Exact Macola ES: Standard Product Routing

Macola ES's Standard Product Routing (SPR) package handles the creation, maintenance and reporting of data that describes operations, outside processes, tools and notes used in producing a product.

Macola ES's Standard Product Routing (SPR) module is oriented toward any size make-to-stock manufacturer, but it also has the inherent flexibility to be used in job shops where jobs tend to be similar to earlier jobs.

SPR standardizes manufacturing routings, the information that describes the path a product follows on the shop floor as it flows through the production process. SPR routings are used in three valuable ways:

Sequencing Work: On the shop floor, in the form of shop packets, to describe the sequence of manufacturing operations, how the operations are to be performed, the type of machine required, the tools to be used, etc.

Scheduling: In production planning to calculate manufacturing lead-time and organize work center loads.

Costing: In production control and accounting, to set-up control records to trace the progress of the shop order and accumulate actual vs. planned costs. This is using SPR in conjunction with other Macola ES packages, such as Standard Costing (S/C), Shop Floor Control (SFC) and Manufacturing Cost Accounting (MCA). Timesaving features

Reduce the time required for creation and maintenance of standard routings in several different ways. Create General Routings to cover the operations used the most in your shop, knowing that many Specific Routings can use the same General Routing. Then copies of General Routings can be pulled into Specific Routings when the Specific Routings are being printed or copied into new shop orders.

Beyond the ability to incorporate routings, there is a "Same as Except" routing copy facility which permits existing routings to be copied into new routings where the result can be altered as needed. This is particularly useful when large routings for two or more items differ by only a few operations, tools or notes. You will find it far quicker and less error prone to make a few changes to create a new routing rather than to enter it from scratch.

Macola ES Standard Product Routing business benefits:

- Work sequencing
- Scheduling
- Costing
- Maintenance of labor and machine standards
- Overlap percentage/quantity
- Automatic issues of material

Operation Codes

Provide default values when entering operations or outside process records to a routing. This is particularly useful when an operation or group of operations is performed at the same work center with similar procedures, or when an outside process is performed by the same vendor with similar procedures.

Control and customization

The SPR package includes a variety of functions from which you may customize a package to your operation's individual needs.

Entry and editing of routing date is interactive. Pointer records (to general routings), Operations, Outside Process Operation, Tool and Note records may be added to an operation record to clearly define the routing for the benefit of those on the shop floor.

Maintenance of labor and machine standards are kept at the operation level, allowing you to easily track how many labor and machine hours should elapse during a particular operation.

For scheduling and lead-time, a percent may be specified for each operation telling how much you wish it to overlap the previous operation. You may also specify an overlay quantity, telling the quantity you wish to overlap from the previous operation.

A variety of operation types including productive (most common), move, outside processing, rework, inspection and alternate are supported. Productive operations also include optional information relating to the set-up of the operation, such as machine hours or labor hours required for set-up, as well as material quantities used during set-up.

Another option permits operation cycles per hour to be established in place of hours per operation cycle. This is yet another way to control accuracy.

Automatic issues of material at specific attaching operations allow for material planning and execution to accommodate Just-in-Time scheduling techniques.

Creating standards from history

For those companies that do not have good standards, each routing being used in production tracks a historical average, based on actual labor and machine hours reported in Shop Floor Control (SFC). This average can then be used to come up with the standard. This can be done selectively, at user-defined time intervals.

Lead-time is calculated by using the fixed and the variable lead-time elements, both stored on the Item Master File. Lead Time tracking aids in material planning. The Material Requirements Planning package uses the planning lead-time from Inventory Item file to recommend when material should be ordered. SPR helps develop quality plans that optimize your manufacturing execution.

For more information about *Macola ES Standard Product Routing*, please contact your business partner or account representative today, or visit www.exactamerica.com/macola.