

## Routing and Resources

The labor, machinery, and tooling elements of manufacturing can be as crucial as the component materials you use. These are the elements that can cause production to come to a crawl and cause costs to far exceed projections. The TRAVERSE Routing and Resources application provides the functionality to define these important pieces of your manufacturing software solution.

Working with the Bill of Materials module, the Routing and Resources application defines elements such as work centers, labor, machinery, and tooling. In terms of costs and times, these elements make up the process side of the manufacturing bill of materials.

By breaking down the process in the labor types, machine groups, and tooling, Routing and Resources enables you to define operations as a combination of these elements. You can then create routings as a set of step-by-step operations and you can use them in the Bill of Materials application without needing to recreate them every time.

You can define queue time, setup time, run time, wait time, and move times in terms of seconds, minutes, or hours. Overlap logic is used to determine the rate of pass-through. You can set up flexible costing algorithms for labor and machinery. Overhead methods can be unique for each work center.

Routing and Resources also provides a sophisticated base for future customization with a comprehensive tooling database, labor and machinery pricing algorithms, and a complete shop calendar feature.

The screenshot shows the 'MR Routings' application window. At the top, there is a toolbar with navigation icons and a status bar indicating 'Record 1 of 9'. Below the toolbar, the 'Routing ID' is 'Routing7' and the 'Description' is 'Alternate Routing for 4517'. The main area is a table titled 'Re-sequence' with the following columns: Operation ID, Description, Work Center ID, Labor Type ID, Machine Group ID, Media Group..., Use Overlap, and Notes. The table contains several rows of data, including operations like WELD7, GRIND7, PAINT7, DRY7, ASSEMBLE7, TAP7, CUT7, DEBUR7, and PNTSUB2.

Operation ID	Description	Work Center ID	Labor Type ID	Machine Group ID	Media Group...	Use Overlap	Notes
WELD7	Welding	GEN007	WELD7	WELDINGM7	WELDW7C7	<input checked="" type="checkbox"/>	
GRIND7	Grinding Related	GEN007	MACHSHOP7	GRINDER07	Grinders	<input type="checkbox"/>	
PAINT7	Painting	VENTED7	PNTG7	BOOTH7	BRACE1	<input checked="" type="checkbox"/>	
DRY7	Drying	VENTED7	NOT-USED	DRY7		<input checked="" type="checkbox"/>	
ASSEMBLE7	Assemble Unit	GEN007	ASSEMBLY7	NOT-USED	WELDW7C7	<input type="checkbox"/>	Notes for Assem...
TAP7	Tapping / Drilling	GEN007	MACHSHOP7		PUNCHPRESS	<input type="checkbox"/>	
CUT7	Cutting Services	METALS7	MACHSHOP7	SAW07		<input type="checkbox"/>	
DEBUR7	Deburring	METALS7	MACHSHOP7	TABLE7	Grinders	<input checked="" type="checkbox"/>	
PNTSUB2	Subcontracted P...	BOOTH7	NOT-USED	NOT-USED		<input checked="" type="checkbox"/>	

*From Tooling to Labor, the Routing and Resources module is flexible enough to grow with your company.*

- Easily define resource elements such as work centers, labor, machinery, and tooling.
- Use interactive views to gain greater control of costs associated with production.

## Routing and Resources Features:

- replace labor types, machine groups, tooling, and more globally
- calculate overhead by labor, machinery, piece, and/or flat rate
- set up required labor by machine group
- define tooling by operation
- estimate billing rates
- interface with General Ledger and account definition for costing purposes
- comprehensive user definable shop calendars
- keep track of details with extensive notes fields
- attach media for CAD diagrams, videos, and pictures
- keep a detailed tooling database
- use flexible costing algorithms
- add extra user-definable fields
- perform subcontracted operations
- keep track of vendor information for multiple subcontractors

## Routing and Resources Reports:

- Operations Where Used
- Work Center Where Used
- Machine Groups Where Used
- Labor Types Where Used
- Tooling Where Used

Work Centers enable you to determine overhead costs in a variety of methods.

Operations define what you do and provide a comprehensive method of determining how long each operation takes.