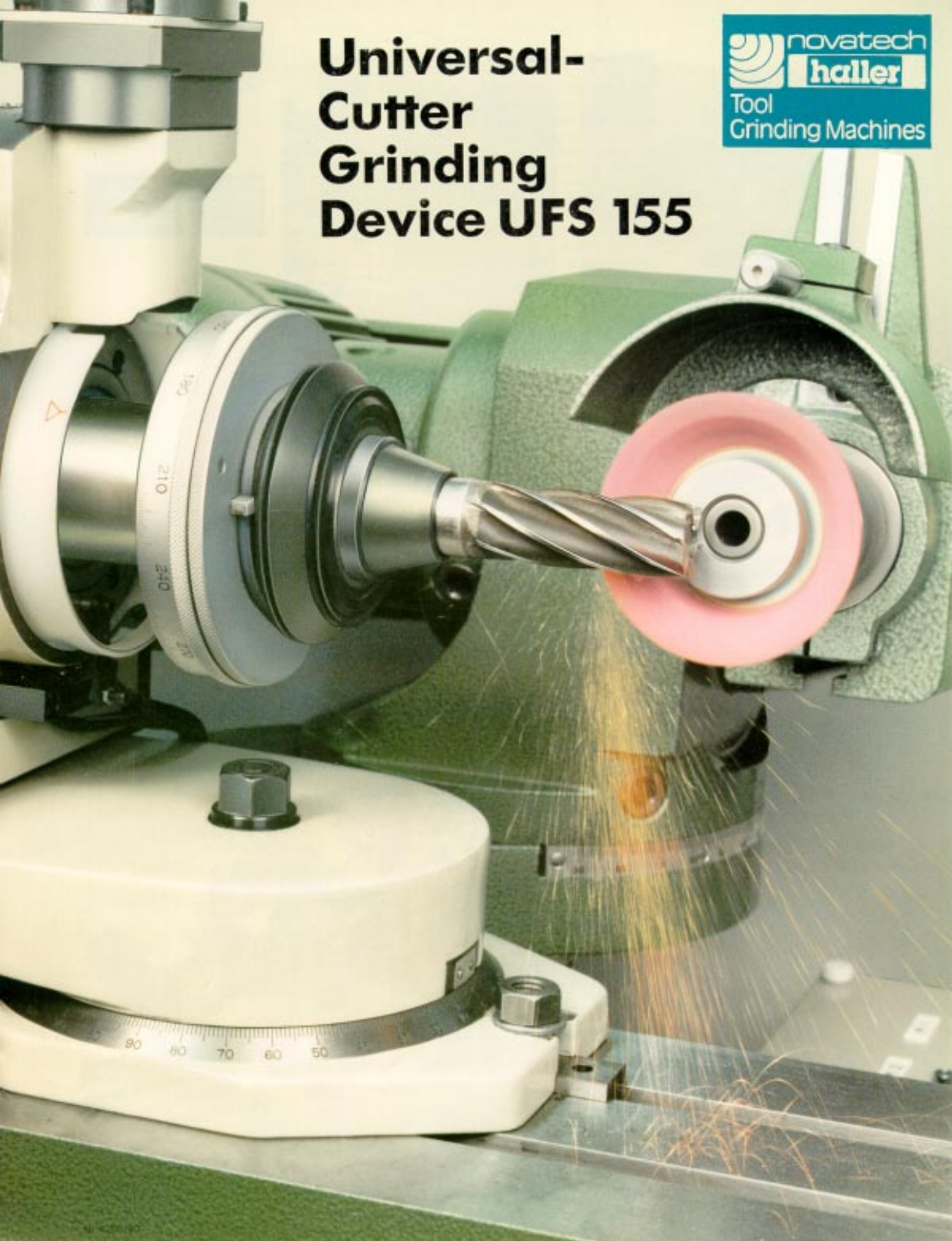


# Universal- Cutter Grinding Device UFS 155

 novatech  
**haller**  
Tool  
Grinding Machines



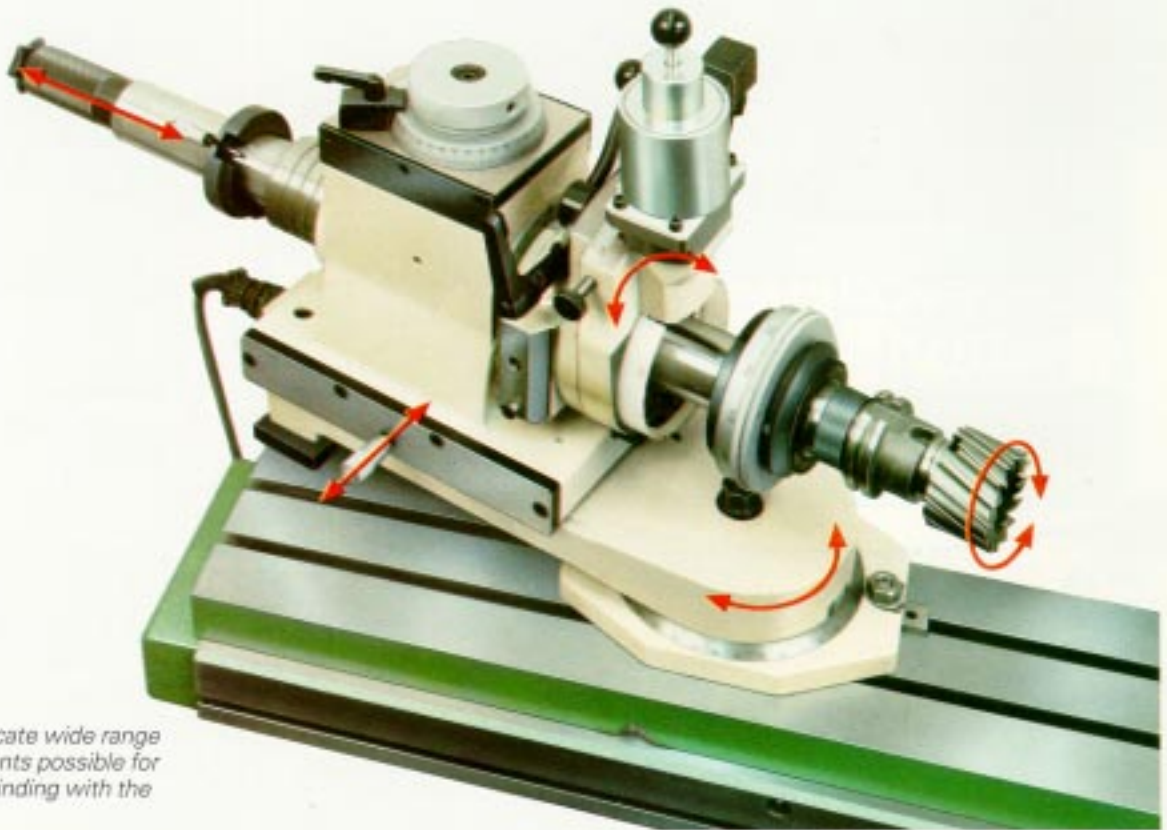
### Universal Application

The Universal Cutter Grinding Device UFS 155 has repeatedly proven itself during manual grinding of straight and spiral fluted cutting tools. Unlike sine bar systems, the UFS 155 offers many advantages and is extremely easy to use. Additionally, it can be easily retrofitted to any conventional tool and cutter grinder.

### Universal Features

- Simple operation
- Backlash free spiral grinding
- Fast, easy spiral set-up, infinitely variable from 0-infinity left or right hand
- Grinding length of 6.1" (155 mm) independent of spiral setting
- Multi operation of finger support
- Tangential set-up independent of spiral set-up
- Grinding of the radial rake and peripheral angles, as well as the ends in one chucking
- Simple installation
- Can be mounted on either left or right hand side of grinding wheel spindle
- Perfect cylindrical grinding without "indicating" work head
- Grinding of HSS, Carbide and Diamond tools

## Universal Cutter Grinder UFS 155



*Arrows indicate wide range of adjustments possible for precision grinding with the UFS 155*

**Flexible  
Application**



*Grind the radial rake angle*



*Grind the clearance angles*



*Grind the clearance angles on the end*



*Grind an axial relief angle*



**Superior  
Design –  
Quality  
Construction**

**Rugged construction –  
Precision performance**

The Universal Cutter Grinder UFS 155 is equipped with a mechanically controlled spiral grinding mechanism. It is possible to set up any spiral from 0 to infinity, left or right hand and infinitely variable.

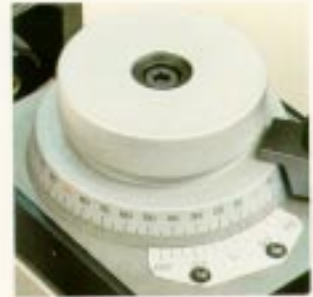
The spiral grinding mechanism works without backlash to guarantee on exact helix angle.

Preloaded ball bearings facilitate the radial and axial motion of the workpiece spindle and the spiral motion is effected by a magnetically activated control roller.

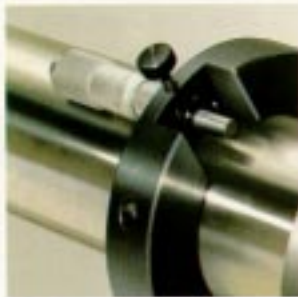
The infeed of the workpiece spindle is generating the desired helix angle which can be set by manually adjusting the control roller.

While indexing manually, the control roller and the index mechanism are activated magnetically.

When grinding with the support finger the control roller is lifted and the work spindle is free in both axial and radial directions.



**1** Scale for infinitely variable helix angle adjustment



**6** Adjustable axial spindle stop with micrometer



**7** Cross slide with micrometer for precise sizing of tool diameter





**2** Radial infeed with micro adjustment  $\pm 20^\circ$ , independent of spiral setting



**3** Magnetically activated indexing mechanism



**4** 24 position indexing plate standard (optional to 38) with 360° adjustable calibrating scale



**5** Rotating base plate to adjust for grinding position

Control Device for:

- Index mechanism
- infinitely variable pressure of control roller, including disengaging. Can be operated by either a foot or hand switch.



## Installation Opportunities

The Universal grinder UFS 155 can be mounted on any Tool & Cutter Grinder regardless of its age, make or model.

Table movement is eliminated by the manually activated precision workpiece spindle.

To maximize its operation, the grinding wheel spindle should be adjustable for height, tilt, and swivel.

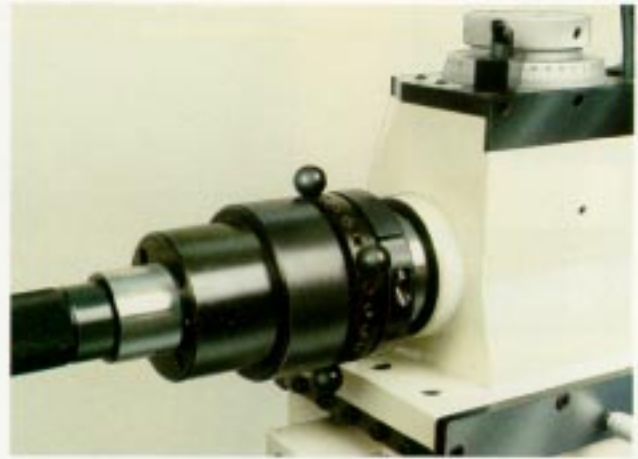


Installation examples are:  
Cincinnati # 2  
K. O. Lee  
Hybco  
Seneca Falls  
Gedding/Lewis  
Gallmeyer and  
Livingston  
Deckel  
Saacke  
and many more

Christen AU-150  
Universal Tool & Cutter  
Grinder

Featuring:  
UFS 155 spiral grinder 5-axis  
grinding wheel head  
Radius grinding built in

*Indexable axial cam relieving attachment*



**Accessories  
for various  
Applications**

*Support Finger*



*Dial Indicator to set up helix*



*Base adapter for mounting  
various measuring devices  
and set up gages*



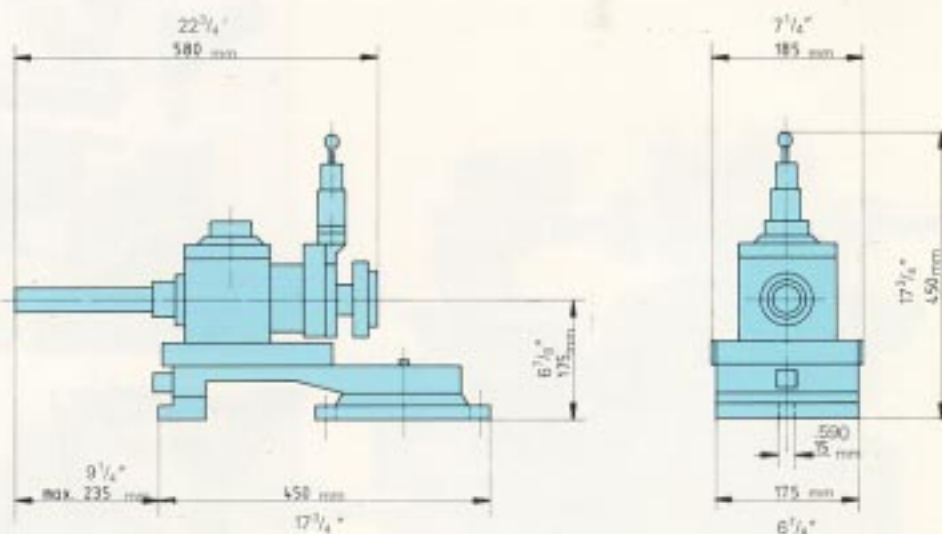
contact us for the latest  
accessory list

Universal Cutter Grinder UFS 155 – including accessories

**Technical Data**

Tools and Adapters	Center Height	inches	6 1/4"	mm 175
	Maximum Tool Weight	lbs	33	kg 15
	Workpiece spindle taper	NST	40	ISO 40
		Morse Taper	5	MK 5
	Industry standard toolholder available Collet for direct chucking into Workpiece spindle Indexing Device	up to Index	1" 2-38	mm32
Working Range	Spiral flute and axial relief grinding infinitely variable, left and right hand			
	Helix Angle	Degree	0-90	
	Grinding Length	inches	6.1	mm 155
	Cross Slide	inches	.393	mm 10
	Rotating Base	Degrees	360	
Electrical	Control Box with Footswitch	piece	1	
	Handswitch	piece	1	
	Electromagnet	piece	2	
	Secondary Power	volts	24	
	Primary Power	volts	110	
Dimensions	Length	max. in.	27	mm 685
	Width	inch	7 1/4"	mm 185
	Height	inch	17 1/4"	mm 450
	Weight	lbs	176	kg 80

Specifications subject to change without notice.



**SALES:**

(800) 866-NOVA (6682)

**Showrooms:**

Boston, MA  
Chicago, IL  
Columbia, SC  
Detroit, MI  
Phoenix, AZ  
Philadelphia, PA  
Seattle, WA

Please ask for General Catalog



**Tool Grinding Machines**