

Milling Machine Component Definitions

Motor

Drives the spindle using electric power.

Motor Switch

Turns the motor on or off.

Variable Speed Control

Adjusts the spindle speed while the machine is running.

Tool Head

Houses the spindle and other components, adjustable for angular operations.

Quill Feed Rate Selector

Controls the rate at which the quill feeds down.

Quill Feed Handwheel

Manually advances or retracts the quill for drilling operations.

Quill Feed Hand Lever

Lever used to manually feed the quill during drilling.

Quill

The sliding component that houses the spindle, moves vertically.

Spindle

Rotating shaft that holds and drives the cutting tool.

Digital Readout

Displays the current position of machine axes for precision machining.

Ram

Horizontal arm that supports the tool head and allows in/out movement.

Ram Locks

Locks the ram in place once adjusted.

Ram Adjust Handle

Used to slide the ram in or out to adjust position.

Table

Flat surface where workpieces are secured for machining.

Table Locks

Locks the table in place along the X and Y axes.

Table Stop Dogs

Mechanical stops to limit table travel distance.

Table Traverse Crank Handle

Moves the table left and right (X-axis travel).

Table Power Feed

Mechanism to automatically move the table for consistent feed rate.

Saddle

Supports the table and allows Y-axis travel (in and out).

Saddle Traverse Crank

Moves the saddle forward and backward (Y-axis).

Knee

Supports the saddle and table, moves up/down (Z-axis).

Vertical Knee Traverse Crank

Raises or lowers the knee to change tool-to-workpiece height.

Column

Main vertical support structure for the entire machine.

Base

Bottom-most support structure that stabilizes the machine.