

Glossary of SYSPRO Manufacturing Terms

Assembly

A group of sub assemblies and/or part which are put together and constitute a major subdivision for the final product. An assembly may be an end item or a component of a higher assembly.

Available-to-promise

The uncommitted portion of a company's inventory and planned production, maintained in the master schedule to support customer order promising.

Backflush

The deduction from inventory records of the component parts used in an assembly or sub-assembly by exploding the bill of materials by the production count of assemblies produced.

Build schedule

A build schedule is a manually entered production plan which reflects the actual decisions made by the production planner in terms of what items will be made, and when they will be made. The anticipated build schedule or master production schedule is one of the sources of demand in SYSPRO that drives material requirements planning.

Component

Raw material, ingredient, part or sub-assembly that goes into a higher level assembly, compound, or other item. This term may also include packaging materials for finished items.

Cost implosion

The cost implosion is the process of working up through the where-used chain (using the quantities and costs of low-level items) to establish the total cost of the finished item.

Cumulative lead time

This is the longest planned length of time that it would take to produce an item. This is a calculated field.

Demand time fence

This is the number of days taken to tailor the part to order. All items defined as a **MAKE TO ORDER ITEM** will have the demand time fence printed. The period in which the demand time fence will be printed on the Master Production Schedule report will be calculated by adding the run date to this field.

Economical Batch Quantity (EBQ)

The most economical batch size considering the cost of holding inventory compared to the cost of ordering (in the case of a purchased item) to the cost of set-up (in the case of a manufactured item).

Elapsed time

The expected time that it should take an operation to be completed for the economic batch or pan size quantity.

Finished part

Any part having components attached to it, but which is itself not a component of another part. Another term for this would be **TOP LEVEL PART**.

First level

Indicates any component that is one level below a parent part. (Refer to the structure file explanation below).

Floor stock

Stocks of inexpensive production parts held in the factory from which production workers can draw without requisitions. A second meaning to this term is one used in many software packages and is second inventory balance located on the shop floor.

Gross requirements rule

The total of independent and dependent demand for an item prior to the netting of on-hand inventory and scheduled receipts.

In SYSPRO this field is used as a means of indicating the quantity of an item (taking into account sales orders and forecasts) that must be used for each period as the gross requirement.

Job

An order placed on the factory to make a part (either finished or sub-assembly). Often known as a works order.

Kit

The components of a parent which have been taken from stock and prepared for movement to a production area.

Kitting

The process of creating kits.

Level numbers

Levels serve to indicate where a component is used in the structure tree. In **Fig 1**, part **A** is at level **0**, while part **B** is at level **1**, and part **D** is at level **2**. Level numbers are abstract and are maintained automatically by the system.

Lowest level

Indicates any part which is a component, but which has no components itself (raw material). By definition, this must be a bought-out item.

Low level code

Identifies the lowest level in any one of all the bills of material at which a particular component may appear.

Manufacturing basis

Indicator to determine whether the Economic Batch Quantity (EBQ) or the Pan quantity are to be used when calculating lead times or suggested order quantities.

Manufacturing lead time

This is the total time taken to build an item, assuming that all the raw materials are available. This field may either be entered manually, or calculated from the **Lead-time calculation** program. The manufacturing lead-time will be added to the planning frequency allowance to generate the manufacturing time fence (MTF).

Manufacturing time fence

This is the manufacturing lead-time plus the planning frequency allowance.

Milestone

A flag against an operation that allows previous operations to be posted with their standard time multiplied by the quantity complete during Labor posting.

Move time

The time between the completion of one operation and the start of the next. If operation 2 starts before the end of operation 1, then the IOMT may be negative (see elapsed time and total elapsed time).

Offset period

This is the number of days offset backwards from the manufacturing completion date of a parent part. The offset period indicates when the material is required in relation to the manufacturing process. Besides using offset to specify when material is required, one may link material required to a particular operation.

Pan

This is the manufacturing batch quantity and will be used, if the Manufacturing basis is equal to P, to calculate the lead-time and suggested order quantities.

Parent part

Any part having at least one component.

Percentage yield

This field defines the percentage yield that is returned by making a given number of items. For example, if a job for 550 items is made and the yield percentage is 90%, then only 45 items will, on average, be completed. This percentage is used to increase the suggestions made, thereby attaining the correct quantity required.

Phantom part

A part that does not physically exist, but which serves to highlight the components that make up the phantom part. In **Fig 1**, let us suppose that **B** is a phantom part. In the **Trial Kitting list** program, for example, the list of components for **A** would be parts **C**, **D** and **E**. The quantity required of **D** would be the quantity per between **D** and **B** multiplied by the quantity per between **A** and **B**. The quantity required of **E** would be the quantity per of **E** and **B** multiplied by the quantity per between **A** and **B**.

Planning frequency allowance

The planning frequency allowance is added to each item's overall lead time (the longest time to make and purchase all the components that are required for a finished item). This gives the **planning time fence** (PTF).

Planning bill

A planning bill is an artificial part used to assist in forecasting. The part cannot be stocked, sold, or bought and is used merely to allow the forecasting of a **family** of products as one entry, while generating gross requirements into the MPS or MRP systems for each member of the family independently.

Planning time fence

This is the cumulative lead-time for the item plus the planning frequency allowance. This is the time within which you should not take a sales order unless you have forecast sales of this item, i.e. If you do not have the item in stock you will be unable to satisfy the sales order.

Planning horizon

This is the length of time per stock code that you wish to look ahead. This is calculated as the planning time fence plus the visibility factor.

Productive unit

This is the lowest common denominator in which the productive capacity of a work center within a factory is deemed to be grouped. Thus the productive unit may be a MAN, GANG, MACHINE, CELL etc.

Projected available

This is the amount of stock that should be available if you manufacture and sell according to plan, and is calculated using the gross requirements, the build schedule, and any suggested build schedule. This value is shown to allow verification of the reasoning behind the available-to-promise and the build schedule.

Quantity per

This indicates the relationship in terms of quantity between the parent and the component parts. If, for example, every time part **A** is manufactured we require two of part **B**, then the **quantity per** for the structure link of A to B would be **2**. The quantity per may be up to 6 decimal places.

Run time

The planned standard time to produce one unit of an item in an operation. The time units are user-defined, and although hours are usually used, they may be in minutes or seconds, etc.

Sequence number

A two-character field which serves to position parent-component structures in a sequence other than component stock code sequence. In addition, it will allow a part to appear more than once against a particular parent part.

Set-up time

The time required for a specific machine, resource, work center or line to convert from the production of the last good piece of lot **A** to the first good piece of lot **B**.

Start-Up quantity

The quantity produced whilst the production line is coming up to full speed, temperature, etc.

Start-Up time

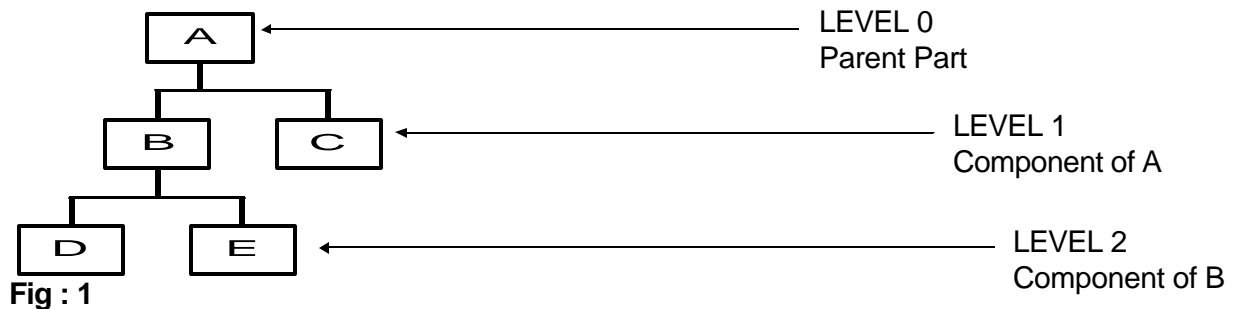
This is the time allowed for the production line to come up to full speed, temperature, etc.

Structure

A single relationship between a parent and a component, in the diagram below, the link between parts **A** and **B** would be a structure

Structure file

This is a file containing the relationships between components and parent stock codes.



A has components **B** and **C**, while **B** has two Components - **D** and **E**.

Sub-assembly

An assembly that is used at a higher level to make up another assembly. In the above example, part **B** is the only sub-assembly.

Subcontracting

When production work is sent to an outside manufacturer.

Suggested build schedule

For a Master Production Schedule item whenever any shortage is found to exist, a suggested quantity to place into the build schedule file will be printed. The batch rules will be taken into account.

Teardown time

The time taken to remove a setup from a machine or facility. Teardown is an element of manufacturing lead-time.

Total elapsed time

This is the longest possible time taken from the commencement of the first operation, to completion of the last operation in the process of manufacturing a particular item.

Visibility factor

The visibility factor defines the number of days from the planning time fence (PTF) that general planning will take place. The planning time fence plus the visibility factor gives the **planning horizon** (PH). Any date after the planning horizon is not normally subject to any build schedules.

Warehouse code

This defines the physical location of stock holding. It is a two character alphanumeric code. The inventory month end program is able to handle up to 500 warehouse codes.

Work center

Work centers are typically one or many persons and machines that are capable of doing the same job. These may be considered as one unit for purposes of capacity requirements planning and detailed scheduling.