THREADING MACHINES	
MAC-AFRIC, 4" THREADING MACHINE	P.O.A.
PRESSES – ECCENTRIC/FLY MACHINES	
VARIOUS SMALL ECCENTRIC PRESSES FROM 3 TON TO 10 TON	P.O.A.
MULLER ECCENTRIC PRESS, 60 TON	P.O.A.
USED EXACTILITY HYDRAULIC PRESSBRAKE, 100 TON X 3000MM	P.O.A.
ECCENTRIC PRESS, 63 TON	P.O.A.
A.E ECCENTRIC PRESS, 5 TON	
BLISS ECCENTRIC PRESS, 10 TON	P.O.A.
ELLIOT ECCENTRIC PRESS, 8 TON	
BENCHMASTER ECCENTRÍC PRESS, 7.5 TON	P.O.A.
MASKINER ECCENTRIC PRESS, 10 TON	P.O.A.
SAW MACHINES	
SAMUR VERTICAL BAND SAW WITH BUTT WELDER	P.O.A.
SAMUR VERTICAL BAND SAW, MODEL: S-400V	P.O.A.
MOSSNER VERTICAL BAND SAW, MODEL: SM-300	
MECHTEC HORIZONTAL HYDRAÚLIC BAND SAW, FULLY AUTOMATIC, MODEL: DBS280NC	P.O.A.
RONG FU METAL BAND SAW, MODEL: RF-712DR	P.O.A.
SHEET METAL MACHINES	
AMADA CORNER SHEAR, MODEL: CSB220	P.O.A.
MVD CNC HYDRAULIC GUILLOTINE, 4000MM X 4MM	P.O.A.
USED HACO NC HYDRAULIC PRESS BRAKE, MODEL: ERMS 30-135	P.O.A.
EDWARDS MECHANICAL GUILLOTINE, 6MM X 2500MM	P.O.A.
SMAC HYDRAULIC GUILLOTINE, 6MM X 3200MM	P.O.A.
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SCHEPPACH SPINDLE WITH FEEDER, MODEL: HF3000	P.O.A.
BIESSE SINGLE SIDE EDGE BANDER, MODEL: AKRON 1110J	P.O.A.
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MAPAL'S ALL NEW CUTTING EDGE DESIGN OFFERING MAXIMUM STABILITY – THE OPTIMILLCOMPOSITE-SPEED-PLUS

Improved workpiece clamping for large carbon-fibre parts enables the aerospace industry to machine more quickly. MAPAL supports this development with new tools. With its diamond coating and optimised geometry, the OptiMill-Composite-Speed-Plus guarantees process reliability.

The aerospace industry is reluctant to change functioning processes that have already been audited due to the large effort involved. However, growing cost pressures are also forcing this sector to make its production as efficient as possible. Aircraft manufacturers have so far identified the clamping technology as an obstacle on the path to higher performance. Large carbonfibre parts are usually fixed using vacuum clamping technology. The limited holding forces of the suction cups require relatively low cutting speeds in order to prevent rising vibration. This can lead to a loss of quality and deviations in shape and position tolerances.



New clamping technologies now enable manufacturers to increase the cutting values. But with this came a new problem: under the changed process conditions, there was an increased risk of breakage due to the increased load on milling cutters that had previously worked perfectly. "Even very large manufacturers were affected by tool breakages after using the tools to their limits", explains Tim Rohmer, Product Manager for solid carbide milling tools at MAPAL. The tool manufacturer saw a need to act and developed the OptiMill-Composite-Speed-Plus as a response to market demands.

Large core, little chip space

In order to enhance the flexural strength, MAPAL increased the core diameter of its solid carbide shoulder milling cutter. Although this is at the expense of chip space, it does not have any negative effects because CFRP machining does not produce chips, but a fine dust. During tool tests

with differently dimensioned diameters, no differences were found in terms of removing dust and process heat. MAPAL noticeably increases the flexural strength with the larger core diameter.

The requirements for the groove profile also differ from the machining of metal, where feed, infeed depth and cutting width influence the chip thickness. Since the rake angle for CFRP is only slightly engaged due to a low feed per tooth, MAPAL has designed the cutting wedge for maximum stability.

The new OptiMill-Composite-Speed-Plus also has an optimised envelope contour to reduce leverage forces and thus for increased fracture resistance. It works well in practice, as Rohmer explains: "Typical parts for aviation consist of stacks, i.e. composite panels, with five to 15 mm usually being machined. Shorter tools are perfectly adequate for this." While the predecessor tools were still longer than specified in DIN6527, the new tool series largely complies with the standard. MAPAL provides the tools with diameters of 4 to 20 mm.

Even diamond layer

The OptiMill-Composite-Speed-Plus also ensures high tool lives for machining abrasive carbon fibres with an innovative diamond coating. The uniform layer thickness distribution and the high repeatability with which MAPAL applies the diamond in the CVD process are exceptional. Conventional coating technologies often produce irregular layers that are thicker at the tip than further down on the cutting edge. This process ensures different edge rounding and thus fluctuating cutting pressure and wear and tear.

The homogeneous layer thickness over the cutting edge length contributes to process reliability. This enables consistent performance regardless of which part of the cutting edge is involved. This means that the tools can also be used for circumferential machining of a stack, regardless of height. Users sometimes use the milling cutter until the end of wear and tear, then readjust it and continue working with a fresh part of the cutting edge. The shoulder milling cutter is suitable for a wide range of applications. In addition to circumferential machining, it is also used to produce slots, edges and pockets.



Perfect cutting quality is very important in the aviation industry. Once the fibres are no longer neatly separated and the part thus no longer achieves the desired quality, the tools are replaced, even if they only appear slightly worn. The OptiMill-Composite-Speed-Plus achieves its excellent cutting quality thanks to its specially arranged "fibre catchers" on the cutting edges, which cause a double compression and thus separate the fibre protrusions on the workpieces extremely precisely. The double compression is additionally created by the spiralisation of the tool.

Pull or push - improvements of up to 30 percent

One aspect of CFRP machining is that the tools available today produce different machining qualities on the workpieces. The user must decide which quality requirements are placed on the part according to the existing material composite and therefore make the ideal tool selection. It is often connection points for which particularly neat edges are required. MAPAL provides two different variants of its milling cutters. The right-hand spiral model produces a pulling effect and thus axial tensile forces, while the left-hand spiral variant has a pushing effect and thus forms compressive forces in the axial direction. The fibre catchers counteract the force created by the respective spiralisation.

The previous model had a third, neutral variant. With further development, this variant is no longer required as the new tools reduce the axial forces by up to 40 percent. As such, the two versions of the new product also assume all tasks for which the neutral variant was previously used. In terms of tool life, quiet running, productivity and cutting quality, the new tools are up to 30 percent better than their predecessors.

Whilst the aviation industry is still recovering from the coronavirus slump, the use of CFRP is growing rapidly in other areas. In addition to automotive engineering and racing, the focus here is shifting to the consumer sector. Manufacturers of sports equipment such as bicycles, skis, snowboards or fishing rods increasingly use the modern material.

With its sharp cutting edges, the OptiMill-Composite-Speed-Plus can also be used to machine thermoplastics and thermosets. As these plastics are not abrasive, coating is not required here and sharp cutting edges are used. The uncoated milling tools replace the previous router tools as they are far superior, especially in terms of cutting quality. MAPAL also recommends the uncoated tools for machining fibreglass materials.



TAILORED FOR MAXIMUM PERFORMANCE

Walter launches new Tiger·tec® Gold turning grades for hard steels

Walter is launching two innovative high-performance cutting tool materials for turning operations in the form of the WKP01G and WPP05G grades, which reduce the machining time by between 20 and 30%.

WKP01G has been specially developed for finishing high tensile steels and cast iron (GGG/GG) at the maximum cutting speed and is the only one of its kind on the market designed specifically for this purpose. The optimised cutting edge rounding of the turning inserts improves the surface quality on the workpiece, while their multi-stage post-treatment produces an extremely smooth rake face which significantly reduces friction. The WPP05G grade is designed for medium machining and roughing of steels at the maximum cutting speed. Both cutting tool materials are ideal for finish cuts and occasional interrupted cuts in high tensile materials (900–1400 N/mm²).

The main USP of the inserts is their coating with the patented Tiger-tec® Gold technology. This fine-columnar, highly textured MT-TiCN multi-layer coating increases toughness and resistance to flank face and crater wear. As a result, the grades make it possible to increase the machining speed and the associated productivity by between 20 and 30% compared to standard ISO P10 grades. Walter offers the new grades in around 130 versions with 11 different geometries. Application ranges include high-volume and mass production in the automotive or energy industries, such as gearbox components, gears, rotor hubs, general mechanical engineering, such as forged shafts and the rail industry like wheel sets.

For more information, please contact Spectra Carbide Tooling Technology – Tel: 021 555-4144.













TAEGUTEC LAUNCHES THE WIN-TURN LINE

6-Cutting Edge TNMV Insert and Holders for All-Directional Turning

The 6-corners, 80 degree angle TNMV is a multidirectional, high productivity line capable of deep depth of cuts in forward turning and high feed rates in backwards turning operations. The holders, which use the strong clamping T-HOLDER design, are capable of longitudinal and face turning, both forward turning and backwards turning operations, all in one tool.

TNMV chip breakers

ISO		Chip breaker
Por steel	ВМ	
For stainless *Not recommended for super alloy	BS	

TNMV recommended cutting conditions



- ▶ Capable of high feed turning in BWT and BWF
- ▶ Be aware that the insert may be damaged if the depth of cut is exceeded in high feed backward turning.

For more information, please contact TaeguTec – Tel: 011 362-1500.

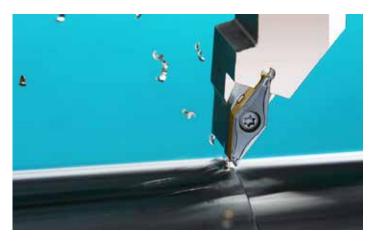
VBMX INSERT AND HOLDERS WITH RIGID CLAMPING

TaeguTec introduced a new VBMX insert with increased rigidity holders for improved anti-rotating during operation

The MULTI-L-TURN insert's narrow corner angles mean the V-type insert is capable of various profiling operations. However, the clearance angle between the pressed type insert and the pocket causes the insert to rotate during machining, resulting in dimensional displacement. To reduce dimensional displacement, TaeguTec has released an all new VBMX V-type positive insert and dedicated holders that reduce dimensional displacement caused by the pressed type insert's rotation.

The new VBMX insert and dedicated holders provide stable tool life, excellent machining performance and precise machining dimensions based on a rigid clamping design. The insert's bottom face includes a groove that firmly seats it on a specially shaped shim, while the back end of the insert contacts to a specially designed pocket.

As the VBMX insert shares the same outline design as the ISO-V type insert and is also compatible with ISO holders. To obtain precise machining dimensions, the dedicated holder must be used.







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LAUNCH OF AFRICA'S BIGGEST MACHINE TOOLS EXHIBITION - MACHINE TOOLS AFRICA 2024

The recent launch of Machine Tools Africa was attended by industry leaders interested in the latest show updates and new features that will be incorporated in the in 2024 trade exhibition. An event owned by the Machine Tool Merchants' Association of South Africa (MTMA) in partnership with organisers Specialised Exhibitions, Machine Tools Africa will be taking place at the Expo Centre in Nasrec, Johannesburg, from 21-24 May 2024.

Recognised as the biggest machine tools exhibition in Africa, Machine Tools Africa is a showcase of cutting-edge developments across the machine tool- and related industries. The expo is designed to showcase the very latest global machine tool technology and to highlight the importance of local suppliers and their international manufacturing partners.



Metal processing is a critical sector of the South African economy and serves as an essential input to multiple industries. According to the Metals and Engineering Indaba, the industry contributes around 28% towards the country's manufacturing GDP, and according to NUMSA employs an excess of 360 000 people. Despite its importance, this industry faces challenges that need addressing to ensure its sustainability.

Challenges such as high energy supply costs, energy interruption, increasing raw material costs as well as inadequate infrastructure are what the industry faces on a day-to-day basis.

Speaking at the launch, Joanne Canossa, MTMA Chairperson, says that "We can all agree that the past few years leading up to this much anticipated show has been nothing short of manic. Machine Tools Africa 2024 is a great step towards the recovery and upgrading of local manufacturing businesses in South Africa."

"At the show, industry players have an opportunity to highlight technological advancements and how technological infrastructure for human-machine collaboration can streamline processes and improve high level decision making. It is this combination of technology and human creativity that defines smart factories and industry 5.0. It will be very exciting to see how our members as well as other companies utilise this platform to target and entice the manufacturing sector."

Positive impact of Machine Tools Africa on the machine tool industry

The previous Machine Tools Africa exhibition attracted just under 6 000 visitors and featured 105 exhibitors. Seventy-seven percent of the visitors had the authority to make purchasing decisions, making the show a crucial platform for business to connect with potential customers. Eighty-eight percent of visitors attended the show in search of new

products, technologies, and trends. These numbers are testament to the importance of this event in the industry.

"We are delighted to again be in partnership with the Machine Tool Merchants Association for the next edition of Machine Tools Africa," says Charlene Hefer, Portfolio Director at Specialised Exhibitions. "The collaboration is significant as our combined expertise and industry insights will bring immense value to our exhibitors and attendees alike."

"Over 50% of our exhibition space has already been sold for 2024 through our pre-launch to MTMA members, and this is just the beginning. We are committed to reaching an even wider market and attracting the most influential players in the industry."

Substantial investment in power generation

Specialised Exhibitions has taken significant steps to enhance the infrastructure of Machine Tools Africa, having made a substantial investment in power generation.

"We are hiring in over 2MVA (megavolt-ampere) of power capacity to ensure the exhibition and all machinery run seamlessly throughout the event," explains Hefer. "This commitment to providing a reliable power supply underscores our dedication to creating an optimal environment for exhibitors and visitors alike. We understand that efficient machinery operation is paramount to showcasing the full potential of the showcased technologies and products. By investing in robust power infrastructure, we aim to facilitate uninterrupted demonstrations, enabling exhibitors to fully highlight the capabilities of their innovative machinery."

Skills development to be a focal area at the show

A shortage of skilled artisans is another challenge facing the metal processing industry. MTMA has been working closely with Specialised Exhibitions to incorporate skills development at Machine Tools Africa 2024 in a professional and competitive way. WorldSkills South Africa will be a participant at the show, adding a whole new dimension to the exhibition. It will highlight the incredible talent and skills of young professionals with an exciting competition taking place during the show.

There will also be a seminar theatre on the exhibition floor, where industry experts will share their knowledge and insights through engaging presentations and panel discussions.

For more information, visit the Machine Tools Africa website www.machinetoolsafrica.co.za or contact Keraysha Pillay at Keraysha.Pillay@montgomerygroup.com Specialised Exhibitions is a division of Montgomery Group.







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SKILLS DEVELOPMENT A KEY FOCUS OF MACHINE TOOLS AFRICA



At the recent launch of Machine Tools Africa 2024, it was announced that WorldSkills South Africa will be participating at the show and is set to bring a whole new dimension to the event. It will showcase the incredible talent and skills of young professionals in the industry and host an exciting competition.

Speaking at the launch, Joanne Canossa, Machine Tool Merchants' Association of South Africa (MTMA) Chairperson, says that "One of the key challenges facing the industry is the shortage of skilled artisans, in addition to other challenges such as high energy supply costs, energy interruption, increasing raw material costs as well as inadequate infrastructure that the industry faces on a day-to-day basis."

"Our higher education minister confirmed last year that South Africa has a shortage of over 30,000 qualified artisans yearly which is forcing businesses to import skilled artisans from other countries," continued Canossa.

"This shortage arises from two fundamental issues. Firstly, there is a lack of career guidance, resulting in fewer young people entering the field. And secondly, there are challenges in the training sector itself, such as the use of old-fashioned technology and machines, limited access to infrastructure and complexities in the industrial process which make it challenging to acquire anything other than an informal experience to training.

"While this unique challenge facing the metal processing industry can be significant, it can also present unique opportunities. Investment in training, mentorship programs, and collaboration with Technical Vocational Education and Training institutions will improve both the quality and the number of metal processing skills in the country.

"South Africa has an opportunity to transform the metal processing industry by working collaboratively to address these issues. The industry can deliver significant economic benefits, provide more job opportunities, and create a more competitive and sustainable trade," concludes Canossa.

WorldSkills South Africa competition

An event owned by MTMA in partnership with organisers Specialised Exhibitions, both parties have been looking at opportunities to incorporate skills development at Machine Tools Africa 2024 in a professional and competitive way. The participation of WorldSkills South Africa will form a large part of this initiative.

"WorldSkills South Africa will be competing in twenty-four Skill Areas in Lyon France 2024 against eighty-five countries, with CNCTurning as one of the competition skills," says Jowie Bopape, Acting Chief Director: National Artisan Development (INDLELA) and Official Delegate: WorldSkills South Africa, at the launch. "We are delighted that WorldSkills South Africa will be hosting an international competition here at home at Machine Tools Africa 2024 together with the Chinese arts and culture exchange student program and FoodBev Seta as sponsors."

"Our WorldSkills South Africa CNC competitor will be competing against the Chinese Gold medallist. We have invited the Machine Tool Merchants Association of South Africa to select a competitor from industry to compete against both these competitors at Machine Tools Africa. This competitor will be selected on experience and the level of projects they have machined in the past. They will compete on CNC X.Z and Y axis with live tooling. Final details will be sent for selection."

"The aim of the competition is to give our competitor international experience and to showcase WorldSkills South Africa to industry," concludes Bopape.

The competitors from South Africa and China are not allowed to be older than 22 in the year of the competition. The competitor from industry can be between the age of 20 and 25. It will be an opportunity for Industry to witness the level the competitors need to be at to compete at this age.

Charlene Hefer, Portfolio Director at Specialised Exhibitions, is excited about the competition and says that the participation of WorldSkills South Africa adds a whole new dimension to the exhibition.

"The WorldSkills South Africa competition is an exciting addition to the show and, alongside our seminar theatre where industry experts will share knowledge and insights through engaging presentations and panel discussions, it will go a long way in highlighting industry skills development," says Hefer. "Future Skills will also be one of our themed days during the show, bringing additional focus on the importance of skills development."

Recognised as the biggest machine tools exhibition in Africa, Machine Tools Africa is a showcase of cutting-edge developments across the machine tools and related industries. The expo is designed to showcase the very latest global machine tool technology and to highlight the importance of local suppliers and their international manufacturing partners.

Machine Tools Africa will be taking place at the Expo Centre in Nasrec, Johannesburg, from 21-24 May 2024.

For more information, visit the Machine Tools Africa website www.machinetoolsafrica.co.za or contact Keraysha Pillay at Keraysha.Pillay@montgomerygroup.com Specialised Exhibitions is a division of Montgomery Group.



2023 INNOVATION AWARDS -A LAUNCHPAD FOR SUCCESS

Innovation is all about forward thinking. It starts with a new idea and culminates in its successful implementation. It could be a new way of doing things or a new product, but the end goal is to add value to the market, the industry and all relevant stakeholders. And this, in a nutshell, is what the Automechanika Innovation Awards are all about. Moreover, it provides creators, manufacturers, importers or distributors of innovative new products an exclusive platform to showcase their concepts to the world.

The 2022 event attracted more than 5 000 visitors from across the African continent and beyond to the stands of close to 2 000 exhibitors. One of the highlights was the exclusive stand showcasing the finalists in the Innovation Awards, which garnered huge interest from industry representatives and the public alike. With visitor registration now open for Automechanika Johannesburg 2023, which will be held from 5 – 7 September 2023 at Nasrec, all those seeking exposure and recognition for their new and innovative products are encouraged to enter the competition. In the past, winners have been able to successfully harness their achievements to bolster their marketing programmes and – as a result – have tasted local and international success.

"Automechanika Johannesburg serves as a gateway for the growing African automotive aftermarket, targeting visitors from sub-Saharan Africa, and is respected as the largest event of its type on the African continent. There is no better way to gain industry and consumer recognition than by taking part in a highly respected competition that aims to award the best of the best in terms of innovation and forward thinking," Tracy Gounden, Business Development and Portfolio Director of Messe Frankfurt South Africa, the organiser of Automechanika Johannesburg, explains. "After the immense interest shown and the high standard of entries received for last year's Awards, we expect a record number of entries for 2023."

Entries will be judged by a group of hand-picked jury members that will be tasked with identifying the most innovative and pioneering automotive products that are manufactured, supplied or distributed in South Africa. They will score each entry on a predetermined list of criteria that covers

the design, quality, efficiency, functionality, practicality, value for money, environmental friendliness and – of course – innovation of the product.

Organisations represented on the panel of judges include the Retail Motor Industry (RMI) and its associations, the Motor Industry Ombudsman of South Africa (MIOSA), the National Association of Automotive Component and Allied Manufacturers (NAACAM), the National Association of Automobile Manufacturers of South Africa (NAAMSA), the Motor Industry Bargaining Council (MIBCO), members of the media, and the sponsors of the event.

In keeping with the latest automotive trends, both in South Africa and abroad, the 10 categories for the 2023 competition are:

- Parts
- · Accessories & Customising
- Driver Assistance & Safety
- · E-mobility
- Data & Connectivity
- · Diagnostics & Tuning
- · Repair & Maintenance
- Original Equipment Products & Services
- IT & Management
- · Service Station & Car Wash equipment

In order to be considered for the award, prospective entrants must submit photographs and a detailed description of any automotive aftermarket or original equipment product they have developed, manufactured, imported, or distributed in South Africa. Entries opened at the beginning of May and the cut-off date to enter is midday on Friday, 18 August 2023. There is no entry fee.

Interested parties can contact Liana Reiners, the convenor of the Innovation Awards, via e-mail at reinersliana@gmail.com or on 083 407 4600 for additional information. Alternatively, the entry form can be downloaded from www.automechanika.za.messefrankfurt.com.





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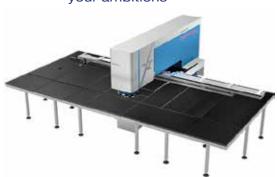
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