

**SHERLINE
PRODUCTS**
INCORPORATED 1974

Mill Tooling Plate

(7" x 13") P/N 3562

About Tooling Plates in General

The original Sherline 4" x 10" mill tooling plate went into production after a request from a customer who had damaged his mill table. It was an intelligent request because we use tooling plates on many of our large shop machines. They not only protect the machine's table from damage, but they provide an inexpensive, modifiable surface for clamping work that is as flat as the machine's original table. We felt it was time the Sherline miniature machine tool line should be able to benefit from this same shop practice. This larger tooling plate offers some additional features.

Use of the Mill Tooling Plate

This tooling plate was designed to give our customers a larger work surface. The plate was designed primarily for the 5800 NexGen mill. When mounted on the 5800, it will increase the usable machining area of the mill to a full 7" x 13" (that's an additional 5.0" in the Y-axis and 8.2" in the X-axis). It can also be used on the 2000 mill, however, it limits the usable Y-axis travel to 2.85". It has a hole pattern pre-drilled to make it easy to clamp down the Sherline mill vise. Additional holes were also added to accommodate the Sherline rotary table, but you should feel free to drill whatever additional holes are needed to meet your particular clamping and setup needs. (See Figures 1, 2, and 3 on the following page for setup options.) We use 10-32 holes for the Sherline clamp screws. Unless you have a particular need for another size, you might want to stay with that size for additional holes so the same size screws can be used in all holes.

In addition, this plate features three T-slots that can be used like the slots in the mill table to attach clamps or other items using repositionable T-nuts. In the bottom of the T-slots are 1/4" holes for alignment pins to speed up squaring up fixtures with the table. Four steel pins 1/4" x 1" come with the set.

The material used for the plate is 6061-T6 aluminum which is milled to 3/4" thickness. The surface is not anodized. Therefore, additional machining to the plate can be done to suit your unique needs.

Clamping to the Tooling Plate

Use all six mounting screws and T-nuts provided to mount the tooling plate to your mill table. Do not over-tighten T-nuts or you can damage your table slots. The heads are countersunk into the tooling plate to leave your working surface free from obstructions.

Clamping Parts to the Tooling Plate

It should always be your goal to try and hold a part as firmly as possible for milling. If a part moves during the cutting process it will probably be ruined. The heavier the cut you wish to take, the more important this becomes. The best way to hold a part more securely is by adding more clamping points. Do not over-tighten the points you already have. For example, on the mill vise, use four clamping points rather than two.

For drilling holes in a part or to make fixtures to clamp to the table for some setups, keep in mind that the holes in this plate are 1.00" (25.4 mm) on centers.

Rotary Table Tooling Plate

A round tooling plate P/N 3074 is now available for use on the Sherline rotary table P/N 3700 or P/N 8700. It functions on the rotary table in much the same way P/N 3560 and P/N 3562 tooling plates work on the mill table.

Thank you,
Karl Rohlin, VP of Production
Sherline Products Inc.

Parts List

| NO. REQ. | PART NO. | DESCRIPTION |
|----------|----------|--|
| 1 | 35613 | 3/4" Tooling Plate (approx. 7" x 13") |
| 6 | 40330 | 10-32 x 5/8" Socket Head Cap Screws |
| 6 | 30560 | Tee Nuts (Reorder number for set of 4) |
| 4 | 35630 | 1/4" x 1" steel Alignment Pins |

The following images show how the Sherline rotary table and mill vise can be mounted on the 7" x 13" Mill Tooling Plate.

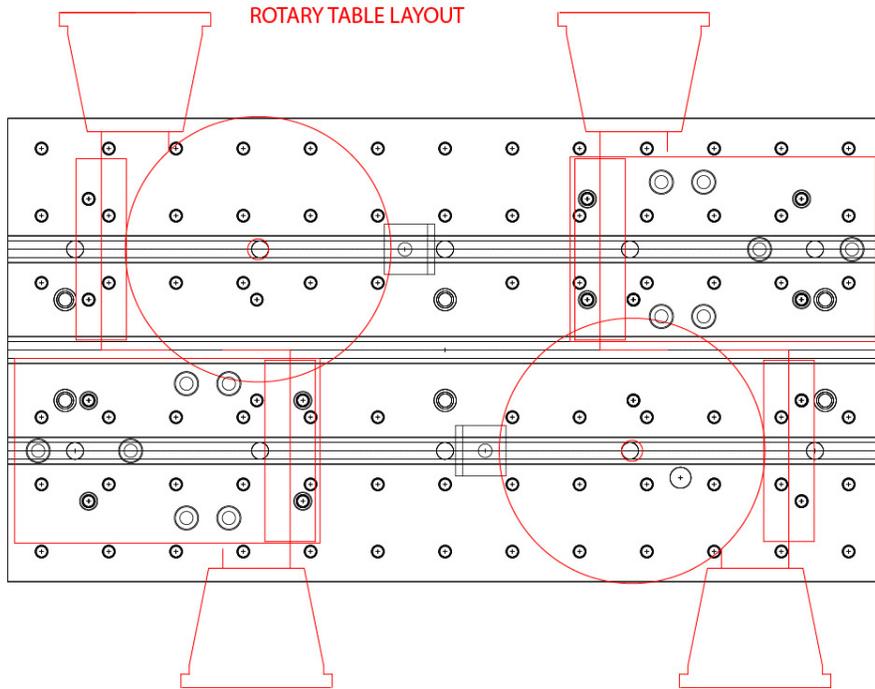


Figure 1

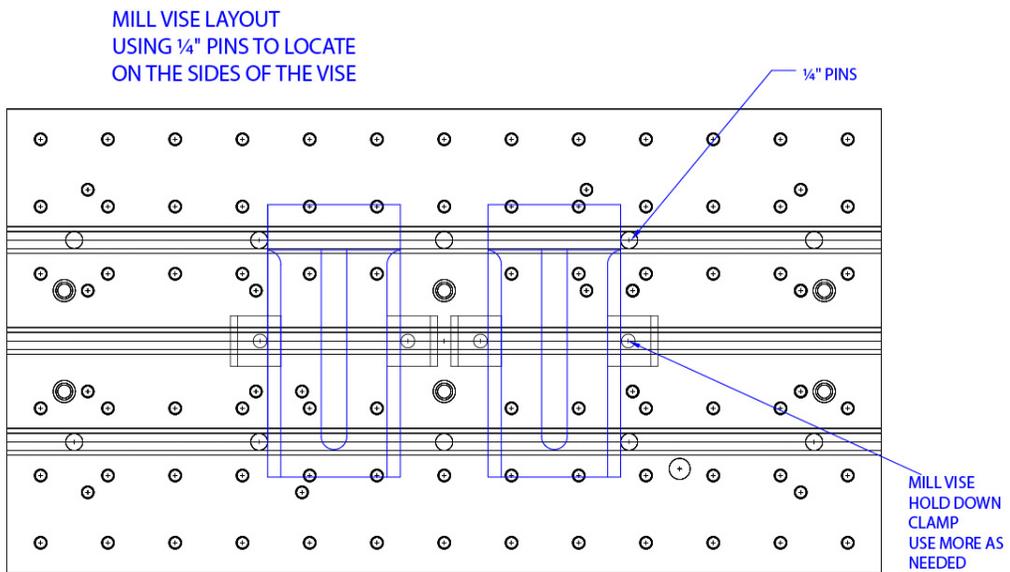


Figure 2

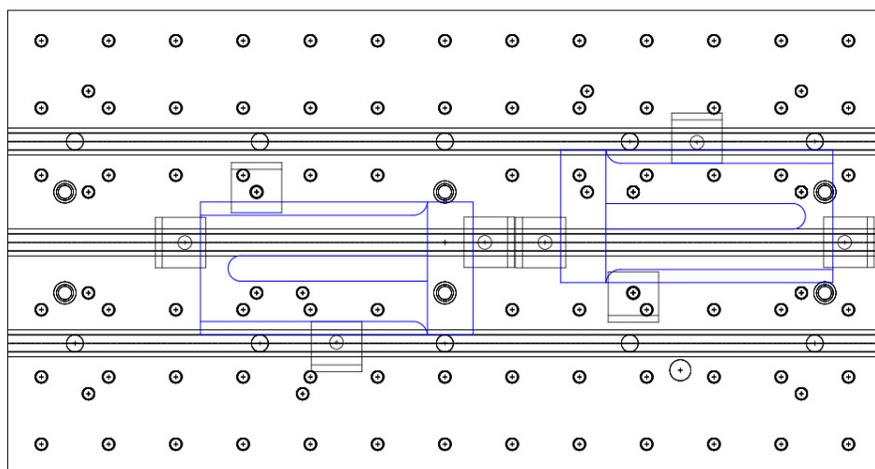


Figure 3