



MULTI-SPINDLE AUTOMATICS



WICKMAN  
BENNETT



### 5/8" (16.0mm) x 6 SPINDLE BAR AUTOMATIC

This machine is designed for the high speed production of components up to 5/8" dia. capacity. It embodies numerous additional special features and utilizes a rigid centre block or, alternatively, independent slides in each station. It is particularly suitable for producing parts complete, eliminating second operation work.

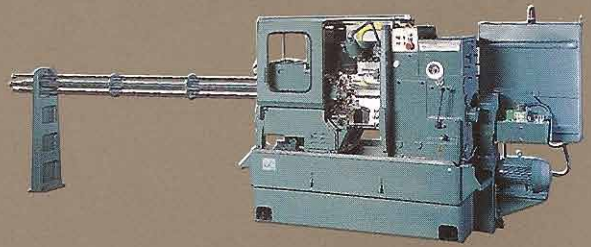
Bar Capacity round 5/8" - (16mm) Hexagon A/F 0.54" - (13.7mm)

Bar Feed length std. 0-3 1/2" - (0-88.9mm)

Speed Range 400-5000 rpm

Range of Cycle Times 1.0-50 secs.

Also available with Spindle Stopping long and double bar feed.



## multi spindle automatics standard range



### 1" (25.4mm) x 6 SPINDLE BAR AUTOMATIC

One of the most popular machines in our range in both bar and collet chucking variations, it embodies similar features to the 5/8" - 6 and is readily adaptable for specialized tooling applications and the fitting of automatic integral bar loading and feeder.

Bar Capacity round 1" - (25.4mm) Hexagon A/F 0.86" - (21.8mm)

Bar Feed length std. 0-5" (0-127mm)

Speed Range 247-4014 rpm

Range of Cycle Times 2-129 secs.

Also available with spindle stopping double and long bar feed. This machine can be arranged to give increased capacity in certain applications.

### 1 1/4" (44.5mm) x 6 SPINDLE BAR AUTOMATIC

A most sought-after machine, which covers the widest range of component sizes normally encountered in the manufacturing industry. It is readily adaptable for specialized tooling applications including the fitting of automatic integral bar loader and feeder.

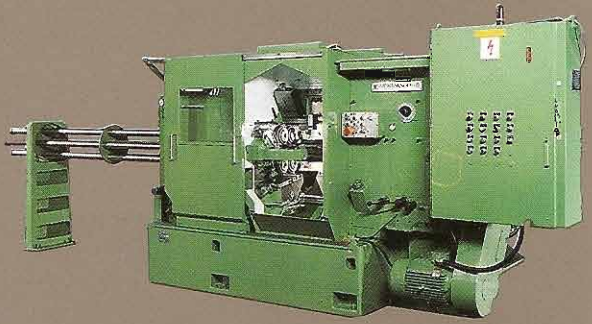
Bar Capacity round 1 1/4" - (44mm) Hexagon A/F 1.51" - (38.3mm)

Bar Feed length std. 1/2" - 7" (12-178mm)

Speed Range 32-2000 rpm

Range of Cycle Times 3.5-337 secs.

Also available with Spindle Stopping and double and long bar feed.



### 1" (25.4mm) x 8 SPINDLE BAR AUTOMATIC

The 1" x 8 has been developed to meet the demands of present-day technology to enable components to be produced in a shorter cycle time and also to enable more complicated components to be produced without the need for 2nd operation. It also provides for the use of simplified tooling to reduce the need of complicated form tools and offers considerable interchangeability of tooling and attachments with other machines in our range.

Bar Capacity round 1" - (25.4mm) Hexagon A/F 0.86" - (21.8mm)

Bar Feed length std. 0.5" - 7" (12-178mm)

Speed Range 200-2737 rpm

Range of Cycle Times 3.7-229 secs.

Also available with Spindle Stopping and double bar feed.

### 2 1/4" (57.00mm) x 6 SPINDLE BAR AUTOMATIC

A rigid-framed machine designed to cover the medium to larger bar components. Has extensive tooling area to facilitate the removal of swarf, and a wide cross slide to cover a large range of work.

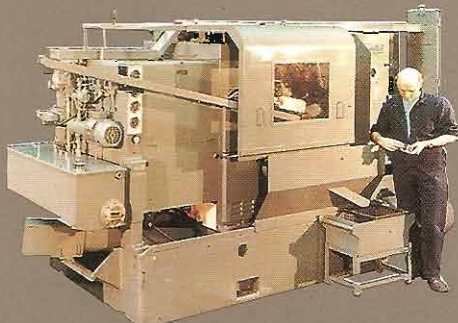
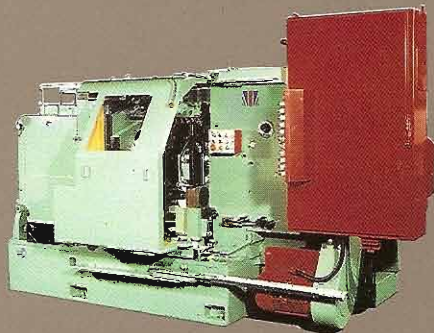
Bar Capacity round 2 1/4" - (57mm) Hexagon A/F 1.95" - (49.5mm)

Bar Feed length std. 1/2" - 10" (12mm-254mm)

Speed Range 111-1600 rpm

Range of Cycle Times 7-602 secs.

Available with Spindle Stopping and long double bar feed and double long bar feed.



### CHUCKING AUTOMATIC:

Available in Chuck sizes 5/8" - (145mm), 6/8" - (170mm)

7/4" - 6 - (186mm) and 8" x 8" - (154mm), with single or double indexing. Hydraulic chucking is standard. Standard Tooling and Attachments are interchangeable with the bar machines.

These machines can also be automatically loaded and coupled together in production lines.

### BAR AUTOMATICS

Other sizes include 2 5/8" x 6 - 3 1/4" x 6 - 1 3/4" x 8 can be made to order. Automatic loading of components on both bar and chucking machines is available.

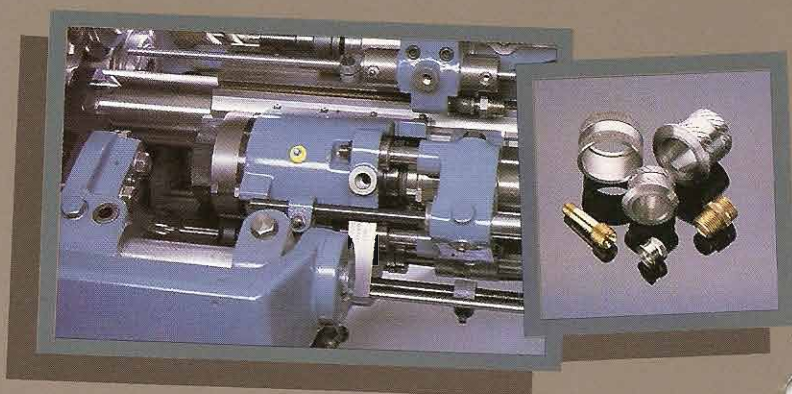


# toolholders and attachments

The built-in precision of the Wickman Multi-Spindle Automatics can only be fully utilized by efficient tooling. Thus, toolholders for both end working and cross slides have been designed to contend with the torsional and tangential cutting forces of modern technology and prime consideration has been given to the interchangeability of these toolholders between both machines and stations. Various types of Preset tooling of either Wickman design or proprietary types are available to permit presetting away from the machine. Also available are a comprehensive range of attachments designed to add many additional machining facilities, so enabling more components to be completed without the need for second operations.

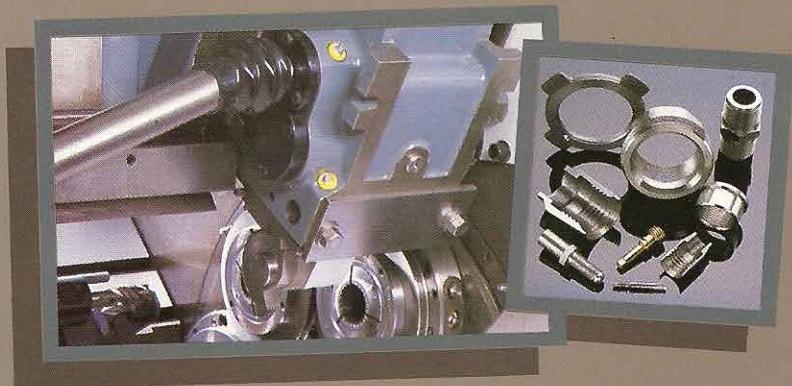
## PICK-UP ATTACHMENT:

The Pick-up Attachment supports the component in the part-off station and is driven synchronously with the work spindle. The Plain pick-up enables components to be produced without part-off pips. The more popular pick-up and back burr type enables components with through bores to be back burred. Other variations enable rear machining to be carried out. For very heavy duty work a rail type unit is available with rough and finish tools.



## THREAD CHASING:

The external chasing attachment will produce accurate threads concentric to other machined diameters. An Internal and Combined Internal and External Attachment is also available.



rebuilding

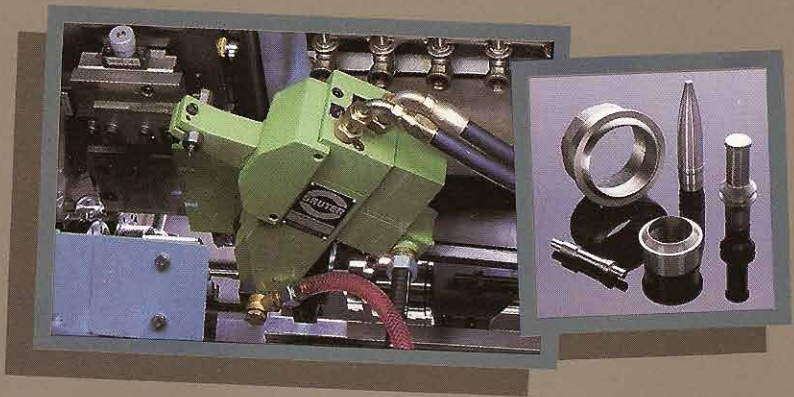


A full service for the complete rebuild of old machines to the latest specification is available. Alternatively partial reconditioning of various sections of used machine may be undertaken.



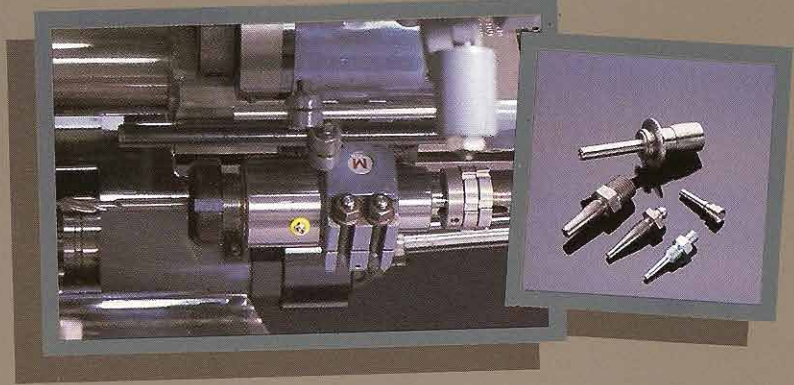
**COPY TURNING:**

This can be achieved by specially designed mechanical units or by proprietary hydraulically operated slide units, to eliminate expensive form tools and reduce the number of tools to produce the component.



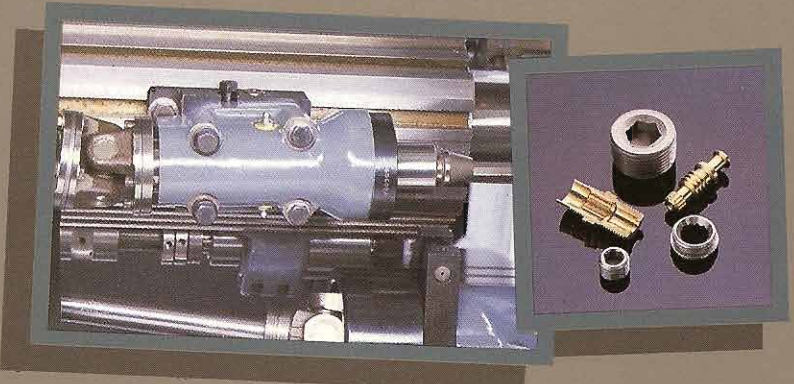
**HIGH SPEED DRILLING:**

This attachment can be fitted in any station and provides a means of obtaining the correct cutting speed for small hole applications.



**DRIFTING:**

This unit enables Internal and External forms, e.g. Hexagon, Splines etc. to be produced on ferrous and non-ferrous materials.



A comprehensive range of spares are available for both Wickman Multi Spindle bar chucking Autos and Wickman Optical Profile Grinding Machines.

Also, the complete inventory of standard toolholders and attachments is held in stock to meet the changing demands of modern production requirements.

spares and servicing



**SERVICE ENGINEERS**

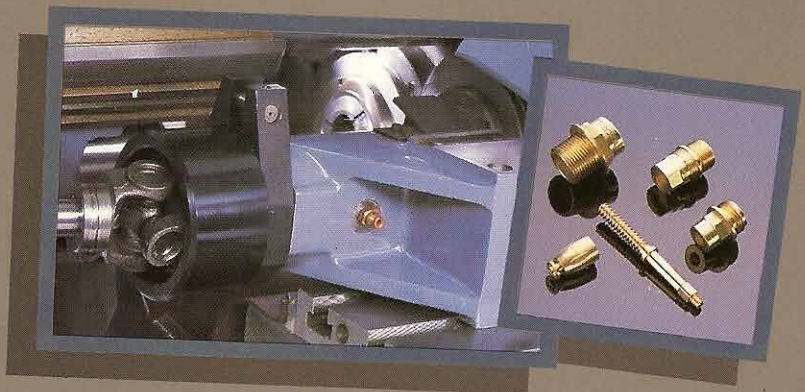
Our Service Engineers are always available to assist customers with installation, solving tool problems and breakdowns. We also offer a service contract to prevent unnecessary breakdowns and ensure maximum efficiency.





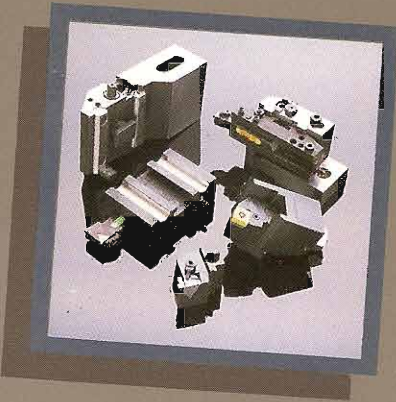
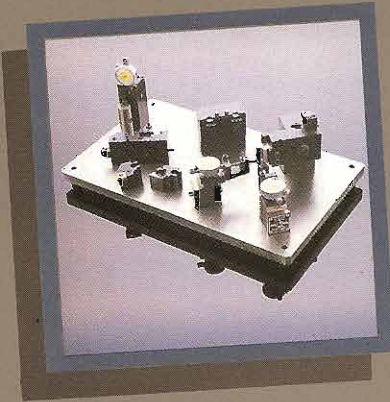
#### FLAT GENERATING:

Standard Wickman Units are available and generally used on non-ferrous materials to produce squares, hexagons and other polygon shapes. For ferrous metals a proprietary unit can be adapted.



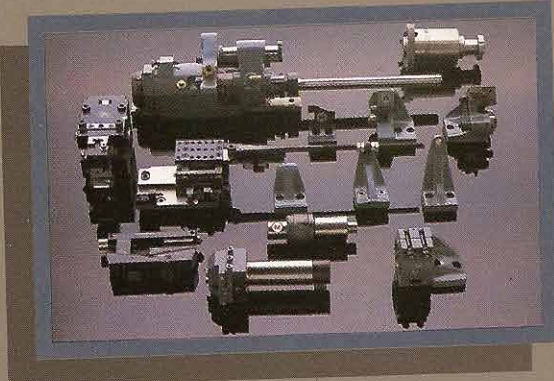
#### PRE-SET TOOLING:

With the ever increasing demand to reduce changeover and tool resetting times Wickman are able to offer pre-set tooling of either Wickman design or proprietary manufacture for both bar and chucking automatics.



#### OTHER ATTACHMENTS

Numerous other attachments are available including Burnishing, Thread Rolling, Cross Drilling, Saw Slotting, Milling, Special attachments can be designed to suit particular applications. Coolant filtration can be also fitted to our machines.



**auto bar loading and feeding**

Automatic Bar Loader and Feeder (which takes the place of the normal stock carriage) can be fitted to certain sizes of Wickman Bar Automatics. The unit automatically loads the bar into the machine, and deposits the bar remnant away from the tooling area. It will handle and feed round, hexagon and irregular shaped bars and effectively increases the machine capacity as no feed fingers and tubes are required. Increases of production in excess of 20% are being obtained where these units are installed.







Wickman-Bennett Machine Tool Co. Ltd. was formed by its parent company Ketlon (UK) Ltd in 1984, following the acquisition of Wickman Automatic Lathes and Webster and Bennett from the John Brown Group. The Wickman-Bennett and Ketlon combined facility and management expertise, affords a unique opportunity to strengthen the operation and endorses Wickman-Bennett's determination to maintain their position among the world's leading machine tool makers.



To meet the needs of continual developing production techniques, and to cope with ever changing manufacturing requirements, machine tools must not only perform at optimum cycle times, but be versatile, reliable and effective. Wickman Multi-Spindle Automatic Lathes meet these requirements by offering:

- Fast Cycle Times
- Easy and Rapid Change-overs
- Easy access to tooling area
- Flexibility to produce not only high volume but small/medium batch production.

With its wide range of attachments, the Wickman Multi-Spindle Lathe has become a machining centre, where a multitude of operations can be included within the automatic cycle. The complete model range has a quadrant system of stroke setting, which removes the necessity of cam changing. The system provides flexibility and offers economical production in smaller batches than is usually possible on Multi-Spindle Autos.

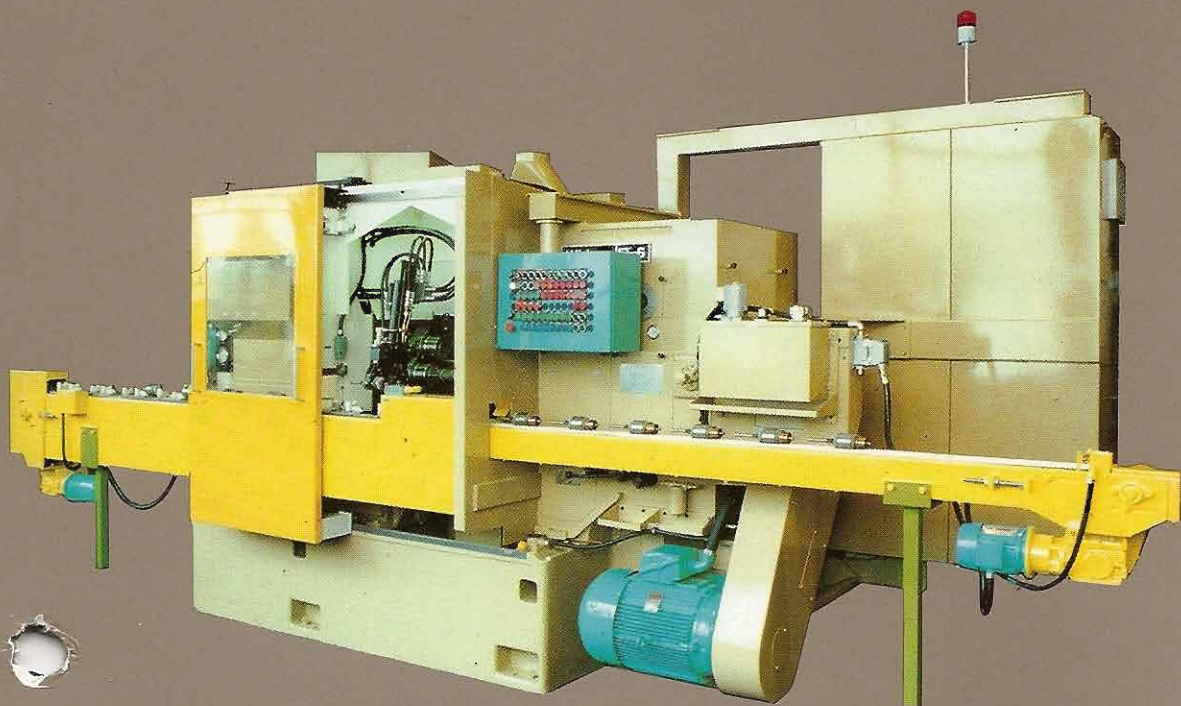
The comprehensive range of tooling and attachments, which can be interchanged between machines of the same frame size, will assure a consistent high standard of component quality, and eliminate the need for second operations. Where required, pre-set tooling; in-process gauging systems; automatic loading and process control facilities can be supplied. Machines are designed to conform to the latest Health and Safety requirements including easy accessible guarding, good tooling area lighting and filter-mist control to reduce air pollution.

The Wickman Optical Profile Grinder complements the Multi-Spindle Auto by producing to fine limits, profile tooling capable of meeting the demands of modern technology and methods. A Large Screen and Pantograph model are available.





*made to order*



Wickman Bar and Chucking Automatics can be made to order to include such features as increased spindle speeds, reducing indexing times and an increased bar capacity to cover special applications. Automatic loading is available for all machines, these can be integrated into production or flow lines as illustrated.



**CUSTOMER TRAINING:**

Training Courses for Tooling Engineers and for Setters are available on our Multi Spindle Autos and a training course for Optical Profile Grinding Machine Operators is available at Banner Lane or in the customer's works.

## *optical profile grinding machines*

Designed to grind to fine limits any profile and is especially suitable for the accurate grinding of irregular shapes of flat, or circular form tools, male or female profile gauges, punches and die segments in any material including tungsten carbide.

Two types of machine are available. Large Screen and Pantograph. Machine can be equipped with D.R.O.

A wide range of attachments and equipment are available including Circular Grinding, Cutter Indexing, Punch Indexing, Form Relieving, Small Grinding Wheel Attachment, Wheel Balancing and Dust Exhaust Unit.



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We reserve the right to alter the specification of our machines without prior notice.



**WICKMAN  
BENNETT**



# WICKMAN 30mm-6 SPINDLE BAR AUTOMATIC with built-in FULL PRE-SETTING FACILITIES

The machine is equipped with stock carriage (not shown) for 3.7 metre long bars,  
or can be fitted with automatic bar loading/feeding systems



The WICKMAN BUILT-IN PRE-SETTING SYSTEM offers:-

FASTER CHANGEOVERS

SUPER ACCURATE TOOL RE-SETTING

HUGE DOWNTIME SAVINGS WITH FAMILIES OF PARTS

FULLY PRE-SETTABLE THROUGHOUT THE MACHINE'S CAPACITY (unlike "add on" systems)

**THIS MACHINE INCLUDES A FULL RANGE OF PRE-SET TOOLHOLDERS AND AN OPTICAL SETTING UNIT**



GENERAL VIEW OF THE TOOLING AREA

Contact: WICKMAN MACHINE TOOL MANUFACTURING COMPANY LIMITED  
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