



ROUTING AND RESOURCES

Manufacturing

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. 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 each time.

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.

Operation ID	Description	Operation Type	Tooling ID	Machine Group ID	Work Center ID	Setup Labor Type ID	Yield Pct
ASSEMBLE7	Assemble Unit	Per Unit			GEN007	ASSEMBLY7	100.00
BEND7	Metals Bending	Subcontract	CLAMP2	BEND07	METAL57	MACHSHOP7	100.00
BEND7	Metals Bending	Subcontract	CLAMP7	BEND07	METAL57	MACHSHOP7	100.00
CUT7	Cutting Services	Subcontract	S-CSS	SAW07	METAL57	MACHSHOP7	100.00
CUT7	Cutting Services	Subcontract	CLAMP2	SAW07	METAL57	MACHSHOP7	100.00
CUT7	Cutting Services	Subcontract	CLAMP7	SAW07	METAL57	MACHSHOP7	100.00
DRBUR7	Deburring	Subcontract			METAL57	MACHSHOP7	100.00
DRILL7	Drilling	Per Unit		DRLPRESS7	METAL57	MACHSHOP7	100.00
DRY7	Drying	Per Unit		DRY7	VENTED7		100.00
GLUE47	Gluing	Per Unit		TABLE7	WDVRC7	GLU17	100.00
GRIND7	Grinding Related	Per Unit		GRINDER07	GEN007	MACHSHOP7	100.00
PAINT7	Painting	Per Unit	CLAMP2	DRY7	VENTED7	Notching	100.00
PAINT7	Painting	Per Unit	CLAMP7	DRY7	VENTED7	Notching	100.00
PAINTSIB2	Subcontracted Painting Oper	Subcontract		NOT-USED	BOOTH7	NOT-USED	100.00
SAPaint	Subcontracted out painting	Subcontract			GEN007	MACHSHOP7	100.00
TAP7	Tapping / Drilling	Per Unit			GEN007	MACHSHOP7	100.00
WELD7	Welding	Per Unit		WELDINGM7	GEN007	WELD7	100.00

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.

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Features:

- Globally replace labor types, machine groups, tooling, and more.
- 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.
- 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

Routing ID	Description	Operation Def.	Work Ctr.	Work Center Des.	Labor Type Des.	Machine Des.	Machine Group D.	Overlap	Notes
Routing1	Alternate Routing for 46...	WELD37	Welding	GEN007	Main Shop Floor	Welding Related	WELDING041	Header 10 welder	
Routing2	Alternate Routing for 46...	GRIND7	Grinding Related	GEN007	Main Shop Floor	Machine Shop Lab...	GRIND007	Delta 23.725 Indust...	
Routing3	Alternate Routing for 46...	PAINT7	Painting	VENTED7	Ventilated Drying Ar...	Painting Related	BOOTH7	Paint Drying Booth 7	
Routing4	Alternate Routing for 46...	DRY7	Drying	VENTED7	Ventilated Drying Ar...	Labor Not Applicable	DRY7	Painting Booth 7	
Routing5	Alternate Routing for 46...	ASSEMBL7	Assemble Unit	GEN007	Main Shop Floor	General Light Ass...	NOT-USED	Machine Group Not...	Notes for Assembly Unit 7 A...
Routing2-1	Routing for 4617	PHYSUB2	Subcontracted	NOT-USED	Work Center Not Ap...	Labor Not Applicable			
Routing2-2	Routing for 4617	ASSEMBL7	Assemble Unit	GEN007	Main Shop Floor	General Light Ass...	NOT-USED	Machine Group Not...	Notes for Assembly Unit 7 A...

Determine overhead costs in a variety of methods.

MFG - Routing and Resources

Operation ID: PAINT7
Description: Painting
Operation Type: Per Unit

Work Center ID: VENTED7
Labor Setup Type ID: MACHOP
Labor Run Type ID: PAINT7
Operators Required: 1
Machine Group ID: DRYP
Machine Group ID: DRYP

Yield Pct: 100.00

Time Required

Queue Time	0.000	Hours
Machine Setup Time	15.000	Minutes
Machine Run Time	8.000	Hours
Labor Setup Time	18.000	Hours
Labor Run Time	8.000	Hours
Wait Time	24.000	Hours
Move Time	0.000	Hours

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