The Purpose of the XYZ base

The Sherline vertical mill can be purchased without the headstock and motor/speed control unit. This allows lathe owners to swap the headstock and motor/speed control from their lathe to the mill in approximately 60 seconds. This package offers about a 30% savings when compared to the price of our standard mill, and 10% when compared to the cost of a vertical milling column (P/N 3050) and XY Base (P/N 5200). If you only use one or the other of your machines occasionally and don't mind the changeover time to switch the drive unit from machine to machine, this is a good way to economize.

Other XYZ Bases Available

All four models of the mill can be ordered without a headstock and motor unit.

1. The 5201 (5211) base mentioned above is from the basic model 5000 mill and has 9" of X-axis travel and 3" of Y-axis travel.
2. The 5230 (5235) has the same dimensions as the 5201 listed above, but comes with the adjustable “zero” handwheels.
3. The 5420 (5430) XYZ base from the model 5400 Deluxe mill comes with adjustable “zero” handwheels, laser engraved scales on the table and base and has 5" of Y-axis travel instead of 3".
4. The 5625 (5630) XYZ base from the Model 2000 mill has 7" of Y-axis travel.
5. The 5825 (5830) XYZ base from the Model 5800 NexGen mill has 11" of Y-axis travel. Other features of the 5825 include:
   - Extra-Rigid Column Base
   - 15" Extended Column Bed
   - 18" Extended Mill Table
   - 18" Mill Base

The first four mills listed have approximately 6" of Z-axis (up/down) travel, while P/N 5825 has over 9" of Z-axis travel. The 5600 column for P/N 5265/5230 has a ram design that allows it to be moved in and out, left and right plus the column bed itself can be swung in and out and left and right. These adjustments give 7 directions of movement including the X, Y and Z motions. If you use it with a Sherline headstock, the headstock can be pivoted for an 8th direction of movement.

CNC-Ready Versions

A CNC-ready base includes handwheels for use on the rear shaft of a stepper motor. (Motors are not included.)

Any Sherline mill XYZ base can also be purchased in CNC-ready configuration. This means that instead of a handwheel attached directly to the leadscrew, a stepper motor mount is fitted ready to bolt on a DC stepper motor for used with computer control. The standard handwheel that would normally come with the mill base is included for use on the rear shaft of the stepper motor for manual control; however, the XYZ base cannot be used until a stepper motor is in place, as there is no way to attach a handwheel directly to the CNC leadscrew. It is designed to accept a coupler and motor shaft, not a handwheel.

Thank you,
Sherline Products Inc.