

# CUTTER MEASURING UNIT



**The CMU-130 is a compact, highly accurate instrument for measuring the change of pitch radius and height of gear cutters.**

The Fellows Cutter Measuring Unit, CMU-130, provides accurate tool measurement data for use in the Gear Shaper CNC program control. This data is used to compensate for new or resharpened cutters, assuring continued part-to-part accuracy from your Gear Shaper.

The unit is capable of measuring the change of pitch radius and height of cutters. A digital display permits rapid and precise readout of cutter size change data.

The CMU-130 has a resolution of .002mm (0.0001") in both the "X" and "Y" axes. The display for the axes may be switched between metric and inch.

With appropriate tooling, the CMU-130 may be used for absolute and/or relative center distance measurements, and for runout control of gears and cutters.

The unit incorporates a serial interface port to allow direct communication with any Fellows CNC Gear Shaper equipped with the serial interface option.

The instrument is self-contained, and its compactness allows it to be easily moved between machines. Operational procedures are provided to re-establish the calibration settings of the unit for specific cutters.

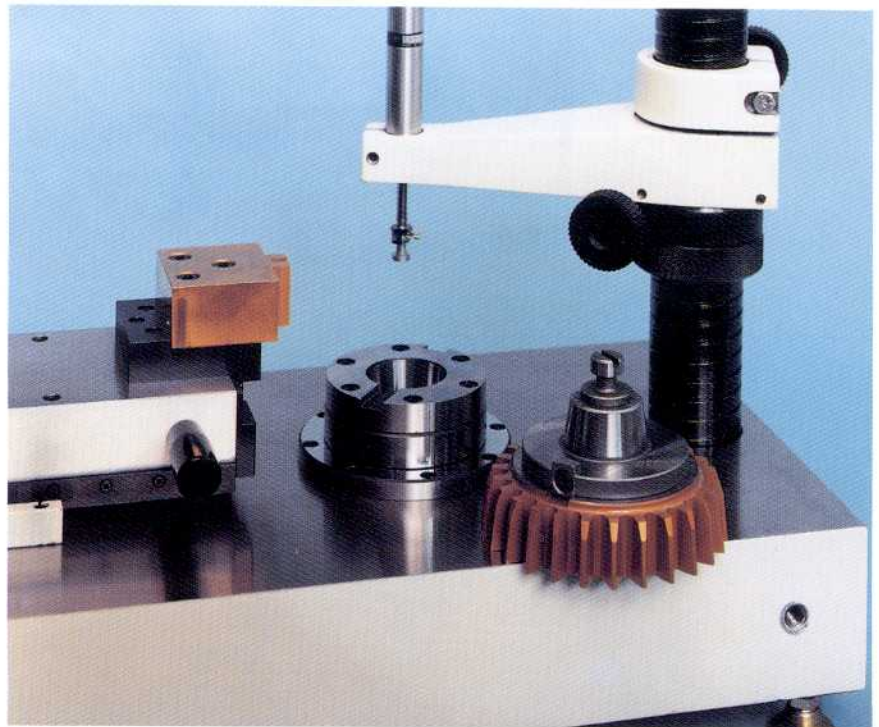
## CUTTER MEASURING UNIT

### FEATURES

- Inch/Metric display
- Pre-set values can be entered into display
- RS232 interface ready
- Uses 120/220 volt A.C., 50/60 Hz.
- .002mm (.00001") resolution on both axes
- Swing out probe on the Y axis for easy loading of cutters
- Measures cutters for Internal, External, Helical, and Spur gears
- Can be used to measure cutters **and** gears
- X axis uses a constant, dampened measuring force
- Gage mount (X axis) can use a segment or master gear as reference
- Anti-friction ball bearing on X axis slide
- Unit may be assembled at user option for left-handed or right-handed operation

### SPECIFICATIONS

Maximum Travel: X Axis.....	130mm	(5 1/8")
Y Axis.....	210mm	(8 1/4")
Y Axis Transducer Range.....	25mm	(1")
Maximum OD of Work .....	220mm	(8 5/8")
Maximum Length .....	826mm	(32 1/2")
Maximum Width.....	425mm	(16 3/4")
Maximum Height.....	425mm	(16 3/4")
Weight.....	77 kg	(170 lbs.)



9189C

**The spindle may be designed to accept cutters mounted on their quick change adapters.**

**NOTE:** The information included herein was correct at the time of publication. However, it is our policy to continually improve our product to insure ever better performance. Consequently, current Fellows' machines and products may incorporate modifications not shown or described in these pages. Machine illustrations in this publication may be shown with available guarding removed to clarify features.



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