

FARMAN

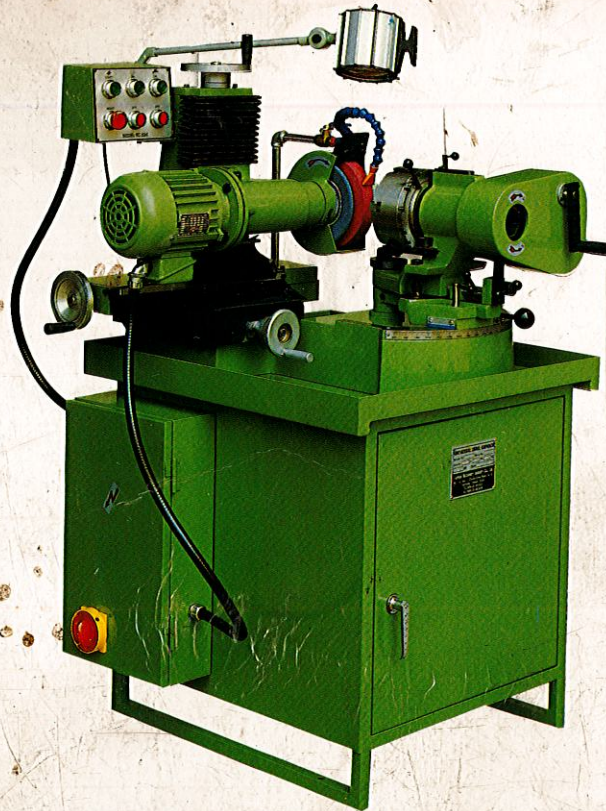
FARMAN

UNIVERSAL DRILL GRINDER

THE FARMAN PRECISION DRILL GRINDER

The affordable approach for providing the accuracy and versatility needed to reduce your drilling costs

Model FC-50N



SIMPLE TO OPERATE: Unskilled workers can quickly learn to produce perfect drill points. Set up and grinding is fast and the web can be thinned in a few extra seconds.

ACCURATE: Rugged construction and precision components assure accurate and repeatable results for many years of heavy use. The heavy duty compound slides and one-piece cast iron base provide extra rigidity and minimize vibration. The workhead incorporates precision needle roller and thrust bearings, with the exception of the main chuck spindle, which utilizes a rotalin bearing for which total deflection is less than .0002". The six-jaw chuck accurately centers the drill which ensures that the cutting lips are ground equally in both length and angle to produce a precision point.

VERSATILE: The range of points that may be ground is astounding: Right-hand and left-hand drills with point angles between 80° and 180°, core drills, plastic points, double-angle points, center drills, carbide drills, step drills, subland drills, and taps! Also a number of **NC self centering points** can be ground, including split, four-facet prismatic, and spiral. The cutting lips can also be corrected.

SPECIFICATIONS

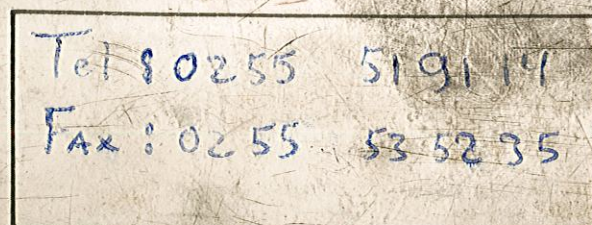
	FC-50N(DUAL CAM)	FC-80N(SINGLE CAM)
Drill size	$\frac{3}{32}'' \sim 2''$ (2.5mm-51mm) straight or taper shank (1,2,3,4,5,6 flute)	4mm ~ 80mm(2,4,6 flute)
Point angles variable clearance	40° ~ 180°	40° ~ 180°
Motor	1/2HP single or 3 phase totally enclosed fan cooled	1 1/2HP
Grinding wheels	Main wheel $7'' \times 1 \frac{1}{4}'' \times 1 \frac{1}{4}''$ (180mm $\times$ 32mm $\times$ 31.75mm) Point thinning dish wheel $6 \frac{5}{8}'' \times \frac{7}{8}'' \times 1 \frac{1}{4}''$ (165mm $\times$ 21mm $\times$ 31.75mm)	Mainwheel 180mm $\times$ 50mm $\times$ 31.75mm
Net weight	250kg	290kg
Grinding the end of end mills	2, 3, 4, 6, 12 flute	2,3,4,6,12 flute
Dimensions	30'' $\times$ 37'' $\times$ 52'' (750mm $\times$ 925mm $\times$ 1300mm)	32'' $\times$ 40'' $\times$ 52'' 800mm $\times$ 1000mm $\times$ 1300mm

STANDARD ACCESSORIES:

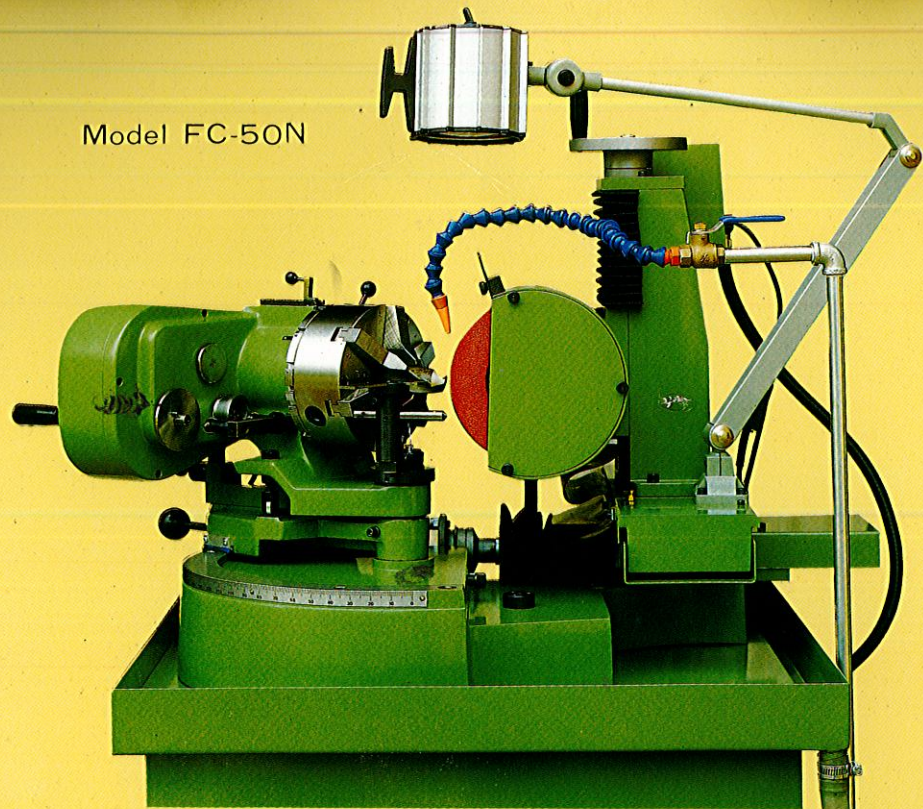
- One 6 jaw self-centering chuck.
- One grinding wheel (recessed one side)
- One "dish" grinding wheel for point thinning.
- Grinding wheel flange and balancing weights.
- Two grinding wheel diamond dressers (one angle dresser and one straight).
- No. 1, 2, 3, 4 Morse Taper sleeve.
- Cam No. 4, 6, 8 for right hand drill.
- A.C. motor.
- Tools for general use.
- Service/instruction manual.

OPTIONS

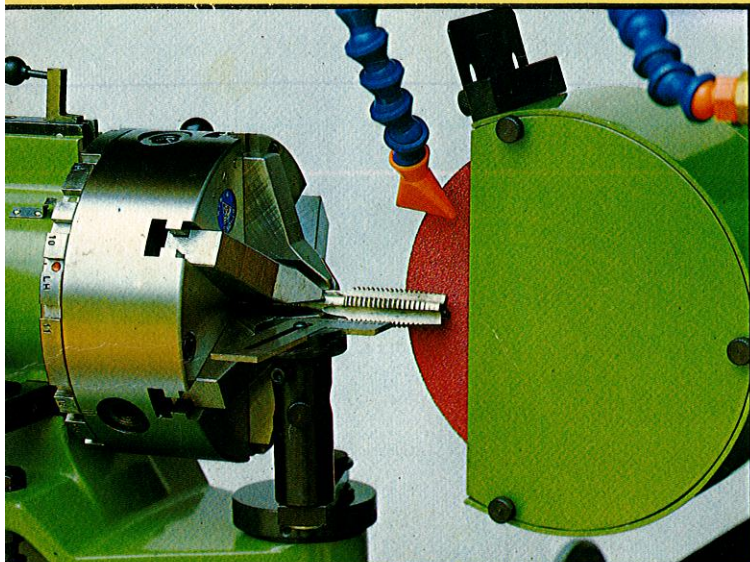
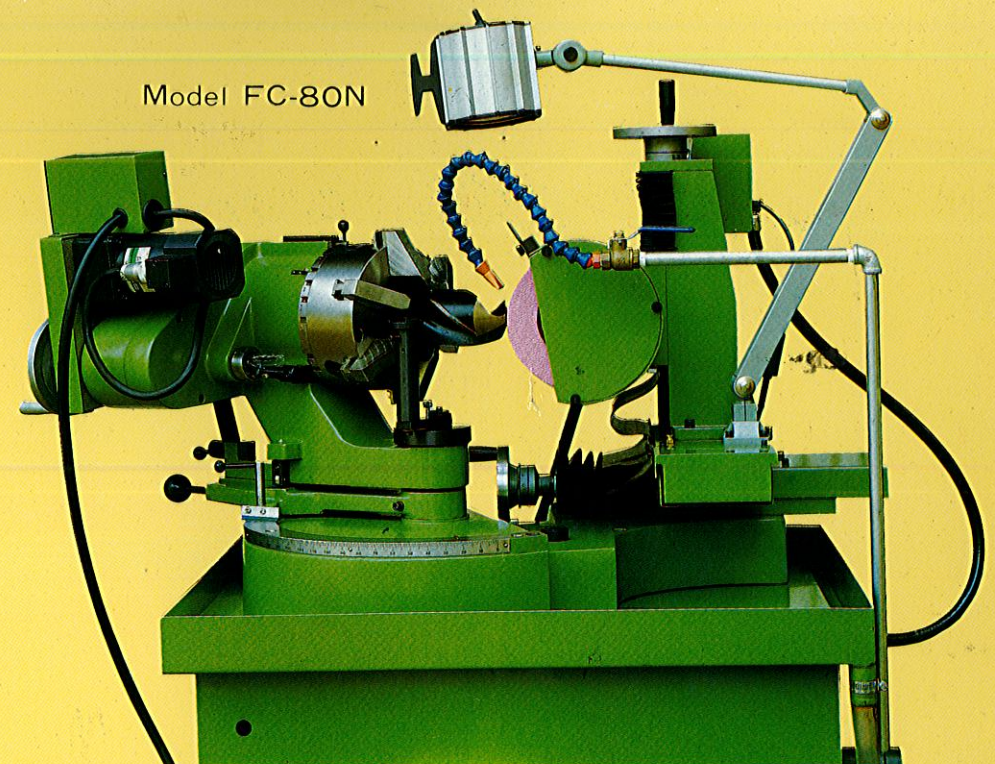
- Flood coolant system. Increases wheel life and prevents burning of drill.
- Silicon carbide and diamond wheels for carbide drills.
- Radial relief attachment. Relieves radius of pilot to produce lands. Also for sharpening end mills.
- Work light (12 Volts).
- Wheel balancer.
- Single flute attachment. (FC-80N)
- Auto cycle motor.
- Extra grinding wheel flange for cup wheel.
- Cam for 3, 6, flute taps. (FC-80N)
- Cam for left hand drills.
- Cam for spiral point drills.
- Cam for sheet metal point drills.
- Cup grinding wheel.
- Cam for 1 flute grinding (For dual cam M/C only).
- Cam for 3 flute grinding (For dual cam M/C only).
- Cam for 5 flute grinding (For dual cam M/C only).



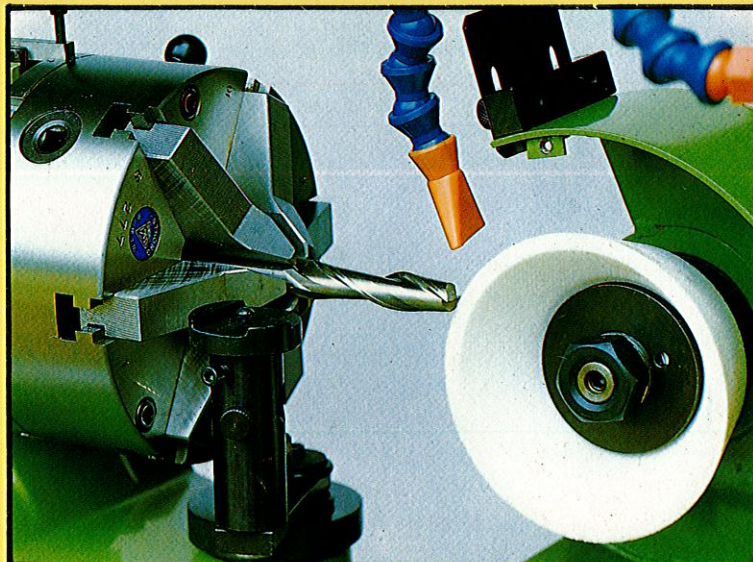
Model FC-50N



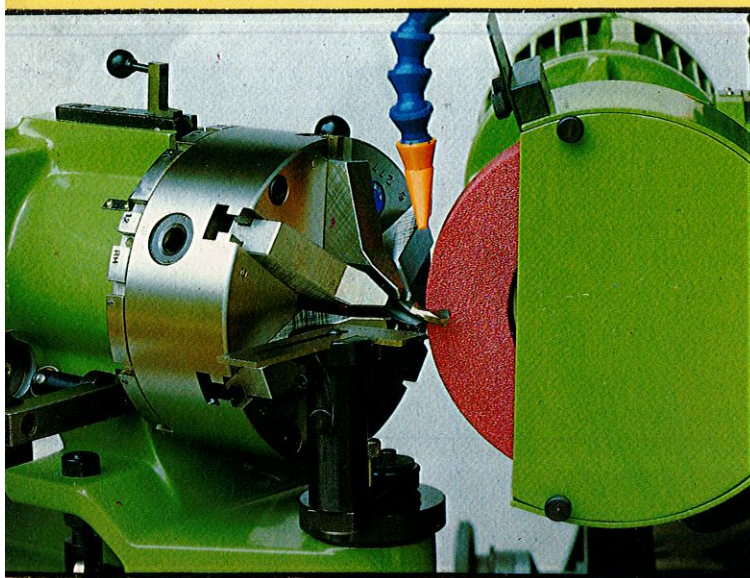
Model FC-80N



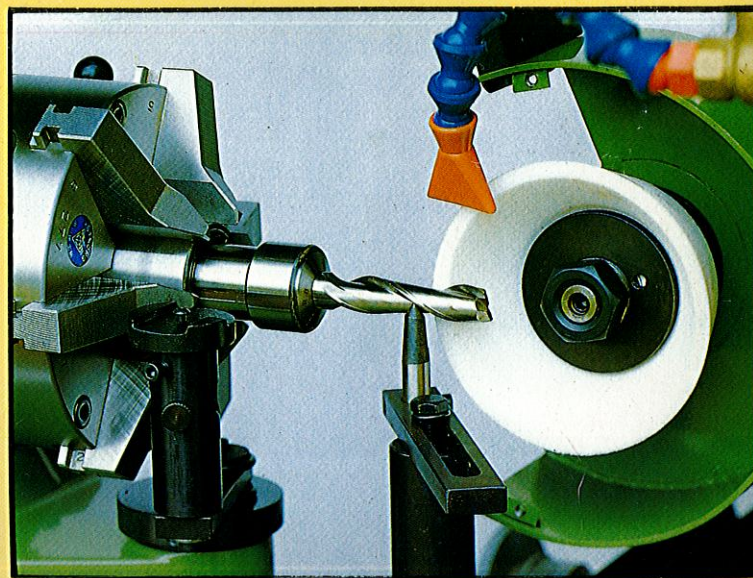
Core drills, or taps and reamers etc, of 2, 3, 4 and 6 flutes can be taper point-ground.



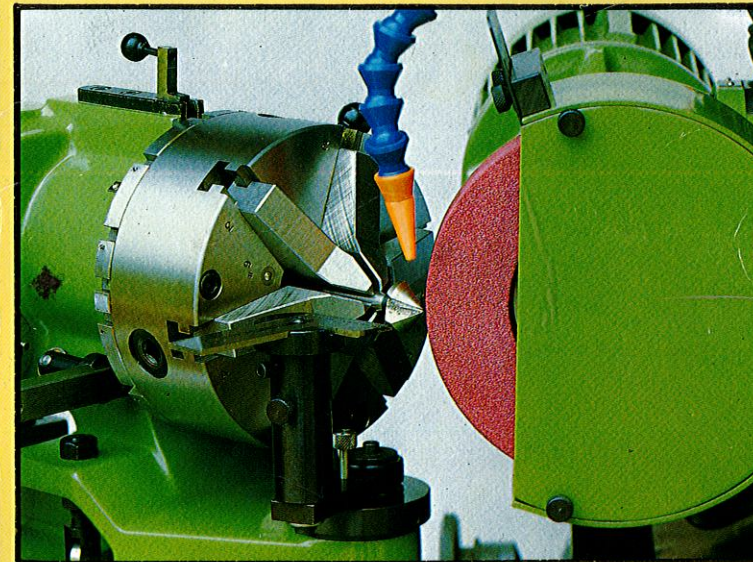
On these machines, Grinding the end of end mills, cutters is Standard Equipment.



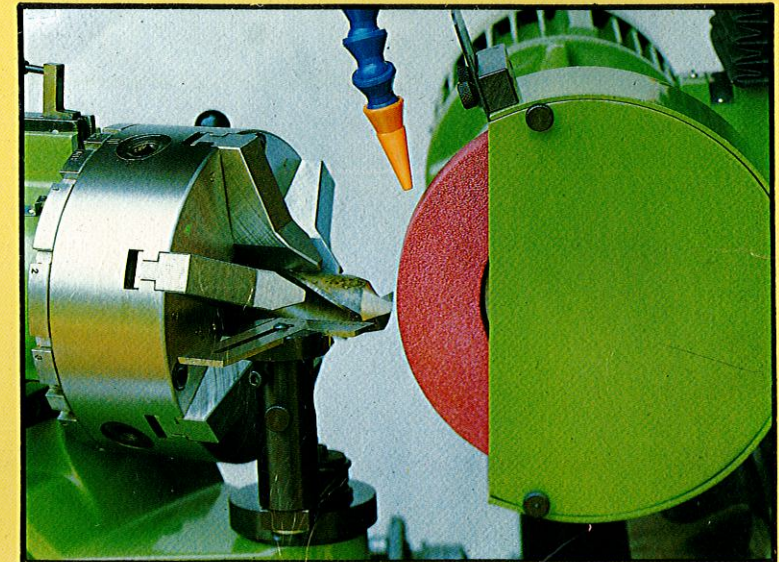
The shoulder of a stepped drills may be ground



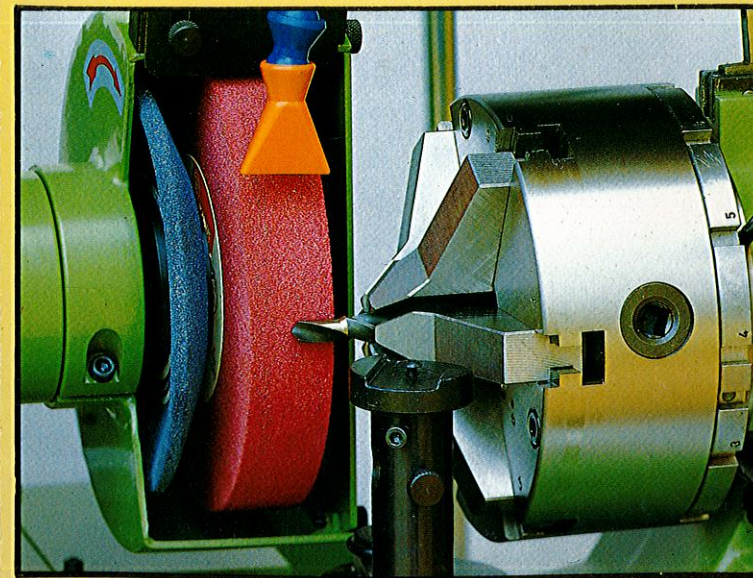
Radial relief attachment. (OPTIONS)
With this device, a flank can be formed over the cylindrical margin of the smaller diameter section of standard twist drill. Also for sharpening end mills.



Grinding Counter-Sink drills (1, 3, 5 flute)



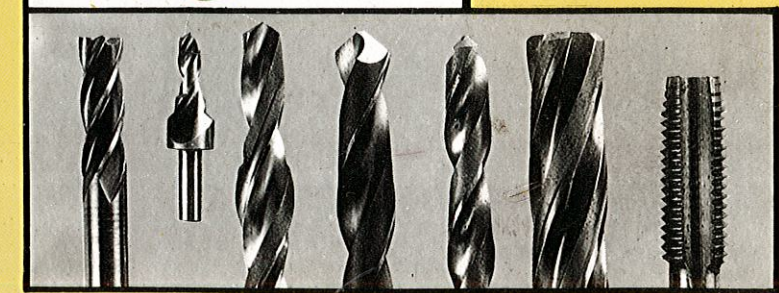
Grinding stand point drill.



grinding the smaller-diameter section, of step drills



Wheel balancer
(Option)



SOME GRINDING EXAMPLES