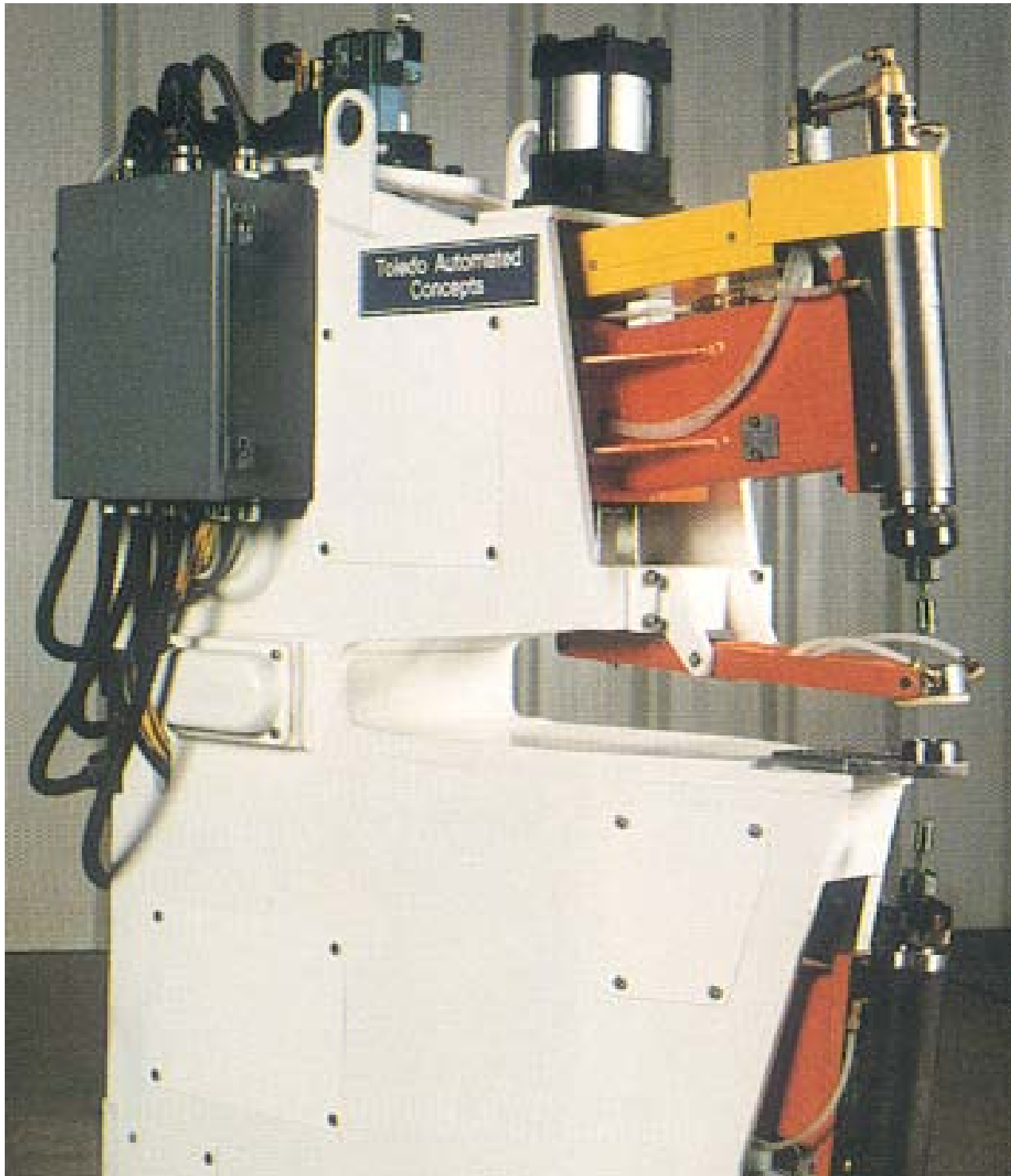


# MACHINE SPECIFICATION



## MODEL 200 ELECTRIC DRILL

Over 500 units sold Worldwide

## DRILL SPECIFICATION

High hole and chamfer quality

Spindle Run out 0.001" measured 4 inches from end of collet.

Glass drilling machines on a granite toe plate.

Glass elevation from bottom of granite toe plate to the top of replaceable urethane insert on top of drill table is 739.77 +/- .02 mm.

The drill will use water pressure to "float" the drill unit into position when granite toe plate is used.

A heavy plate-steel fabricated machine frame is stress relieved and precision machined.

Throat depth for glass clearance is 610 mm.

Hole spacing on same setup tooling is 70 mm for standard maximum straight core drill (without chamfer) diameter of 32 mm.

The drill unit makes use of pivoting movement rather than dovetail slides or quills, thus eliminating the problems associated with these movement means.

Pivoting arms are driven by pre-loaded zero backlash ball screws , driven by stepper motors. (Servo driven ball screws available in some configurations)

Top and bottom drive assemblies are identical.

Unlike air and hydraulic controls, feeds and speeds are precisely controlled

Top and bottom spindles are identical in construction, have duplex pairs of precision bearings, are oil mist lubricated, and have Labyrinth seals to completely exclude contamination.

Diamond core drill is held in a quick-change machine tool double collet. This allows us to preset the core drills on a simple setup fixture to a known length. Straight core drill shaft of 0.375 inches or 10mm.

Top and bottom spindles are driven with separate 1 HP wash down rated induction motors. Both spindles are controlled with a single frequency drive for adjustable rpm.

Drilling coolant passes thru industrial hi speed rotary joint.

Chamfer water is introduced into clamp ring.

Each machine has its own lubrication system.

Water requirements – 28-32 psi (1.9 to 2.2 BAR) @ 3.5 gpm (13.25 lpm) per drill during the drilling cycle. Drill spindles get a water pulse when not is the drilling cycle to lubricate and cool rotary union 0.1 gpm required.

Compressed Air – 80 psi (5.4 BAR)