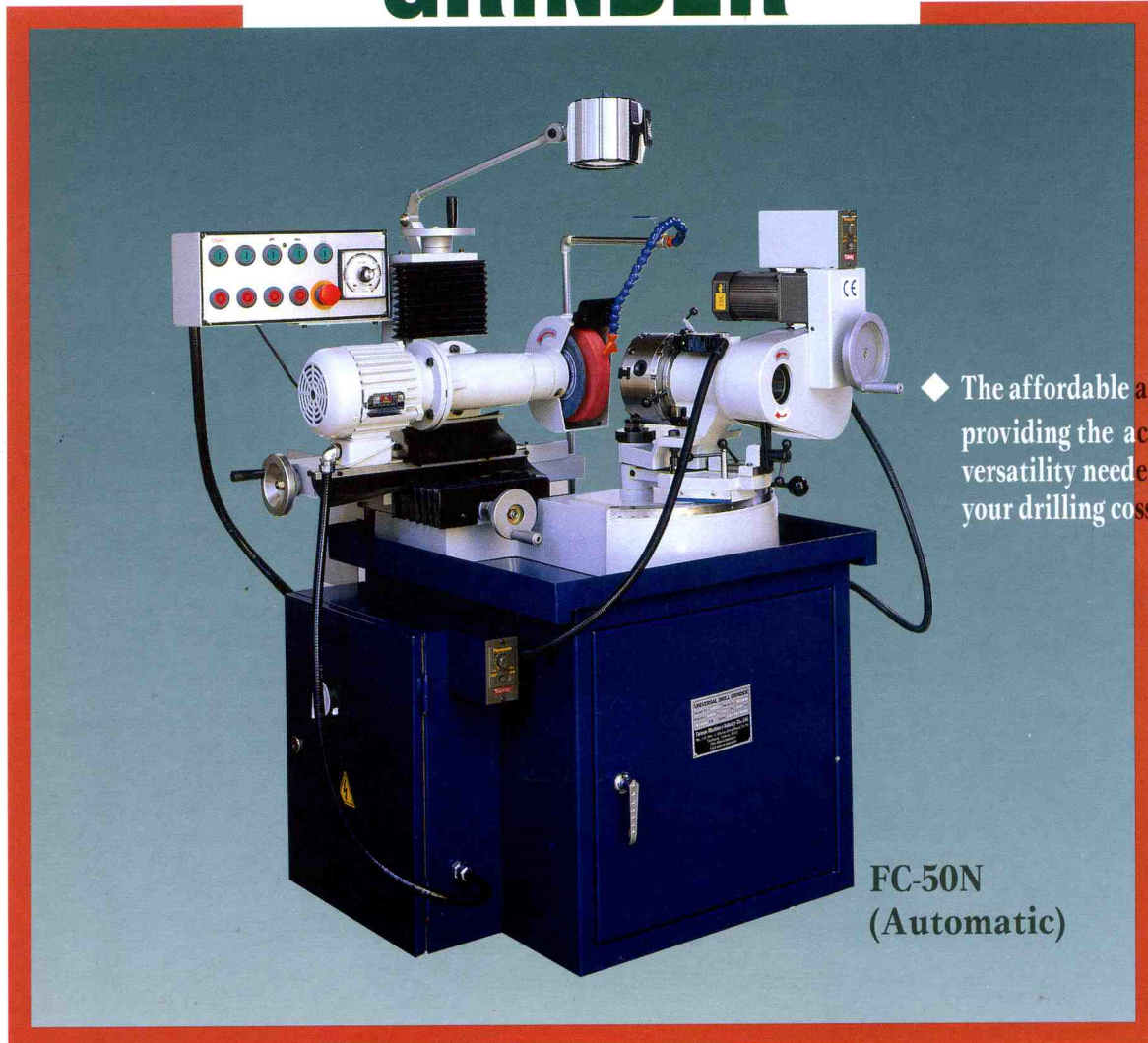


FARMAN

UNIVERSAL DRILL GRINDER



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

**FC-50N
(Automatic)**

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 roller bearing for which total deflection is less than 0.005mm. 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

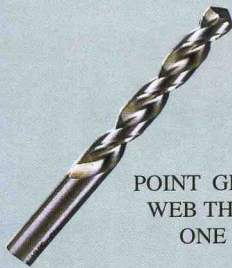
- The range of points that may be ground is astounding: Right-hand and left-hand drills with point angles between 80° and 180°, cored drills, plastic points, double-angle points, center drills, carbide drills, step drills, subland drills, and taps! Also a number of NC self-centering points can be ground,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

FARMAN

UNIVERSAL DRILL GRINDING



COUNTER SINK AND
COUNTER BORE DRILLS
(1,3 FLUTE)



POINT GRINDING AND
WEB THINNING WITH
ONE TIME SET UP



STRAIGHT FLUTE AND
SPIRAL FLUTE TAPS CAN
BE CHAMFER GROUND
(3,4,5,6,7 AND 8 FLUTE)



FOUR-FACET POINT



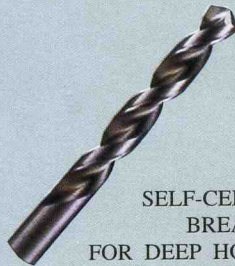
2 - 3 - 4 FLUTES
COUNTER BORE DRILLS



STEP DRILL MADE
FROM ORDINARY TWIST
DRILL, WITH RADIALLY
RELIEVED PILOT



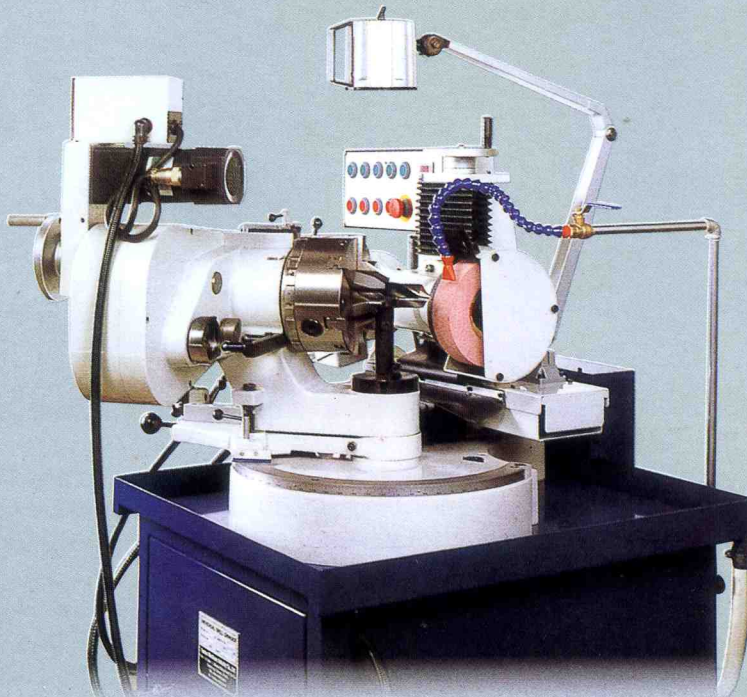
CORE DRILLS AND REAMERS
CAN BE CHAMFER GROUND



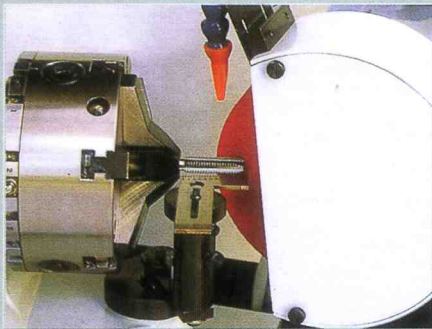
SPLIT POINT
SELF-CENTERING AND
BREAKS UP CHIPS
FOR DEEP HOLE DRILLING



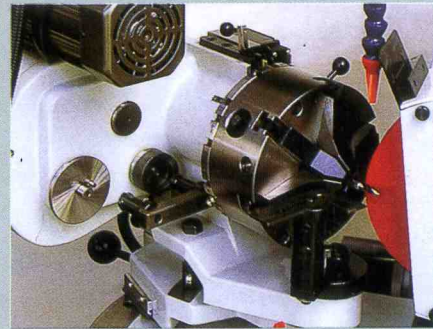
END MILL END
RELIEF 2 - 3 - 4 AND 6
FLUTES END MILL WITH
PRIMARY AND SECONDARY
RELIEF AND GASH GRINDING



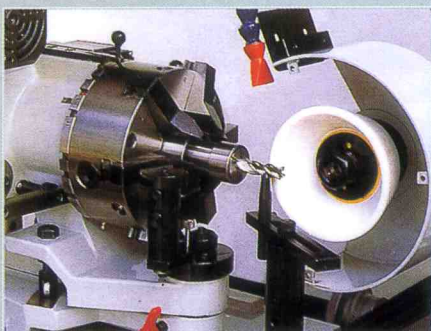
FC-80N(AUTOMATIC)



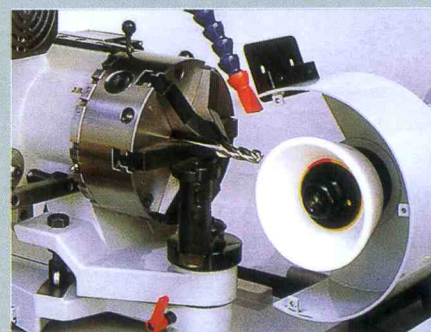
The shoulder of a stepped drills may be ground ▶



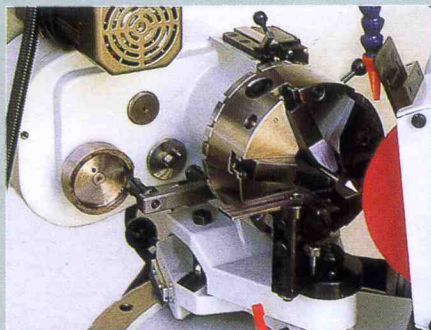
◀ Core drills, or taps and reamers etc, of 2,3,4 and 6 flutes can be taper point-ground.



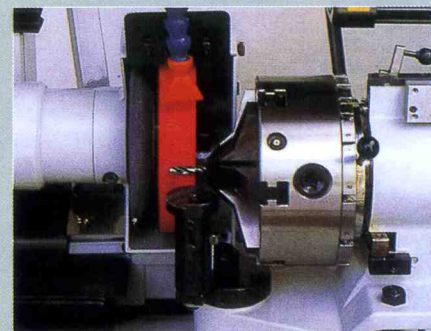
Radial relief attachment. ▶
(OPTIONS)
With this device, a flank can be formed over the cylindrical margin of the smaller diameter section of standard twist drill. Also for sharpening end mills.



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



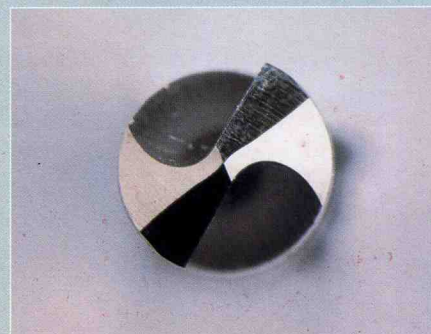
Grinding the smaller-diameter section of step drills ▶



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



SELF-CENTERING POINT ▶
Extends drill life improves hole quality reduces thrust requirements



◀ Grinding Conventional point drill

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.For FC-50N
No 2,3,4,5,6 M.T SleeveFor FC-80N
- Cam No.4 for point angle(40°-180°)
- Cam No.6 for step drill
- Cam No.8 for 4 flute taps or reamers
- 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 & arbor
- Auto feed mechanism (per-setting feeding quantity)
- Powered workhead for automatic rotation&cam action(R.P.M 0 - 58 stepless)
- Extra grinding wheel flange for cup wheel.
- Cup grinding wheel
- Cam for left hand drills.
- Cam for spiral point drills.
- Cam for sheet metal point drills.
- Cam for 1 flute grinding
- Cam for 3 flute grinding
- Cam for 5 flute grinding
- Cam for 6 flute grinding

SPECIFICATIONS

| MODEL | FC-50N(DUAL CAM) | FC-80N(DUAL CAM) |
|-------------------------------|--|--|
| Drill size | (Ø2.5mm-Ø51mm) straight or taper shank(1,2,3,4,5,6 flute) | Ø4mm-Ø80mm(1,2,3,4,5,6 flute) |
| Point angles | 40°-180° | 40°-180° |
| Clearance angle | 0°-18° | 0°-18° |
| Motor | 1/2HP single or 3 phase totally enclosed fan cooled | 1 1/2HP |
| Grinding wheels | Main wheel 7"x1 1/4"x1 1/4"(180mmx32mmx31.75mm) Point thinning dish wheel 6 5/8"x7/8"x1 1/4"(165mmx21mmx31.75mm) | Main wheel (180mmx50mmx31.75mm) Point thinning dish wheel 6 5/8"x7/8"x1 1/4"(165mmx21mmx31.75mm) |
| Grinding the end of end mills | 2,3,4,6,12 flute | 2,3,4,6,12 flute |
| Net weight | 300 kgs | 380 kgs |
| Dimensions | 30"x37"x52"(750mmx925mmx1300mm) | 32"x40"x52" (800mmx1000mmx1300mm) |

FARMAN

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