

DIAMES[®] Manufacturing Execution Manager

The DIAMES Manufacturing Execution Manager (MEM) is an MS-Windows-based tool to visualise and manage shop-floor activities online. As part of the DIAMES Product Portfolio the MEM provides online transparency to the entire production process and its workflow. Production-related staff members immediately become aware of random bottlenecks and exceptions as they occur on the shop floor. Such information, combined with personal experience, is the key to manage any activity at shop floor far more effectively. The result is a significant increase in productivity and shorter order throughput times - without any additional resources.

In office environments the Manufacturing Execution Manager is used on individual PCs. On the shop floor the application is available on touch screen devices located at prominent positions. Authorised staff have access to past, actual and planned production information. Combined with the personal business experience such online information is an opportunity to optimise the usage of any manufacturing resources like men, machinery, tools and material far more effectively.

Supervisors and managers have access to business critical production information; either conveniently from their offices or remotely via a secure internet-based VPN connection.

PR0021 - EXTRUDER 150mm

33330 0064 00 KBA10,004C010S6BBL Planned Efficiency: 20% Actual Efficiency: 65%

Status: Stopped 0.01 h DT-Class and Reason: 10 DT-Type: BREAK-DOWN (ELEC. OR MECH.)

Planned Run Time: 5:05 h	Run Time: 234.94 h
Planned Occupation Time: 5:50 h	Occupation Time: 351.28 h
Planned Setup/Tendown Time: 0:50 h	Setup/Tendown Time: 0:00 h
Planned Quantity: 60000 M	Produced Quantity (MIC): 304424 M
Remain Quantity: 0 M	Manual Order: 0 M
Required: 60000 M	Total Produced: 304424 M
Pre-OP Good: 60000 M	Soap: 0 M
Reserved: 0 M	Good: 0 M
Soap Qty / Weight: 0.0000 KG	Last Actual Sample: 0.0000 KG
Good Qty / Weight: 0.0000 KG	User Variable 0: 10,0 10,0
Planned Sample Weight: 0.1130 KG	User Variable 1: 10,0 10,0
Produced Units: 0	User Variable 2: 10,0 10,0
Stock Quantity/Unit: 1 M	User Variable 3: 10,0 10,0
Max Weight/Stock Quantity: 46.3310 KG	
Min Weight/Stock Quantity: 44.0140 KG	
Calculated Planned Speed: 200.0000 M/h	Actual Speed: 0.0000 M/h
	Calculated Average Speed: 27.2567 M/h

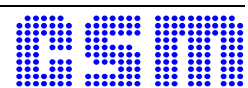
Workcenter Name	Exception ID	Exception Description	Esc. Lev.	Exception Last Occurred	Exception First Occurred	Confirmation PID	Confirmation Timestamp
PR1209	EXM1	Start an Operation ...	1	2003-10-24 09:16:37	2003-10-24 09:16:37	T000001	2004-01-16 12:28:55
PR1324	EXME	MIC back ON-LINE ...	2	2003-10-22 07:50:10	2003-10-21 13:33:16	T000001	2004-01-16 12:27:55
PR1324	EXMD	Sensor Plug out	14	2004-01-16 12:27:06	2004-01-13 15:16:55		0000-00-00 00:00:00
PR1324	EXM1	Start an Operation ...	2	2004-01-16 12:10:48	2003-10-24 06:30:27		0000-00-00 00:00:00
PR1924	EXM0	Running without Ope...	11	2004-01-16 12:13:13	2004-01-16 10:37:14	T000001	2004-01-16 12:28:38

Order: 2003102015 Op: #### Item Ref: SYSTEM CREATED JOB AOY: 501137## AccT: 1146.44h ARunT: 1133.79h ARate: 7.37##/m AU%: 98%
 (Job started at: 2003-10-20 15:46:03) WrkC.pl'd: PR19 PQV: 0## POccT: 0.00h PRunT: 0.00h PRate: 0.00##/m PUX: 0%
 Ready 2004-01-16 12:52

Digital images of your shop floor can be used as backgrounds. Dynamically animated icons that are placed on such an image represent particular work-centres, or a group of production resources. These animated icons indicate production activities and the current status of the particular machine.

- A single-click on an icon opens a text block in the status bar at the bottom. The Status bar contains customisable information concerning the active job on the selected production resource.
- A double-click on an icon opens an additional pop-up window (smaller window above). This window displays all production related key information, i.e. operators involved, work-centres and details on past, current and planned production order operations.

The same window is the gateway to all production-related management functions, too.



The Data Analyser & Report Generator (DAR) application is another complimentary component of the DIAMES Product Portfolio. This application converts production data into consolidated business specific information. Reports for particular groups of interest are available at a keystroke.

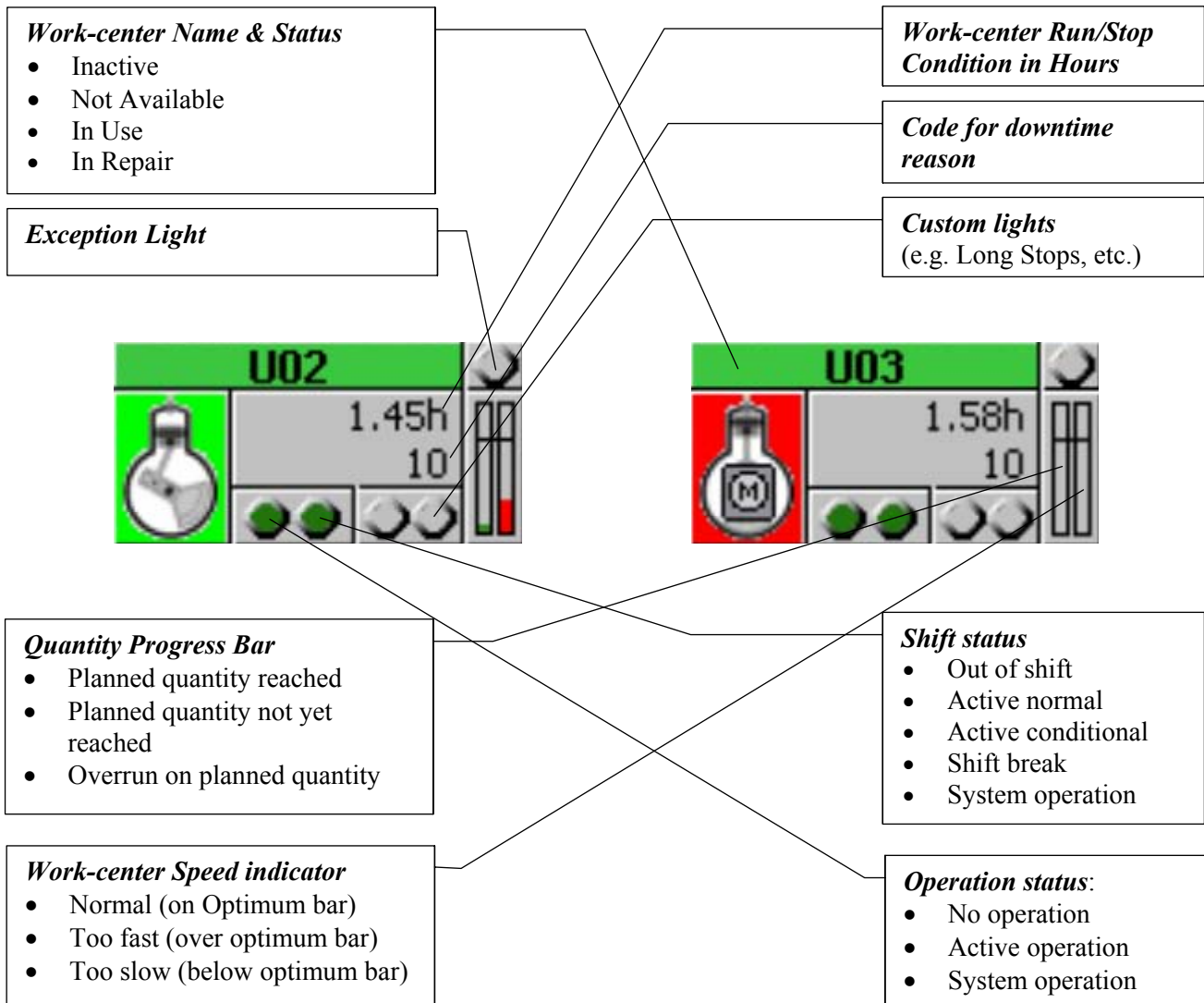
The DAR can be used in stand-alone mode or as integrated function of the DIAMES Manufacturing Execution Manager. Key benchmark figures like Overall Equipment Efficiency (OEE) are available online – even during an active shift.

For further details, please consult the DIAMES-DAR pamphlet.



Work-centre icons

The icons below represent two work-centres. Machine U03 is indicated stopping, machine U02 running. All icon properties, i.e. background colours, lamp functions and progress bars may be customised to cater for your particular business environment and personal preferences.



Description of the unique work-centre icon of the DIAMES Manufacturing Execution Manager

Two “custom lights” that are indicated grey can be assigned to DIAMES specific exceptions. This feature can be used to immediately highlight two of the most critical production conditions, i.e. “Too many operators signed on”, “Current production rate too low”. DIAMES recognises more than fifty exceptions thus far.

