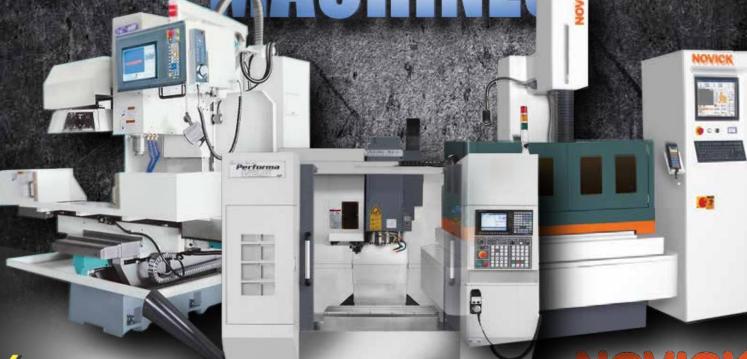
**Machine Tool Market** 

# SOUTHERN AFRICA

September/October 2020

Volume 29 No.5

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# SOUTHERN AFRICA

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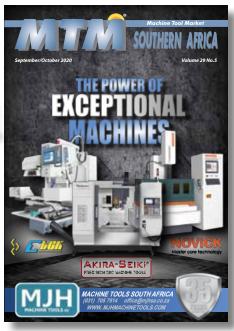
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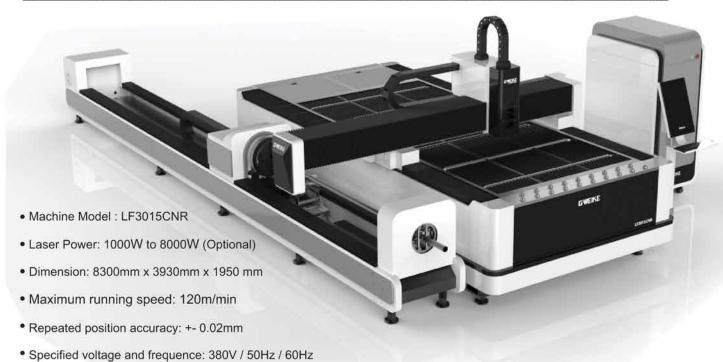
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# TIMESAVERS 42 SERIES ROTARY BRUSH MACHINE

The technologically-advanced 42 Series Rotary Brush machine *adds more* value to steel processing businesses, with the all-new add-on underside finishing machine.

This *add-on* machine is placed in front of the machine, and serves to remove burrs from the underside of workpieces before they enter the main deburring process. The advantage of this is that deburring can be done with one single pass – in half the time it previously took.

In the world of fabrication today, there is overwhelming demand for increased speed of production, while still meeting quality requirements. The 42 series meets these requirements in full. With modern fibre laser technology, in some clients' fabrication centres, the output of newly cut components has reached unprecedented rates. With the add-on machine, Timesavers has therefore ensured that the process of deburring and edge-rounding effectively eliminates any production bottlenecks and increases productivity and profitability accordingly.

In addition, the add-on machine allows the 42 Series to be more easily integrated into fully automated processing lines.

Not only does the 42 series offer improved deburring, rounding and finishing in one processing step, it is also able to process a large variety of sheet thicknesses and metal types. This machine is very versatile, as it can deburr and grind small parts from 30mm to large parts up to 1600mm, while being capable of processing a large variety of materials including stainless steel, aluminium, zincor, zinc and laser film products.

The machine features a centrally installed and user-friendly control panel and an automatic table opening of  $0-100 \, \mathrm{mm}$ . To ensure a perfect finish, the machine has a carousel rotating brush head equipped with eight brushes, four rotating to the left and four to the right. The frequency-controlled conveyor belt feeds at speeds ranging from 0.2 to  $8 \, \mathrm{m/min}$ . Window panels and a well-lit interior make it easy to keep a visual check on processing.

The brushes have an extremely long service life of approximately 3,000 hours. However, when brushes or belts need to be replaced, there is a quick replacement system for virtually uninterrupted production. To monitor feed status, the machine is equipped with LED beams on the infeed and outfeed and the vacuum table has an automatic cleaning cycle.

While the most common finish achieved by the Timesavers wide belt machine is the straight line or grain finish for decorative or aesthetic



Timesavers 42 Series locally available from First Cut.

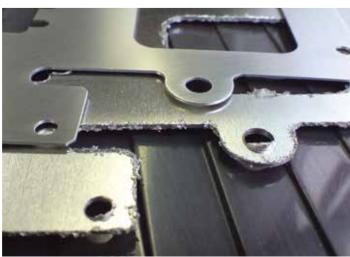
purposes, some customers may require a random, circular or orbital scratch pattern. Timesavers offer machines for each of these requirements and will run samples to demonstrate the required finish results accordingly.

Alternatively, the component can be given a finish with the surfaces prepared for painting or for receiving a specific micro-finish. If any customer has a specific deburring challenge, the First Cut and Timesavers teams are always ready and willing to consult, in order to find an optimal deburring or grinding solution.

Many Timesavers customers have found that switching from time-consuming manual deburring to an automated Timesavers machine has not only saved them a substantial amount of operational time – but substantial costs as well.

Ultimately, for unmatched high-end finishes, the 42 Series is the ideal solution for the fabricator or manufacturer dedicated to supplying their customers with premium standard, quality-cut and finished components.





 $Before\ and\ after\ finishing\ with\ the\ Times avers\ 42\ Series.$ 

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INDUSTRIAL PISTON TYPE COMPRESSOR, 3 HEAD, 22KW	P.O.A.
INDUSTRIAL PISTON TYPE COMPRESSOR, 3 HEAD, 22KW	P.O.A.
PISTON TYPE COMPRESSOR, TANK: 500LT, MOTOR: 11KW	PO A
ATLAS PISTON COMPRESSOR, MOTOR: 5.5KW, TANK: 400LT	PO A
DRILLING MACHINES	
MITCO PEDESTAL DRILL, GEAR DRIVEN, MODEL: 6009A, MORSE TAPER 4	P.O.A.
MEDDINGS BENCH DRILL. 13MM	
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USED KARL KLINK BROACH GRINDER BRIERLEY DRILL SHARPENER, CAPACITY IUP TO 25MM	R 42 000 00
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USED FAVRETTO ROTARY GRINDER, MODEL: TR 60	P.O.A.
USED JONES AND SHIPMAN UNIVERSAL GRINDER, MODEL: 1305	PO A
USED JONES AND SHIPMAN UNIVERSAL GRINDER, MODEL: 1311	
USED OKUMA CYLINDRICAL GRINDER MODEL: GU 33 900	PO A
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LOCKFORMER, MODEL: LC-15DR, 0.7MM ~1.5MM	PO A
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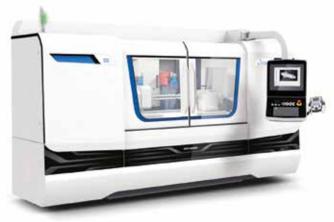


# S33 – THE GOOD VALUE SOLUTION FOR INDIVIDUAL REQUIREMENTS

Universal and flexible are the features of the new S33 CNC universal cylindrical grinding machine from STUDER. It can grind small to large workpieces in single batch, small or large series and is available with centre distances of 400mm, 650mm, 1000mm, 1600mm and a centre height of 175mm. The changeover from grinding between centers to live spindle grinding takes place in record time. Complex workpieces are easily ground in just one clamping.

The basis for the universal cylindrical grinding machine S33 is the machine bed made of solid Granitan® S103. Thanks to its favorable thermal behavior this offers a high degree of dimensional stability, while short-term temperature fluctuations are largely compensated for by the mineral casting. STUDER has redesigned the machine base geometry and supplemented it with an innovative machine base temperature control, which ensures fast and stable production. The mounting of the dressing unit on the double T-slot of the longitudinal slide massively reduces time needed for set-up or changeover of the machine.

While the S33 is based on the STUDERT-Slide concept, which now features an extended X-axis stroke of 370mm, STUDER offers various wheelhead versions. The turret wheelhead with a 1° Hirth coupling and automatic swivel can accommodate up to two external and one internal grinding spindle and is equipped with the latest generation of contact detection. The external wheelhead with a grinding wheel right, can be manually set to 0°, 15° and 30°. The machine set-up and changeover costs can be reduced thanks to the turret wheelhead with multiple grinding wheels



The new Studer \$33.

and the fast set-up software Quick-Set. The S33 can easily handle internal, external- and face grinding in one clamping which leads to an even higher efficiency in complete machining. The C-Axis, with an option of either a direct or indirect measuring system, allows the grinding of forms and threads. The S33 can also be equipped with a chuck workhead, specially designed for grinding chuck parts.

More than a hundred years of grinding experience is integrated in StuderWIN, which enables safe programming and efficient use. StuderTechnology requires just a few parameters to automatically calculate precise grinding parameters in just seconds. Good quality and a stable process is assured right from the beginning. The optional integrated modules such as StuderForm, StuderThread or StuderContourBasic extend the functionality of the machine. The hand-control device PCU makes it possible to set up the machine close to the grinding process. With electronic contact detection, downtimes can be reduced to a minimum. With the standardized loader interface, the S33 can also be automated.

# STUDER favorit CAN BE USED UNIVERSALLY

The STUDER favorit is offered with centre distances of 400, 650, 1000 and 1600mm. While it is suitable for short to long workpieces, it can be used universally.

This CNC universal cylindrical grinding machine is designed for grinding in individual and batch production and can be automated. It can subsequently be easily adapted to other grinding tasks using various accessory kits such as in-process gauging, balancing system, contact detection and length positioning.

The favorit is a very cost-effective machine. As with all STUDER cylindrical grinding machines, the proven solid Granitan® machine base ensures the

highest precision, performance and reliability. The full enclosure ensures an optimal view of the grinding process. The wheel-head, which can be automatically positioned every 3°, can take one belt-driven external and internal grinding spindle respectively.

Thanks to a 370mm long X-axis the dressing spindle can be placed behind the workhead or tailstock, without colliding with the grinding head. Geometrical clarifications are now a thing of the past. The dresser position can be manually adjusted in the T-slot.

The STUDER favorit has an integrated coolant tray and a machine base with temperature control. Potential deformations of the slide on

the Z-axis are eliminated. At the same time the "active temperature control" option brings the machine to operating temperature faster.

The practical STUDER grinding software with its proven StuderPictogramming means that even less experienced users can quickly and practically program grinding and dressing cycles. The modern and user-friendly design is complemented with a touch-screen panel, which allows the operator to easily and directly control the machine. Service doors at the rear and on the right of the machine ensure high ergonomic efficiency during machine operation. Development, production, assembly and inspections of STUDER products all takes place in a process-oriented manner and complies with the stringent directives stipulated in VDA 6.4 and ISO 9001.



For more information, please contact Retecon – Tel: 011 976-8600.

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Harp cylindrical grinders come with distance between centres of 1000-3000mm, 1500-4000mm and 2000-5000mm and centre height of 180mm, 270mm and 370mm, respectively. All machines are supplied with internal grinding attachment, coolant system, steady rest and 3 jaw chuck.

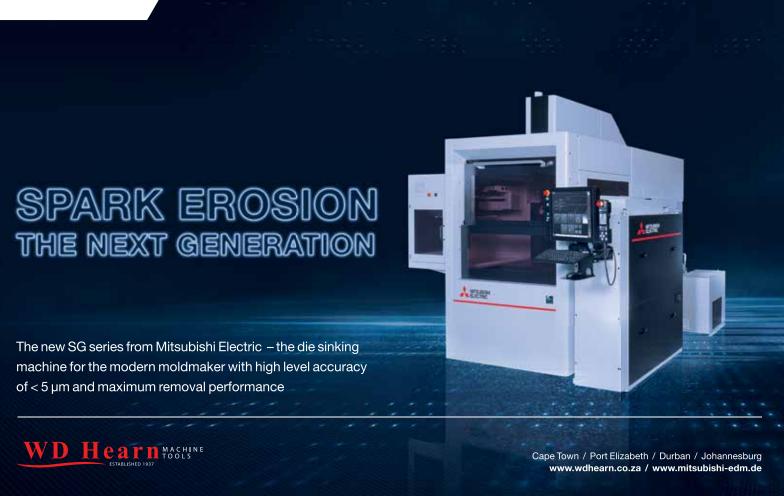


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# DURMA FIBER LASER FOR INNOVATIVE SOLUTIONS



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  $1\mu m$  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 CO<sup>2</sup> laser at the same laser power.

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





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- progressive tech

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Simple, inexpensive, compact

- Variety of materials Enhanced productivity in thin sheets
- Low investment and operating costs Simple to operate
- Simple design and short installation time





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LM1800 Multi-axis **Turning Center** -673mm turning length

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# CRAFT MACHINE TOOLS DEFINING THE ART OF MILLING

The term 'Milling' can be used to describe the art of cutting or shaping metal with a rotating tool. In today's industrial mechanical business industry, traditional or conventional milling machines have become in most cases second choice to the Computer Numerical Control (CNC) milling machines which have helped many companies to produce wide spectrum of components on a large scale with greater precision and accuracy. The CNC innovation has proven that these machines have the ability to boost a company's productivity and profitability.

Source: http://EzineArticles.com/5896245

CNC mills can perform the functions of drilling and often turning. CNC Mills are classified according to the number of axes that they possess. Axes are labelled as X and Y for horizontal movement, and Z for vertical movement.

The complexities of the component design will determine the number of axes required. The number of axes refers to the simultaneous movement of the cutting tools. If you are planning to perform positioning work on complex multi-parts over a long period of time, then you need to have advanced machining centers to perform intricate parts production operations. If your business only requires 3-axis CNC milling machines, it means that you are only capable to produce low difficulty components.

Source: http://EzineArticles.com/5896245

Craft Machine Tools (Pty) Ltd, has over 50 years experience in the milling industry and has partnered with the leading manufacturers in Taiwan to provide YOU with the optimum CNC Milling solution.

# Craft Machine Tools covers three primary areas of CNC Milling, namely:

- 1. Entry Level low complexity components
- 2. Niche large component applications
- 3. Production

# Feeler, performance beyond expectations

# The Craft S - 1654 R CNC Bed Type Mill

If you are looking for a machine to fit your general low complexity milling application The Craft S - 1654 R CNC Bed Type Mill complete with the Sintec control is a quality entry level 3 axes ( $4^{th}$  axis is available as an optional extra) milling machine built to rigid construction standards.

### **GSM CNC Bed Type Mill**

DESCRIPTION	CRAFT S-1654R
TABLE SIZE (mm)	400 x 1370
X, Y, Z TRAVELS (mm)	1 000 x 508 x 600
TABLE LOADS (ton)	1
SPINDLE MOTOR (HP)	10
SPINDLE SPEEDS (rpm)	50 ~ 6 000 (up to 12 000 opt)

For companies specializing in large component milling in a low production environment Craft Machine Tools offers the GSM 3086R CNC and the GSM 2473R CNC complete with the Fanuc control system. There are very few other machines on the market that can offer these capacities at such competitive prices and without sacrificing quality and precision.

### **GSM CNC Bed Type Mill**

DESCRIPTION	2473R	3086R
TABLE SIZE (mm)	610 x 1854	813 x 2 185
X, Y, Z TRAVELS (mm)	1 520 x 720 x 700	2000 x 874 x 700
TABLE LOADS (ton)	1.5	1.8
SPINDLE MOTOR (HP)	10 / 15 (opt)	15
SPINDLE SPEEDS (rpm)	50 ~ 6 000 (up to 12 000 opt)	6 0 0 0 (up to 12 0 0 0 opt)

\*Specifications are subject to change without prior notice

	LINEAR GUIDEWAYS		BOX WAY	
DESCRIPTION	FVP Range	VMP Range	NBP Range	VB Range
TABLE SIZE (mm)	950 x 425 – 1 680 x 800	420 x 650 – 1 420 x 600	950 x 520 – 1 500 x 600	1 300 x 600 – 2 400 x 960
X TRAVELS (mm)	800 – 1 600	580 –1 300	800 – 1 300	1100 – 2200
Y TRAVELS (mm)	500 – 800	420 – 610	520 – 610	610 – 1 000 (4 ways)
Z TRAVELS (mm)	505 – 800	510 – 600	505 – 600	610 – 800
TABLE LOADS (kg)	800 – 1 000	300 – 1 500	500 – 1 300	1000 – 2700
SPINDLE MOTOR (HP)	7.5/11 – 9/11	7.5/11	7.5/11 – 15/18.5	6/11 – 11/18.5
SPINDLE SPEEDS (rpm)	10000 – 8000	10 000	10 000	4000

Moving more towards the production arena, Craft Machine Tools have a large range of Feeler CNC milling machines. Feeler is an award winning manufacturer having received accolades for Excellence in Research and Innovation, Quality and Service and being selected in the top 100 of 'Taiwan's Top 100 Brands'.

Feeler is a global company, boasting over 13 brands and 23 companies in its machine tool division with representation worldwide. Feeler strives to provide the world with quality machine tools at affordable prices through the synergy of its 4 000 dedicated employees. Feeler are

currently producing over 10 000 machine tools annually while showing impressive growth and have the honour of being one of the top 20 largest machine tool manufacturers in the world.

Craft Machine Tools has been representing Feeler in South Africa for 30 years and successfully completed hundreds of installations, while offering an extensive range of CNC milling machines covering just about every application. For quality, precision and reliability within a production environment, Feeler will give you performance beyond expectations.

For all your milling requirements contact Craft Machine Tools at (011) 845-2031 or www.craftmachinetools.co.za

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# FUTURE SHAPING SOLUTIONS FORM FAMILY OF DIE-SINKING EDM MACHINES

Whatever the current or future diesinking electrical discharge machining (DSEDM) challenge, GF Machining Solutions' AgieCharmilles FORM family of DSEDM machines are future-shaping solutions to advance manufacturers' success.

The AgieCharmilles FORM X, FORM S, FORM P and FORM E series advance their forebearers' software and technical innovation, such as the renowned AC FORM human-machine interface and GF Machining Solutions' legendary EDM know-how. Whether the requirement is a single machine for straightforward use or full automation, these new, easily integrable FORM solutions position users to meet every challenge, with greater flexibility and machining accuracy to eliminate costly manual operations.

These eco-friendly solutions offer Econowatt technology to save energy, a variety of Industry 4.0-oriented connectivity features to support manufacturers' digital transformation and eTracking software for EDM process monitoring and full traceability.

From faster rib machining to micromachining, the AgieCharmilles FORM family of DSEDM solutions is evidence of GF Machining Solutions' continued and significant investments to advance DSEDM research. The result is that AgieCharmilles FORM series users achieve performance like never before in machining with graphite and copper. Perfectly repeatable machining of micro cavities is just one example of the manufacturing challenges expertly resolved by this range of DSEDM solutions. In parallel, this series' iGAP technology enables the rigidity of plastic injection molded end products with deep, plastic reinforced ribs; it ensures fast, accurate machining of rib cavities with superior respect for the required demolding taper and VDI homogeneity throughout the cavity surface.

Manufacturers requiring maximum use of their AgieCharmilles FORM machine can exploit the range's eConnectivity features and MTConnect capability to stay informed of the machine's status. Moreover, the FORM E 350 allows switching between DSEDM to drilling EDM, allowing extended use of the machine. Automation

is another way AgieCharmilles FORM series machine users can extend their productivity: In today's fast-paced manufacturing environment, unattended manufacturing is a must, so the AgieCharmilles FORM E, P, S and X series solutions can be connected to external robots and offer integrated pallet as well as electrode changing solutions.

# AgieCharmilles FORM X – extreme and uncompromising accuracy

Extreme accuracy, highest precision in mass production, and unparalleled productivity come together as future-shaping solutions with the AgieCharmilles FORM X series. This series'TECFORM ensures highest accuracy and reproducibility on both big and small parts. This is due to the fixed table and stiff machine base delivering perfect positioning accuracy along the entire axis travel. The result – high precision throughout the machining area.

Furthermore, manufacturers' mass production of highly precise micro parts is assured by the AgieCharmilles FORM X series precisionenhancing qualities. High quality, automated mass production is easily within reach, thanks to these machines' dynamic thermostabilization.

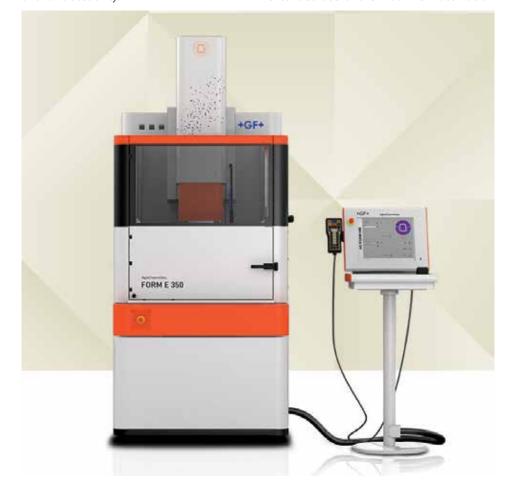
As manufacturers face ever-shorter delivery time, the AgieCharmilles FORM X series delivers high running time – no manual intervention necessary – thanks to its vast Automation capabilities. These include accommodation of linear, rotary or robot pallet and electrode changers, as well as smart features such as Part Express and Job List management. Users can ramp up their profitability by automating their production, thanks to the AgieCharmilles FORM X series' ability to accommodate two front-oriented machines on each side of the robot.

# AgieCharmilles FORM S: big success in micro-profiles

GF Machining Solutions' AgieCharmilles FORM S solutions open new fields for miniaturization, optimize productivity, ensure lasting accuracy, and have the automation readiness to position users for the future.

New fields of miniaturization are opened by the maximum respect for details provided by these solutions' Intelligent Speed Power Generator (ISPG) evolution and specific micro technologies. The latest-generation ISPG makes it possible to use a smaller-than-ever spark gap to remove minute amounts of material in order to achieve finest geometric details.

At the same time, AgieCharmilles FORM S 350 users achieve more with less by using fewer electrodes to achieve greater detail. Behind this achievement lies this solution's process, enabling such a small electrical current that electrode wear becomes insignificant. Consequently, only few electrodes are needed to machine cavities and this represents a significant advantage over similar products.



High, lasting accuracy is made possible by a specific controlled process during production of the AgieCharmilles FORM S series, so the machine retains stable accuracy across its lifetime. Stable performance is ensured by this solution's standard thermostabilization equipment.

Moreover, the AgieCharmilles FORM S 350 is Automation-ready and GF Machining Solutions has a perfect automation configuration to meet every need, whether the requirement is a simple linear tool changer or any kind of robot in any cell.

### AgieCharmilles FORM P

As the preferred choice for automated parts production with adapted investment cost, the AgieCharmilles FORM P series puts perfect results and high productivity at the user's fingertips.

Perfect results are enabled by the intuitive, easy-to-learn and easy-to-use die-sinking EDM process ensured by GF Machining Solutions' AC FORM human-machine interface (HMI). Designed for productivity, the FORM P series leads the way in high running time without manual intervention, thanks to the series' multiple Automation choices from a linear, rotary or robot pallet or electrode changer as well as smart features like



Part Express and Job List management.

Manufacturers' speed and productivity are advanced by GF Machining Solutions' die-sinking EDM embedded in the FORM P series' EDM process management. The ISPG, in association with the TECFORM EXPERT system, maximizes surface finish and homogeneity by generating the ideal EDM spark settings.

### AgieCharmilles FORM E

This multifaceted performer delivers best value for the investment in the production of molds and parts. It offers superb accessibility, automated dielectric management, extended

Automation capabilities, ever-evolving technological improvements and the availability of GF Machining Solutions Customer Services' rConnect world of digital services.

Automatic dielectric management increases machining time while reducing human intervention. Filling and emptying the work tank is now automatic, and the dielectric height can be adjusted while running a program. Furthermore, the AgieCharmilles FORM E series offers extended Automation capabilities, including linear and rotary tool changers for machines produced in Switzerland. In addition, the FORM E 350 can accommodate an external robot.

Thanks to GF Machining Solutions' continuous improvement of EDM technology, AgieCharmilles FORM E users get the EDM performance necessary to address their daily challenges. With rConnect, GF Machining Solutions continues to push technological boundaries to deliver the future of services—today. As the machine tool industry's most in-depth digital service platform, rConnect represents this GF Division's Industry 4.0 vision of intelligent and high-performing services. AgieCharmilles FORM X, S, P and E series machines are all rConnect ready.

For more information, please contact Retecon – Tel: 011 976-8600.

# FROM CONVENTIONAL MILLING TO CNC MILLING

In a market where skilled artisans are becoming more and more scarce, it has become necessary to look at alternative ways of machining, whether it be for general engineering, tool-making or production work.

CNC machining is quicker and certainly more accurate than conventional milling machines and there is no need for constant monitoring while in use. Taking this into account, MJH Machine Tools have a solution to suit customers' needs. Featuring an entry level CNC control, our Ctek CNC milling machine is the first step to CNC machining.

As long as the operator has basic knowledge on using a DRO, he can, within a few hours, be taught how to program and run the machine. There is no need for G code knowledge as the control is conversational,

using a question and answer format. The software is simple to use with graphic input in basic machinist language. The control has options for standard operation modes such as drill, tap, bore, contour and pocket programming, which is ideally suited to general engineering work without a need for external programming packages.

The latest Ctek's come with linear guides on all three axes for better accuracy and speed, as well as a direct spindle drive motor and an improved Z axis motor with inline



Ctek CNC Milling Machine.

break which eliminates the need for a counterbalance. The Ctek can be fitted with a  $4^{\rm th}$  axis within a matter of hours and programmed from the standard Ctek control.

The Ctek range has six x-travel sizes, 800mm, 1 000mm, 1 500mm, 1 800mm, 2 000mm and 2 500mm. These machines are available in open type or fully enclosed depending on the customer's requirements. All spares are available ex stock at a fraction of the cost compared to other controls. With hundreds of these machines sold throughout South Africa since 1997, it is not surprising that Ctek CNC milling machines have been the first step to full CNC machining in many workshops.

Should there be a requirement for a high performance machining centre for super fine finishing and accuracy, the Akira Seiki is the machine to consider.



Akira Seiki Milling Machine.

Spindle power ranging from 15HP on the Junior series to 42HP on the Super Vertical range and spindle speeds from 9 000rpm to 15 000rpm guarantee high quality surface finish.

Akira Seiki machines come standard with spindle oil chillers, inner spindle air chiller, coolant through spindle, pneumatic counter balance, chip screw conveyor, quick change ATC and 4<sup>th</sup> axis preparation.

For further information, please contact MJH Machine Tools – Tel: (031) 705 7514.

# AMADA

The Amada Hyper Easy Cut II System (HP-EZ Cut) is a nitrogen filtration system designed to reduce the running costs of laser cutting by filtering nitrogen from compressed air.

Every laser owner knows that one of the key costs to running a laser cutting machine is the cost of "assist gasses." These costs can vary drastically, depending on the supplier, volumes consumed and method of storage / supply. Problems, such as on time delivery of gasses is also a concern from time to time.

The Amada HP-EZ Cut is a retro-fittable system designed to filter nitrogen from the compressed air supply and supply it to the laser cutting machine. The nitrogen filtered is around a 98% purity and can be fully regulated through the machine control during the cutting process.

With an ideal 15 bar air supply pressure, the unit will perform at its optimum best and cutting thicknesses depend mainly on the power (kW) rating of the laser cutting machine. This means, the bigger the kW of the machine, the thicker the HP-EZ Cut can process.

By having "free nitrogen on demand", a wider range of materials can be processed, especially when cutting carbon steels. By cutting with nitrogen, you can eliminate the carbon film or deposit on the cut edge of the parts and can eliminate the need for part treatment before welding or painting.

This is due to the different reaction of the nitrogen with carbon steel compared to oxygen.

The HP-EZ Cut system is supplied, installed and supported by Amada, which ensures that the full

set-up is done on both the EZ Cut side as well as the machine cutting condition side. Specific cutting conditions are created to cater for the system to ensure optimum operation.

The EZ Cut nitrogen supply is fed into the laser via the compressed air supply "port" at the back of the machine, so there is no need for unplugging anything to switch between gas types as the EZ Cut unit has a lever which is simply switched over to select Air or EZ Cut as the desired assist gas.

The long-life filters in the unit are designed to give a "worry free" supply of up to 4000 hours on certain filters and 20 000 hours on others. One full set of replacement filters is supplied as standard with any new unit sold, allowing for 8000 hours of care free cutting before having to purchase any

new filters. The onboard NC controller monitors the moisture content and filter condition giving warnings when abnormalities are detected, thus reducing damage to the unit or the laser machine itself.

Amada offers customers peace of mind and big savings on nitrogen consumption, thus making jobs more profitable.

With Amada's motto of "Working Together With Our Customers", the EZ Cut II system is taking a leap forward in ensuring a more profitable way of processing steel.

For more information, please contact Amada on (011) 453-5459.





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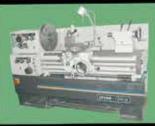
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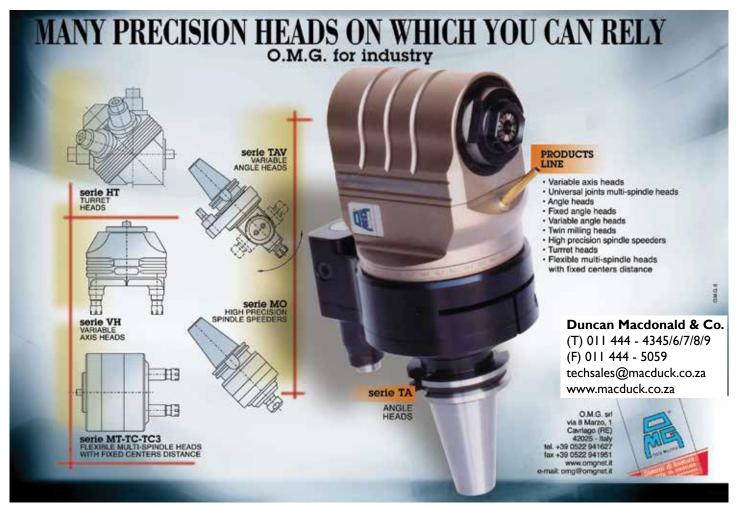


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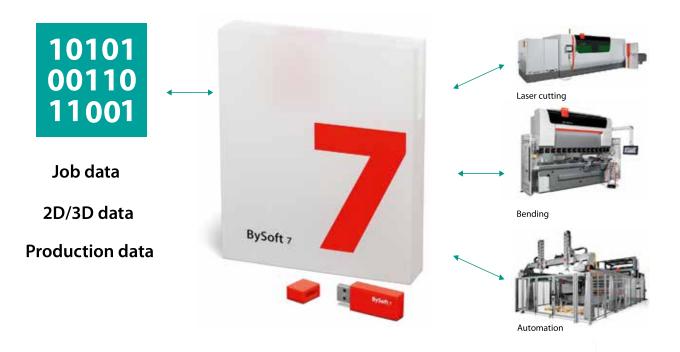
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