

# DIAMES® Shop Floor Manager

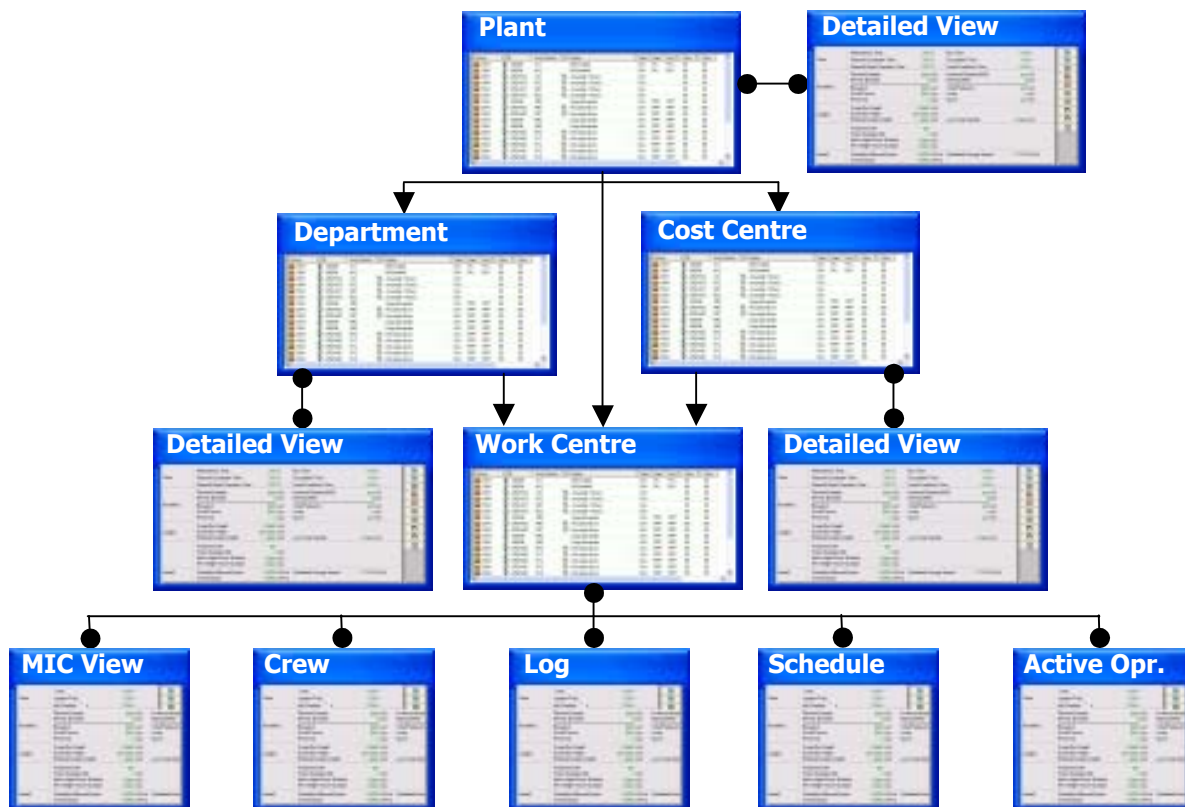
The Shop Floor Manager (“SFM”) is a data navigator to visualise and manage online shop-order operations and production resources. SFM is an MS-Windows-based GUI application, which is complementary to the DIAMES family of products. The potential benefit of using SFM is that key-users, who are mainly concerned with planning activities, can deal much faster and more effectively with all the aspects that are necessary for the day-by-day business process manufacturing than with the classical DIAMES Terminal Manager.

Starting with retrieved information on the plant level, the user drills down interactively to view all the departments and the associated work-centres. From the information on work-centre level the user continues to drill down to the active shop-order operation or the production schedule for that work-centre. The information on each level is displayed as a list; e.g. the plant list, department list, work-centre list or production schedule list. Each type of list is associated with certain unique functionalities and features.

The user manipulates the production schedule and the active shop-order operation of a particular machine by means of standard SFM functions. These are used to start, suspend or terminate active shop-order operations – or to set downtime reasons and to report quantities manually.

The basic features include powerful search functions to home in on critical information, e.g. bottlenecks and exceptional production conditions. When SFM is used in the front office of the planning or production departments it provides those users with a powerful tool to take immediate action when it is necessary to resolve problems like delayed shop-order operations, production tasks that are over-producing quantities or performance and quality mismatches.

## Plant Navigation



*Example: Plant navigation within the Shop Floor Manager*



- The **MIC View** window displays information specific to the selected work-centre. Authorised users have access to a feature that allows them to enter the actual downtime reason for a work-centre that has stopped production.
- The **Crew View** window shows the crew that is currently associated with the selected work-centre. Authorised users have access to a feature that allows them to sign individual crewmembers on or off.
- The **Log View** window shows all the events that have occurred on the selected work centre within the specified time period.
- The **Work Schedule View** window shows information regarding the operations that are planned for the selected work centre. Authorised users have access to the following functions or features of the scheduled shop-order operations:
  - *Start an operation in the production schedule*
  - *Change the priority of an operation in the production schedule*
  - *Re-assign an operation for execution on another work-centre*
  - *Split an operation to execute partly on more than one work-centre*
  - *Adjust the quantity-offset of an operation*
  - *View the field locks, resource locks and extended data (e.g. raw material, label data) for an operation.*
- **Active Operation View:** This window visualise specific data regarding the shop-order operation that is currently active on the selected work centre.

Active Operation				
Shop Order: 619912... Operation: 0010 Item: 12560354 Pld WPL: 41K045				
Quantity: 2466	Planned Efficiency: 87%	Actual Efficiency: 28%		
Times:	Planned Run Time:	0.61 h	Run Time:	0.20 h
	Planned Occupation Time:	1.63 h	Occupation Time:	0.71 h
	Planned Setup/Tear-down Time:	0.00 h	Setup/Tear-down Time:	0.00 h
Quantities:	Planned Quantity:	20200 m	Produced Quantity (MIC):	2466 m
	Rework Quantity:	0 m	Manual Offset:	0 m
	Required:	20200 m	Total Produced:	2466 m
	Pre-OP Good:	0 m	Scrap:	256 m
Weights:	Reserved:	0 m	Good:	1677 m
	Scrap Qty Weight:	0.0000 **	Last Actual Sample:	0.0000 **
	Good Qty Weight:	0.0000 **		
Speed:	Planned Sample Weight:	0.0000 **		
	Produced Units:	0		
	Stock Quantity/Unit:	0 m		
Max Weight/Stock Quantity:		0.0000 **		
Min Weight/Stock Quantity:		0.0000 **		
Calculated Planned Speed:	550.1500 m/m	Calculated Average Speed:	205.4833 m/m	
Actual Speed:	250.9520 m/m			

- Suspend active operation
- Terminate active operation
- Report good quantity
- Report scrap quantity
- Convert good quantity to scrap
- Convert scrap quantity to good
- Adjust offset
- View field locks
- Update operation
- View extended data

### Example: Active shop-order operation window – available SFM functions

The previous figure illustrates a detailed view of the information of an active shop-order operation and the list of available functions/features to report back and manipulate the quantities produced.

Drilling down further opens additional windows with more detailed customisable “extended information” that is available for this shop-order operation

## Shop Order Navigation



### Example: Shop-order navigation within the Shop Floor Manager

The previous figure illustrates the Shop Order navigation “drill down” path structure of the SFM. The result is a list of shop-order operations – based on the user-defined search criteria.

Drilling down further opens information windows, which contain all available data and details of the selected shop-order operation. The information is split-up into a planning segment and a segment containing the collected data about the current work in progress if the operation is or was active.

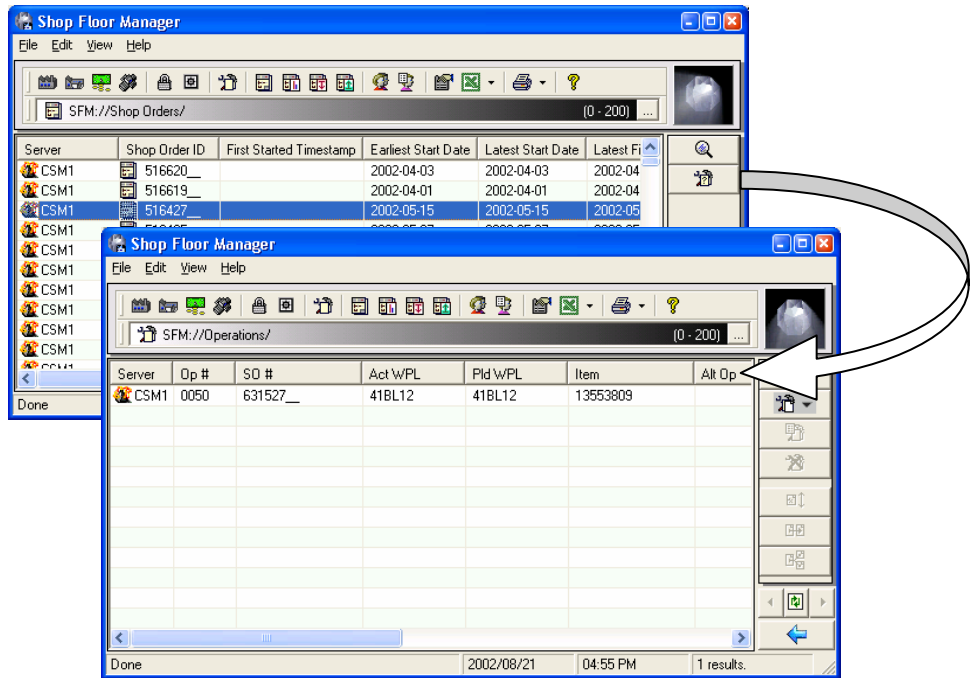
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









A separate drill down path provides access to additional “extended information” segments that contain special instructions, raw material specifications and other important information related to the production process.

Any collected additional information about production activities, that is not part of the standard DIAMES data structure, is maintained as customised extensions and also made available for the visualisation by SFM.

For general daily business operations dealing with production, the shop-order navigation is the most frequently used function of the SFM. The authorised user has access to a combination of the features of the classic DIAMES Manufacturing Information Centre (“MIC”) and the shop-order manipulation functions of the DIAMES Terminal Manager. SFM provides the production related personnel on the shop floor with a powerful – Microsoft Windows based – tool to execute all the tasks that are required to manage the effective business process production successfully and completely on site.

The following figure depicts a typical shop-order view and how the “drill down” proceeds to the related shop-order operation view - together with a list of all the functionalities available within this view.



-  View a detailed view of the selected operation
-  Create a new operation or clone an existing operation
-  Update the selected operation
-  Delete the selected operation
-  Change the schedule priority for the selected operation
-  Reschedule the selected operation
-  Split the selected operation
-  Report good quantity for the selected operation.
-  Report scrap quantity for the selected operation.
-  Convert good quantity to scrap for the selected operation
-  Convert scrap quantity to good for the selected operation
-  Do a personal report back of values for the selected operation
-  Adjust the offset of the selected operation
-  View the resource locks of the selected operation
-  View the extended data of the selected operation

**Example: Shop-order to operation list “drill down” functionality**

