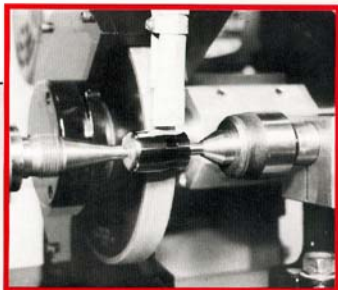
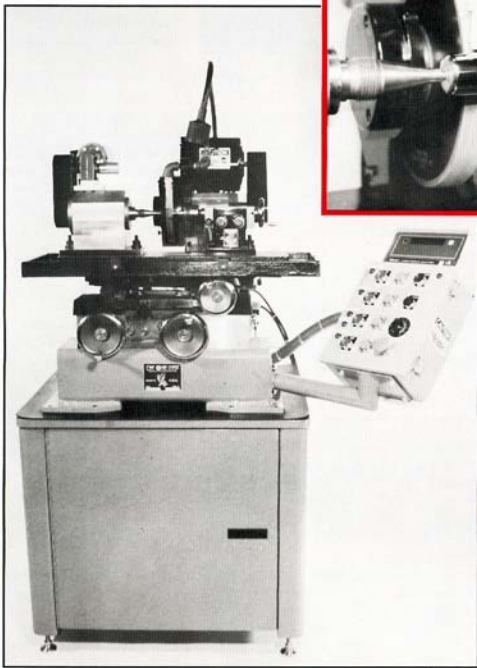


PLUG GRINDER

Improve Your Production Tooling with Complete Technology in a Grinding Package.

DIE QUIP CORPORATION



Innovative design provides better surface finish and longer wheel life.

Maintain quality and consistency by eliminating hand polishing.

Decrease your plug deliveries and costs by quickly resizing them for special orders.

DIEQUIP's new cylindrical plug grinder makes the grinding process of tungsten carbide semi and full floating plugs or mandrels quick, easy, and affordable. This innovative compact design is a breakthrough for OD plug grinding. It has unique features designed to specifically address plug grinding problems, such as poor plug intersections, clumsy workholding fixtures, chatter due to improper wheel speeds, and continually truing the wheel. It is the only machine that is tooled and ready-to-operate for grinding a variety of plug sizes.

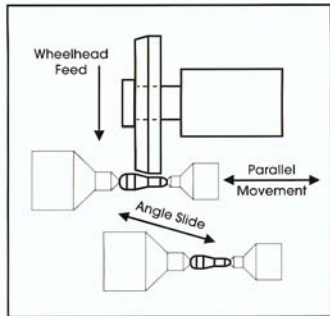
The pre-set tooling reduces the set-up time required for changing the wheel and plug. Also the need for special driving devices such as keys, hoses, and drive dogs has been eliminated. These changes ensure accurate repeatability from one tool to the next.

Another marked improvement of this machine is the ability to traverse along the plug's angle and bearing diameter as well as improve its surface finish. This dual sliding feature extends the wheel's life by keeping the intersection sharp by grinding on both areas of the wheel instead

of just one. By getting more life from each wheel, the number of total wheels needed will drop, reducing the overall wheel cost.

A second benefit of the angle slide is the superior polish on the angle reduction angle of the plug. Since this polish affects the tube's surface finish and wall quality, a better polish results in a better end product.

All of these features will allow each customer to produce, rework, and maintain the highest quality plugs to meet the closer tolerances, improved surface finishes, and reduced lead times demanded from your customers.



ANGLE SLIDE FEATURE

The table moves on an angle and parallel slide to grind the bearing diameter and the plug angle. The slides are accurately positioned by adjustable dead stops. The slides move manually and can work during the plunge grinding or brushout cycle.

- Provides a superior surface finish on the plug's angle, which creates a better tube finish and extends the life of the plug.
- Gives a better consistent geometry because the wheel intersection does not break down.
- Allows for accurate realignment of the plug to its original position after it has been moved from the wheel for diameter measurements.

MACHINE FEATURES

3 SPEED GRINDING WHEEL

adjusts wheel R.R.M. for the size of the plug to eliminate chatter.

WATER COOLANT SYSTEM

includes a paper filter which keeps the wheel free from cutting particles, extending the wheel life and improving the surface finish.

LINEAR SCALE COUNTER

allows the operator to view diameter changes on a LED screen.

AUTOFEED SYSTEM

allows the operator to leave while achieving consistent repeatability from one plug to the next. The autofeed can be adjusted in increments of .0001".

Accessories

SUPPLIES

Only two 7" copper bonded wheels are required to rough grind and achieve a superior surface finish. Two wheels (100 and 1600 grit) and two dressing sticks (100 and 900 grit) are included with this machine. Additional wheels are available through Die Quip and come balanced, trued, and dressed.

SPECIFICATIONS

Width	48" (121.92 cm)
Depth	35" (88.9 cm)
Height	57" (144.78 cm)
Weight	930 lbs. (421.84 kg)
Electrical	120 Volt, 60-HZ, 1-Phase
Worktable	Parallel adjustment for straight grinding + /- 3 degrees Angular adjustment of 11 degree table movement + /- 2 degrees Maximum 11 degree table movement 2 1/2" (6.35 cm) Maximum plug size 1 3/4" Maximum grinding length 3 1/4" (8.255 cm)



WHEEL BALANCING STAND

This item is necessary for adding a new wheel to an arbor to prevent premature wheel and spindle wear. It can hold a maximum of a 7 inch wheel.



CENTERS

The live centers are a #2 Morse taper and are available in 3 sizes. The dead centers are a #3 Morse taper and are also available in 3 sizes.



ARBORS

Wheel arbors are provided with balancing rings for easy balancing. Special Die Quip hollow mandrel arbors eliminate the need for large centers.



5C COLLET WORKHEAD

This fixture uses a hand wheel collet closer for holding plugs and mandrels without centers. It is designed to fit into place for immediate use.



COOLANT FILTER & TANK

This item filters the coolant through a media that removes the tungsten carbide particles before it returns to the work area. This process prolongs the life of the coolant and grinding wheel, while improving the surface finish.



DIGITAL READOUT DISPLAY

This user-friendly unit is preset to show diameter changes and the amount of material removed from each plug. It displays up to .00005 (0.0127 mm) as it reads the movement of the slide.