

TIP 3 — Mill Table Horizontal Clamp/David Gibson

At the 1998 P.R.I.M.E. (Pacific Rim International Model Engineering) Show in Eugene, Oregon a young man stopped by Sherline's booth with a neat little project he had made. He was kind enough to give me four of the clamps to display in our showroom and gave permission to share his project with you. It would make a simple little "rainy day" mill project and you would end up with some very handy table clamps when you are done. David often holds oddly shaped parts and sometimes needs to mill the entire top surface. These clamps are attached to the mill table and secured with T-nuts. The part is then set on the lower clamp surface and held in place from the sides with the horizontal screws. You will need at least three clamps and perhaps as many as four or five for some parts; the more the better. Figure 1 shows the size clamps David made, but once you see how they work, you could adjust the size to suit your particular needs.

This suggestion was contributed by Sherline machinist David Gibson of Fall Creek, Oregon. Since providing me with the prototype clamps from which I took the above dimensions, Mr. Gibson has sent in some revised drawings with more common dimensions. He now makes the overall length of the clamp 1.50" and the width .50" in steel or .625 in hard aluminum. He specifies the angle of the tilted face and drilled hole to be 5° . The dimension from the bottom of the part to the centerline of the drilled hole should be .562 at the back of the part. The angled face extends all the way to the bottom rather than only half way down as I showed it.

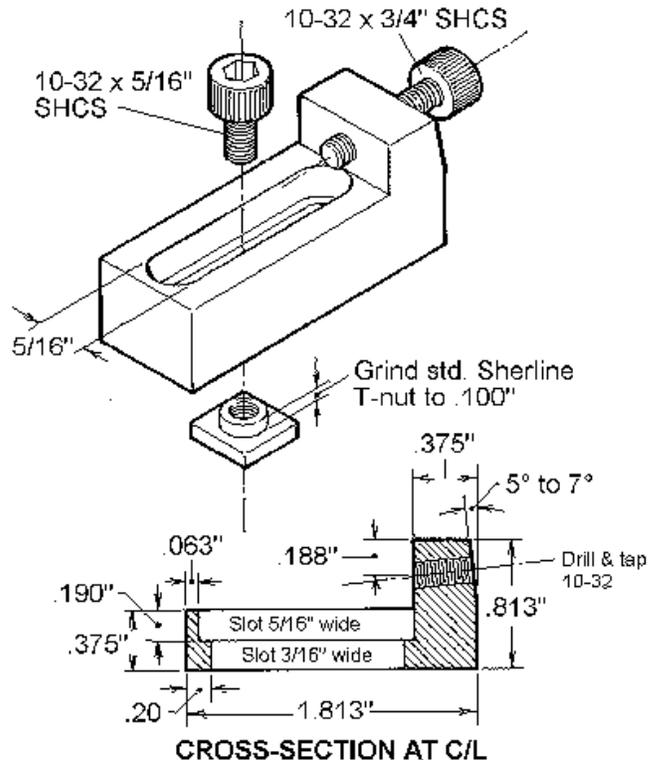


Figure 1—The view above shows the completed clamp and a cross-section at the centerline. The angled hole for the securing screw helps pull the part downward onto the clamp surface. Note that it is drilled perpendicular to the angled surface.