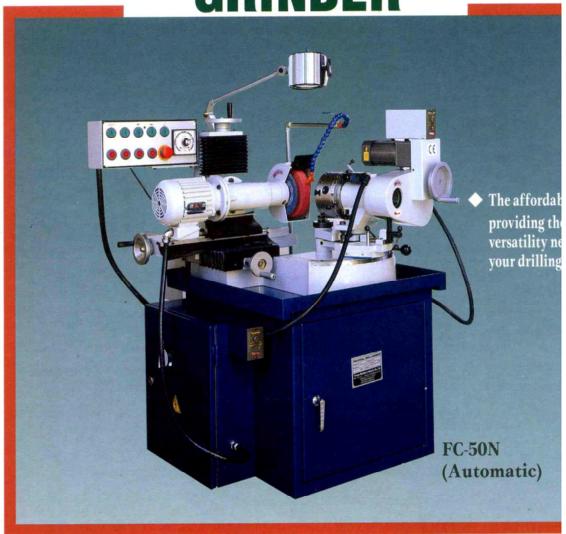
UNIVERSAL DRILL
GRINDER



#### SIMPLE TO OPERATE

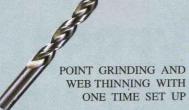
 Unskilled workers can quickly learn to produce perfect drill points. Set up and grinding is fast and the web can be thinned in a few extra seconds. compound slides and one-piece cast iron base provide extra rigidity and minimize vibration. The workhead incorporates precision needle roller and thrust bearings, with the exception of the main chuck spindle, which utilizes a rotalin

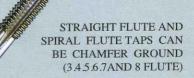
#### VERSATILE

•The range of points tha astounding: Right-hand with point angles betwee drills, plastic points, dou'd rills, carbide drills, step drills, and taps! Also a nu

# FARMAN UNIVERSAL DRILL GRINI







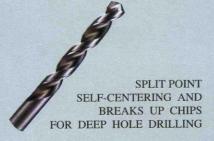


FOUR-FACET POINT



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





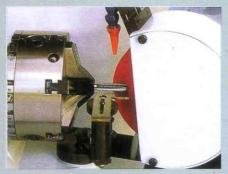
END MILL END RELIEF 2 · 3 · 4 AND6 FLUTES END MILL WITH PRIMARY AND SECONDARY RELIEF AND GASH GRINDING



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.

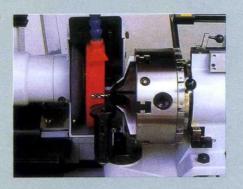
On these machines; Grinding the end of end mills, cutters is Standard Equipment.



Grinding the smaller-diameter section,of step drills

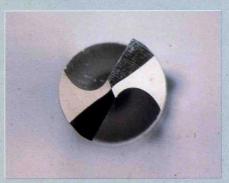


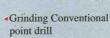
Grinding Counter-Sink drils(1,3,5 flute)





Extends drill life improves hole quality reduces thrust requirments





### 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)	Main wheel (180mmx50mmx31.75mm)
	Point thinning dish wheel	Point thinning dish wheel
	6 5/8"x7/8"x1 1/4"(165mmx21mmx31.75mm)	6 5/8"x7/8"x1 1/4"(165mmx21mmx31.75mm)
Grinding the end	2,3,4,6,12 flute	2,3,4,6,12 flute
of end mills		
Net weight	300 kgs	380 kgs
Dimensions	30"x37"x52"(750mmx925mmx1300mm)	32"x40"x52" (800mmx1000mmx1300mm)



# FARMAN MACHINERY IND CO., LTD.

No. 27. CHUNG SHAN 5th RD. TA-YA TAICHUNG TAIWAN. R. O. C. TEL:886-4-25665231.25665237 FAX:886-4-25662049

E-mail:farman55@ms41.hinet.net Website:www.farman.com.tw