

UG760 (30'') - CG760 (30'')

**ULTRAGRIND
DOWN FEED**

**CRASH TYPE
GRINDER**



**BENNETT
MAHLER**

**GREATER
PRODUCTION & QUALITY...
...BY DESIGN**

BENNETT 760mm (30") GRINDERS

IMPROVED
QUALITY

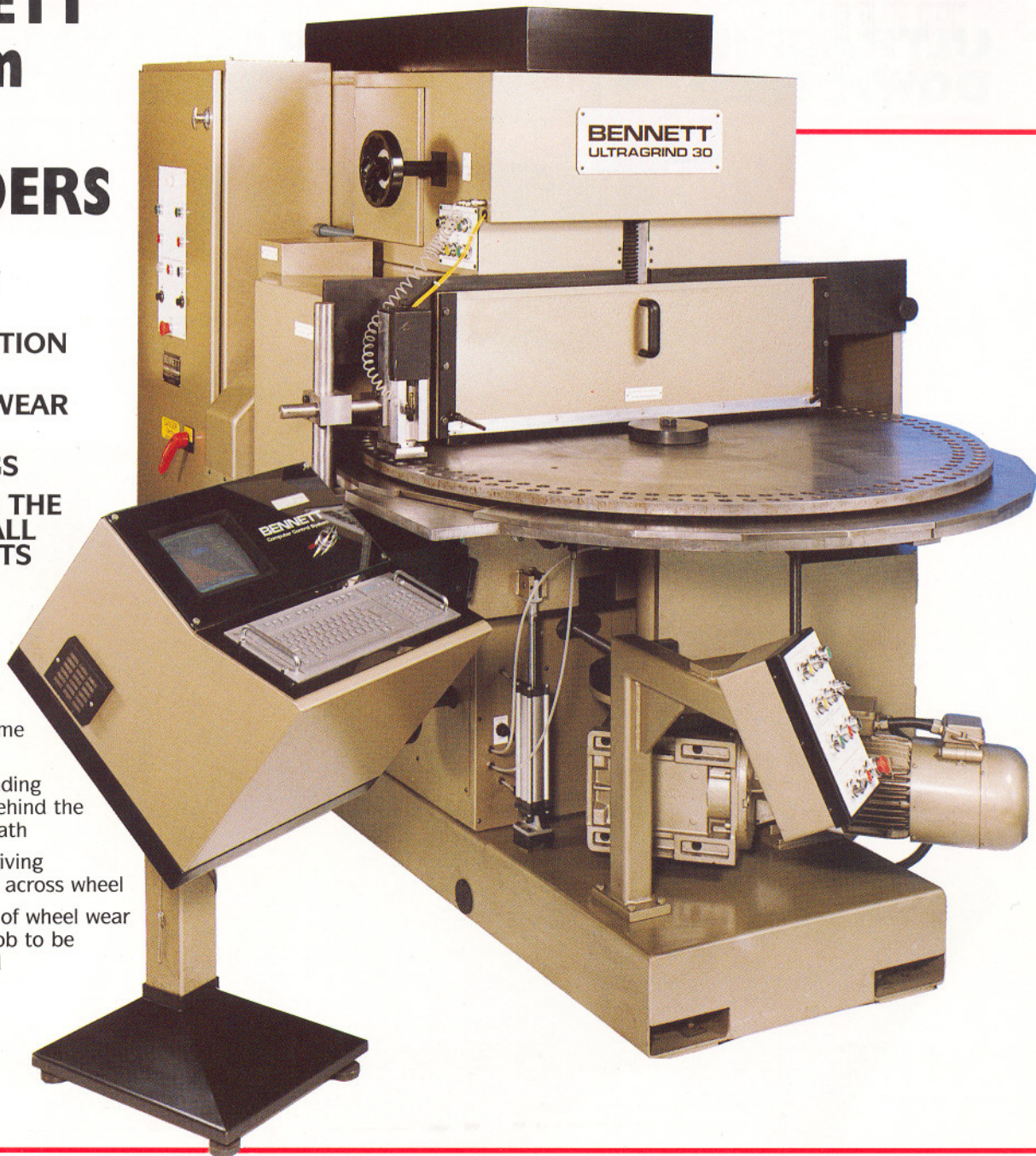
GREATER
PRODUCTION

REDUCED
WHEEL WEAR

ACCURATE
COSTINGS

NOT ONE OR THE
OTHER BUT ALL
FOUR BENEFITS
ACHIEVED
BY...

- Simple computer control giving *optimal* grinding programme for each spring
- Better use of grinding wheel by using behind the centre grinding path
- Top wheel tilt – giving progressive grind across wheel
- Constant display of wheel wear – allowing each job to be accurately costed



DESIGNED FOR 24 HOUR PER DAY PRODUCTION

- Fabricated steel frame and steel base giving vibration free operation
- Poly-Vee belt drives to wheel spindles for reliable operation
- Lower guides with replaceable hardened steel segments
- Heavy duty table drive unit
- Automatic wheel wear compensation available

DESIGNED FOR RAPID SET-UP

- Rapid traverse by push button control on top and bottom wheels
- All controls located for operator convenience
- Fine inching of grinding heads to within 0.025mm (0.001") control
- Wheel position displayed on UG-760 down feed type
- Work table will swing out for quick set up and wheel change
- Hand wheel adjustable guides (Top guide automatically positioned on UG-760)

DESIGNED FOR REDUCED DOWN TIME

- Loading arm for changing both grinding wheels. Wheels can be changed in less than 30 minutes
- Rugged and removable dresser actuates along the wheel tilt dead centre. No need to remove tilt for dressing
- Bennett grinding principles and experience have resulted in vastly improved grinding wheel life in the heaviest and toughest of applications
- Air cylinder operated safety guards with safety locks

DESIGNED FOR SIMPLICITY OF OPERATION

- The Bennett UG-760 offers the ultimate in computerised control of downfeed grinders as standard
- The Bennett CG-760 Crash Type Grinder can be fitted with automatic length measuring and wheel wear compensation as an option. Optimum positioning of each grinding wheel is achieved by a programmable ratio computer. This allows accurate springs to be ground constantly

BENNETT UG-760 ULTRAGRIND - WITH TOTAL COMPUTER CONTROL

Bennett lead the way with the computerised control of Spring End Grinders. The UG-760 incorporates the latest, most comprehensive yet simple to set up computer control.

An extremely fine, yet flexible control of each step of the grinding action is achieved. This allows all spring designs to be successfully ground.

You can operate the Grinder:

- Manually
- Semi-Automatically
- Fully Automatically with wheel wear compensation
- Fully Automatically with in-cycle spring measurement

High production rates and high precision are achieved by dividing the total grinding cycle into four phases. Each phase allows the specific programming of downfeed rate and phase time giving optimum control on the rate of metal removal resulting in superior grinding quality.

Wheel wear and frequency of dressing are reduced to a minimum, thus cutting cost and improving productivity.

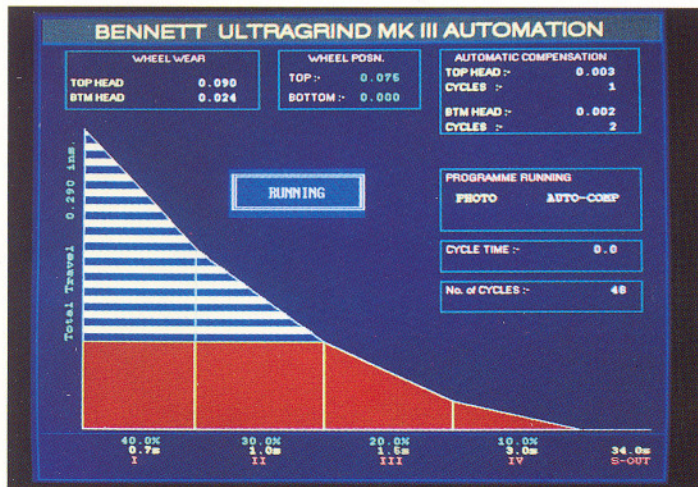
BENNETT UG-760 COMPUTER CONTROL

*PC Control

- IBM compatible system
- Multiple choice menu driven programme only requiring numeric inputs plus user specified part names
- Extremely simple to programme
- Recall of existing programmes stored in memory in seconds. Over 1,000 programmes can be stored
- Multi-function industrial environment sealed keyboard and pressurised computer console with safety glass over monitor
- Sequences grinder operation, load/unload

*Colour Monitor Display

- True graph line information on rate and length of downfeed
- Displays 4 independent downfeed sections (operator adjustable)
- Infinitely variable downfeed speeds on all grinding sections
- Top and bottom wheel wear display
- Point of cycle indication



BENNETT PLC AUTOMATIC FEED SYSTEMS... ...THE WAY TO HIGH VOLUME PRODUCTION

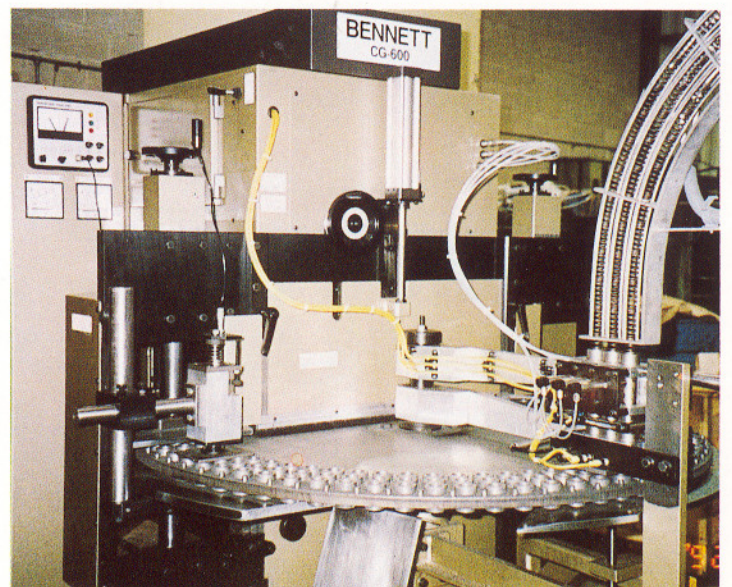
AUTOMATIC FEED SYSTEMS CONTROLLED BY A PROGRAMMABLE LOGIC CONTROLLER ARE AVAILABLE AS AN OPTION. THEY ARE IDEALLY SUITED TO FEEDING MULTIPLE ROWS OF SPRINGS TO BENNETT CG-760 GRINDERS.

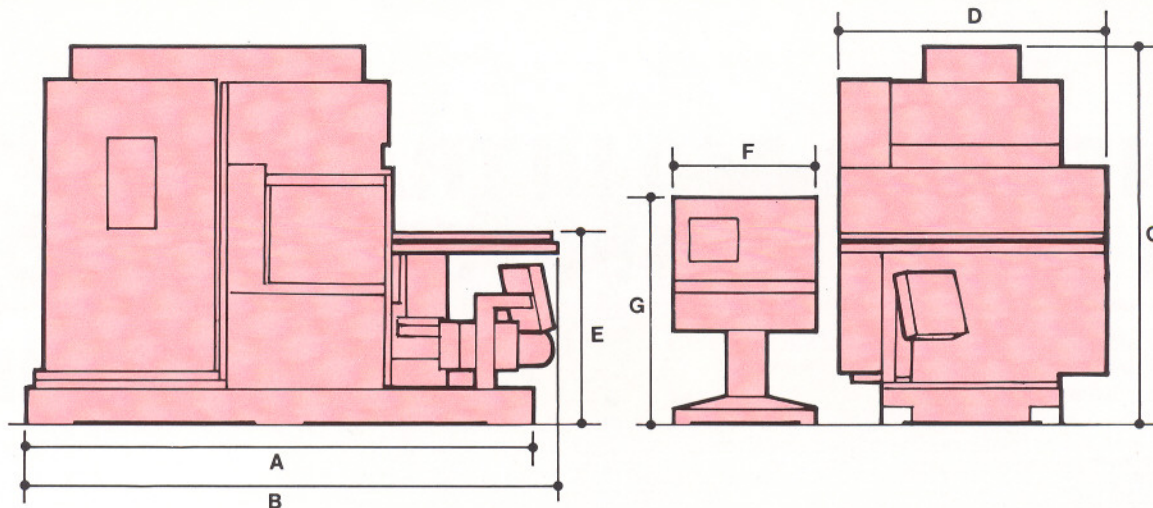
OUT GOES - THE PAST

- No more cams
- No more mechanical trips
- No more heavy arms with a lot of inertia
- No more difficulties feeding several rows

IN COMES - THE FUTURE

- Blockages can be removed and feeding resumed within a minute
- Quick release top arm
- Two lightweight feed arms. Top one remains stationary and accepts springs from bowl. Bottom arm indexes with worktable
- Programmed sequencing and time delays give precise interaction of movements
- Visible warning of misfeeds and no feeds





Specification:

Max. wire size UG-760	20mm	(0.79")
CG-760	7mm	(0.28")
Max. grinding path width	127mm	(5.00")
*Max. spring length	300mm	(11.8")
Table speed-variable		
UG-760	RPM.	0 -12
CG-760	RPM.	0 -1
Table diameter	1420mm	(56.0")
Grinding Wheel Dimensions	760x75x200mm	(30"x3"x8")
Head motors-each	18.5KW	(25HP)
Table motors UG-760	3.0KW	(4HP)
CG-760	1.5KW	(2HP)
Dust extraction required	102m ³ /min	(3600CFM)
Quantity/size extractor ports	2x230mm	(2x9")
Compressed air req. at 5 bar (intermittent)	0.71m ³ /min	(25CFM)

*Longer versions available on request

Dimensions:

Grinder:	A	2000mm	(79")
	B	2300mm	(91")
	C	2100mm	(83")
	D	1610mm	(63")
	E	1135mm	(45")
Console (UG-760)	F	505mm	(25")
	G	1160mm	(46")
	Depth H	700mm	(28")

Shipping spec.:

Nett weight:	5385Kg	(11870 lbs)
Gross weight	6250Kg	(13775 lbs)
Shipping dimensions	Cm	292x191x246
	(In)	115"x75"x97"
UG-760 Console	Cm	90x80x170
	(In)	35"x31.5"x67"

Standard Features:

- Motors and control gear
- Top head tilt with indicator
- Wheel mounting arm
- Pneumatic guard lifting device
- One blank 20mm thick worktable
- Dressing attachment
- One pair of grinding wheels
- Inching mechanism by pushbutton to top and bottom heads.
- Rapid traverse to both heads
- Panel mounted motor/table controls
- Front mounted grinder operation controls and emergency stop.
- Compressed air supply filter/regulator
- Ultragrind computer control (Note 1) including:-
- Free standing computer console and wiring harness.
- IBM compatible PC unit with four programme choice
- Proprietary software
- Colour monitor display.
- Automatic wheelwear compensation
- Spring length measurement
- Wheel wear and position indication
- Top guide automatic adjustment to wheel position (Note 1)

Optional Extras:

- Dust extractor unit
- Special air cooling for wheels
- Wheel wear compensation system with programmable logic ratio controller (Note 2)
- Spring length measuring gauge with measuring head and visual 3 light indicator of under, good and over length (Note 2)
- Constant digital readout of wheel positions (Note 2)
- Automatic feed system of springs with vibratory bowl, all control and protection devices.
- Twin (4 wheel) model available for the CG-760
- Tables/bushes for special requirements.

Note 1:- UG-760 only

Note 2:- CG-760 only



BENNETT MAHLER

BENNETT MAHLER LIMITED

2 Merse Road, North Moon Moat Industrial Estate, Redditch, Worcestershire. U.K.

Tel: (0) 1527 64444 or 62304

Fax: (0) 1527 591668