



# WORKS ORDER PROCESSING

All companies in the manufacturing sector need to give clear instructions to those actually responsible for manufacture, describing precisely how a job is to be carried out and what materials, manpower and equipment are needed to complete the work. It is equally important for management that after the instructions have been given it is possible to know at any time exactly what stage the work has reached and the costs incurred up to that point.

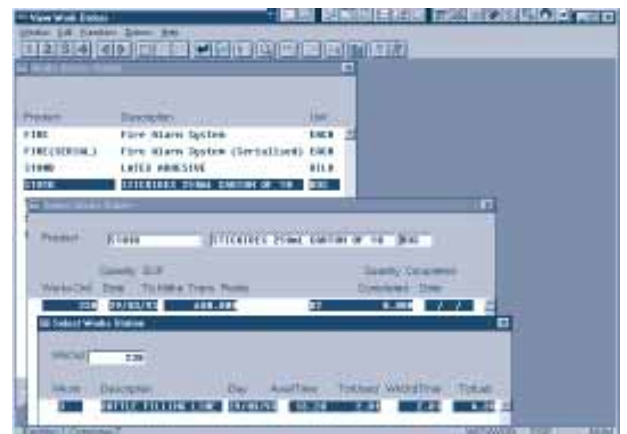
Global 3000 Works Order Processing allows these functions to be carried out easily and efficiently, giving management access to a wealth of information so that informed decisions can be taken quickly and effectively.

When used in conjunction with Global 3000 Bill of Materials, Works Order Processing will allow works orders to be raised either directly or back to back with sales orders. Given the required completion date, it will roll back through the operations taking into account machine loadings for all works orders to give a latest start date for the works order to be completed on time.

Availability of materials is also taken into account and if Purchase Order Processing is in place then the daily or weekly status of projected materials stocks will also be calculated. This enables lower stock levels to be maintained without increasing the risk of stock-outs.

If required, sophisticated costing procedures may be used to establish assembly or formula costs and the actual cost of production may be compared against standard costs, with comprehensive variance analysis. By the selection of suitable parameter settings, the software is equally suitable for use in engineering, assembly or process industries.

Because Global 3000 Works Order Processing is written in a fourth generation language, it benefits from comprehensive and consistent enquiry and reporting facilities. On screen help is available and screens are clear and easy to understand, making the software easy to use. Works Order Processing shares all the advantages of the Global environment - availability across a wide range of computer platforms, optional graphical user interface and ease of integration with industry-standard products.



# TECHNICAL SPECIFICATION

## OPERATING SYSTEMS

Global 3000 Works Order Processing runs in single-user, multi-user or networked mode under a wide variety of operating systems, including AIX, HP-UX, SCO Unix, UnixWare, BOS, DOS, Microsoft Windows, Windows 95 and Windows NT, and Novell NetWare.

## HARDWARE

Global 3000 Works Order Processing runs on a wide range of hardware, from industry-standard PCs through to network servers such as the Compaq Proliant 5000 and RISC-based machines such as the IBM RS/6000, Hewlett-Packard HP9000, ICL DRS6000 and Motorola PowerPC.

## INTEGRATION

Global 3000 Works Order Processing integrates with:

- Global 3000 Sales Order Processing
- Global 3000 Purchase Order Processing
- Global 3000 Invoicing
- Global 3000 Stock Control
- Global 3000 General Ledger
- Global 3000 Bill of Materials
- Global 3000 ODBC Driver
- Global Reporter

## OPEN DATABASE CONNECTIVITY

Data can be held in Speedbase, C-ISAM, Btrieve or (3Q98) Microsoft SQLServer format for compatibility with industry-standard office automation and data analysis tools.

The Global 3000 ODBC Driver can be used with all the above database architectures to enable online, real-time access to Global 3000 accounting data by other ODBC compliant applications.

## WORKS ORDER CREATION

Works orders may be created:

- Directly
- Back to back from sales orders
- From Resource Planning

## WORKS ORDER DETAILS

Each works order may contain the following:

- Assembly reference
- Assembly description
- Related sales order transaction details
- Planned start date
- Required completion date
- Route number
- Workstations within the route
- Operations at each workstation
- Materials required for each operation
- Instructions for each operation and material
- Operational start dates

## ROUTING

Virtually unlimited numbers of routes may be set up. Each route will consist of a series of workstations together with the operations which are to be carried out on those workstations. The same route may be used for different assemblies or products or a new route easily created.

The system allows multiple routes to be set up for any assembly, together with multiple Bills of Materials. The Route and Bill may be changed for any works order up to the time that work has commenced on the order. Cost comparisons are now available comparing actual costs with the cost for the Standard Route and also with the normal cost for the route chosen.

## WORKSTATIONS

A workstation may be a department, section, machine or processing plant or an associated group of machines or process equipment. A four character alphanumeric field is used to define the workstation. Workstations may be allocated to Groups for capacity planning purposes. Details held are as follows:

- Number of shifts
- Workstation hours available on each shift
- Operating efficiency for each shift
- Operating costs for that workstation

## OPERATIONS

Virtually unlimited numbers of operations may be defined. These are identified in the first instance by a single line description to which may be attached an unlimited amount of text. The same operation may be used on more than one workstation and operations may be carried out in any order. For each operation the following information is held:

- Material required to complete the operation
- Labour type
- Type of operation: i.e. whether set up, productive or both
- Standard time laid down to complete both the set-up and the manufacture of a single unit
- Number of operators who will be involved in carrying out the operation and whether they are involved in setting up or productive work
- By calculation, the unit cost of that operation

## LABOUR CLASSIFICATION

Over 700 different categories of labour may be defined together with their standard rates of pay.

## QUALITY ASSURANCE

Specifications may be recorded on the system and a history of test results for each batch or works order maintained. Any number of sets of test results and corrective action details may be recorded for subsequent review and analysis.

## COSTING

There are complete facilities for costing and cost variation analysis, based on material costs and labour costs of operations within the route. Costs such as electricity, plant amortisation etc may also be included in workstation operating costs.

All costs may be brought together into the gross contribution report which is the primary costing record. This analyses the total cost into sections such as primary materials, packaging, direct and indirect labour and workstation operational costs. It also compares the total cost with the primary selling price to indicate potential gross margin.

If the system is configured to record the actual materials and labour used for a works order, it is possible to drill down from the overall cost variance on a works order through labour or materials variances to the individual component or labour type cost variances. Reports can then be produced showing cost variances on completed works orders over any desired period of time, both individually and cumulatively for that period in percentage and value terms.

## PRODUCTION TRACKING

The completion of each operation in the route may be noted enabling the progress of the work to be monitored and costs evaluated up to the current stage of production.

The progress of a works order along a route may be monitored even more closely by using automated shop floor data capture techniques. The status of each operation may be recorded, together with the quantity of each sub assembly which has passed through that operation.

## BATCH TRACKING

Batch numbers and/or serial numbers together with expiry dates may be held for any component, raw material, or assembly. These are recorded as issued to specific works orders. Because the serial numbers or batches of goods sold may also be recorded it is therefore possible to easily trace materials from the original supplier consignment to the eventual customer. Tracking can take place in either direction, from the customer back to the supplier or from the supplier to all customers who have received goods in which a particular batch or serial number has been used.

## REPORTS

The following may be reported upon:

- Works order, route, workstation, materials required
- Materials required by works order
- Labour required by type by works order
- Work in progress - labour posted, materials issued
- Work in progress material valuation
- 12 day labour requirement by type
- 12 week labour requirement by type
- 12 day material requirement
- 12 week material requirement
- Stock action report with opening stock, purchase orders and action required
- Certificate of conformability
- Additional reports from Global Reporter
- Estimating lists
- Net allocated stock - Detailed and Summary
- Works order cost variance report
- Workstation efficiency report

## ENQUIRIES

Extensive screen enquiries including:

- Works orders currently in issue with details
- Daily labour requirements and availability
- Daily workstation requirements and availability
- Works order cost to date identified as material, labour and total individual material costs to date by works order
- Labour type costs to date by works order
- Material batch numbers - where used
- Final destination of batched or serialised items with drill down to component suppliers
- Quality assurance results with a full history of actions taken to adjust a batch or works order to meet the specification
- Net allocated stock enquiry

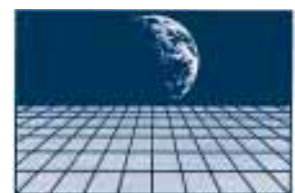
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