

Tip #101 How To Drill Holes In Glass

Description:

Grinding glass with the notched end of a soft metal tube is a quicker way of making a hole than power drilling using a twist drill bit. Rotating the notched end of a metal tube in contact with the glass lubricated by a mixture of oil and emery powder, will produce a clean through hole.

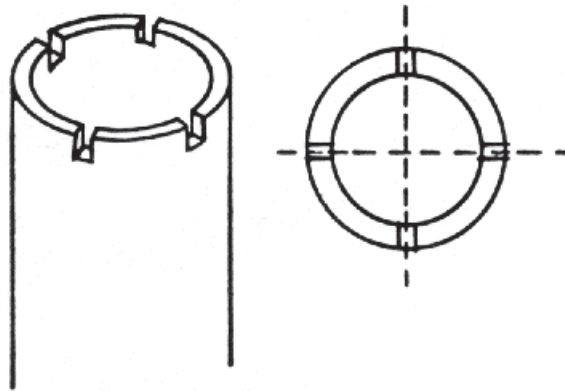
Use:

Screw or bolt holes in mirrors; holes in glass lamp stands for wires or fasteners; cuts in glass ornaments; attaching hinges or fixtures to glass doors; are examples of projects requiring holes drilled through glass.

Operations:

Let us drill a small diameter hole in a piece of glass (plate glass approximately 1/4" thick, if available).

1. Cut off a straight 6" length of 1/4" or 3/16" copper or brass tubing. Cut 4 notches 1/8" deep in one end using a hacksaw.



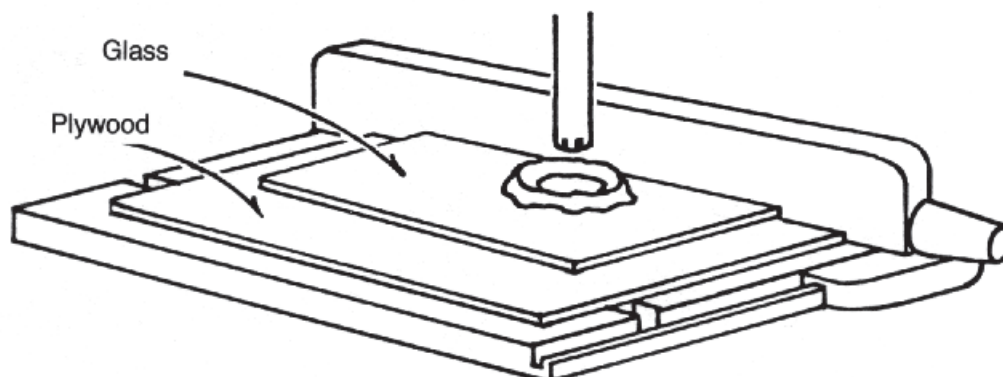
2. Select a piece of glass having about 10 sq. in. area and at least one straight edge 4" or 5" long.

3. Select spot in which to drill. If you wish to mark it, coat the area with white water color or thin paint.

4. Set MARK V in Vertical Drill Press position.

5. Place glass in center of table, painted side up, and edge butted against fence. Beneath glass have a smooth piece of plywood or similar stock.

6. Build a ring of putty on the glass around the center mark. make the inside diameter of the ring about 3/8".



7. Secure tube in chuck. Position center mark on glass under axis of tube by adjusting fence, glass, and table. Use masking or adhesive tape to hold glass in place.
 8. Cover exposed surface inside ring with mixture of oil and emery powder.
 9. Start motor and set speed dial at "A".
 10. Feed drill bit with light pressure. Retract tube frequently to allow mixture to flow into cut.
- Note: When drilling glass of irregular shape, such as bottles, construct a cradle that will hold work in a fixed position until hole is completed.