

C A M L I N E[®] M A I N T

M a k e m a i n t e n a n c e y o u r s t r o n g p o i n t .



Cost savings with precise maintenance

Modern production is extremely vulnerable for unexpected down times. Right tools plus timely and swift servicing of the machines can however significantly reduce expensive idle time. CAMLINE® MAINT answers those important questions about the condition of your machines: Has preventative maintenance been done? What faults are there in a machine? Has the serviceman been called?

A link with the CAMLINE® ADC system enables the automatic collecting and storing of information, and therefore improves the accuracy of the collected data.

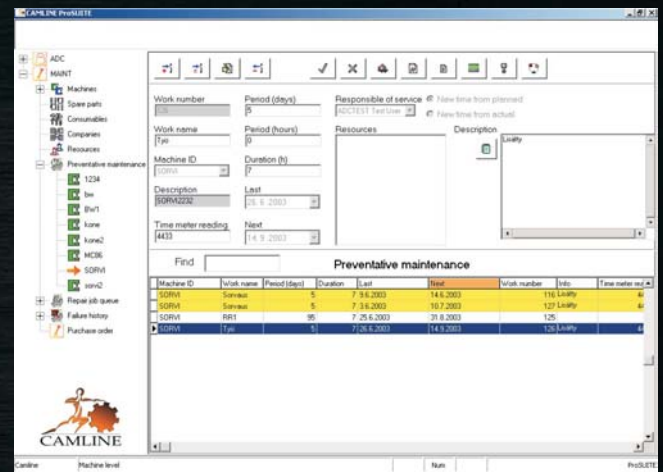
Planned servicing reduces problems

A carefully maintained machine lasts longer and produces more. With the computer based maintenance system, maintenance measures are easy to manage. When the exact condition of a machine is known, it is possible to anticipate service or modification work so that there is minimum operational disturbance.

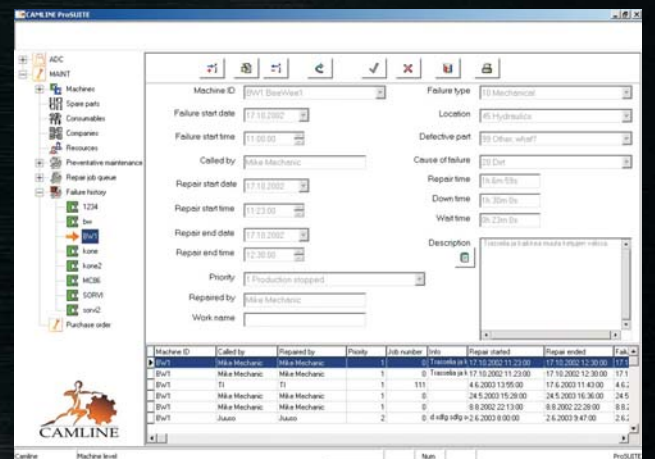
Well-planned preventative maintenance program leads gradually to the situation, where the number of unexpected failures starts to decrease. CAMLINE® MAINT system keeps timetables for preventative maintenance and makes sure that maintenance for each machine is done at the right time. With the help of preventative maintenance job queue, production can anticipate services and plan its own production timetable precisely.

Immediate aid from history

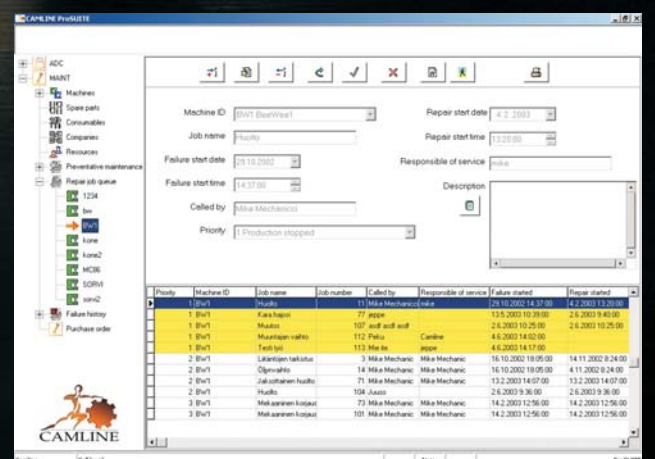
The data saved in the history database shows what kinds of failures have occurred earlier, and what kinds of actions were taken to repair these failures. With the help of versatile search and handling functions, the data in the history database can be put to good use when the same or similar failure occurs later. Based on failure classification, the occurrence of different failure types can be analyzed, and thus basic repairs and the need for new investments can be anticipated.



The preventative maintenance job queue shows all the effective preventative maintenance jobs. Reported jobs are saved in Failure history database, where each service job can be monitored afterwards. The preventative maintenance jobs that are late, are displayed yellow.



All the previous failures and actions taken to repair the failures are saved in the history database, where they can immediately be found when needed.



With the "Repair job queue" function, service personnel can monitor upcoming service jobs. The most urgent, priority one jobs are displayed yellow. Finished repair jobs and their repair data are saved in the Failure history database.

Keep production machines working efficiently

Well-organized maintenance helps production optimize machine operation. Machine performance and operational reliability improve, which can directly be seen in better quality and increased productivity. In addition, well-planned and scheduled maintenance measures prolong the life span of production machines. Collected data can be utilized when making decisions on new investments, and budgeting is easier when the machine condition and the service they need yearly can be predicted and calculated.

CAMLIN[®] ProSUITE - True production integration

CAMLIN[®] ProSUITE system integrates different CAMLIN[®] products into the same Explorer-like user interface. The basic principle in CAMLIN[®] ProSUITE is the hierarchical layout that enables monitoring data by product, machine, cell and factory levels. Different product modules can be integrated to CAMLIN[®] ProSUITE in the order that suites the customer best.

Unbreakable chain between shop floor and administration

CAMLIN[®] ProSUITE can be connected to enterprise administrative systems. In practice, the connection between the enterprise resource planning system (ERP) and the manufacturing process means the possibility to bring for example cell's or machine's work queue from ERP to the shop floor. Correspondingly, starting and ending of a work piece plus the number of manufactured work pieces can be reported back to ERP. This possibility becomes useful for example when specifying production planning, defining capacities or when deciding about the new investments. Likewise, if production breaks occur, the situation can immediately be seen in company administration and necessary actions can be taken at short notice.

CAMLIN[®] MAINT user interface

The user interface is divided into three sections. There are function buttons on the top, and information section in the middle displays the results of different functions, e.g. failure history of CAMLIN[®] MAINT system. Menu tree on the

left has the following levels:

1. Software modules e.g. CAMLIN[®] MAINT
2. System functions
3. Machines

CAMLIN[®] ADC system displays also the factory and cell levels.

The screenshot shows the CAMLINE ProSUITE software interface. On the left is a hierarchical menu tree with levels: ADC, Factory 1 (Machining: BW1, BW2, BW3, MC86-1, MC86-2; Turning), Factory 2, Factory 3, MAINT, and Machines (1234, bw, BW1, kone, kone2, MC86, SDRV1, sorvi2). The main window displays the 'BW1' machine details, including fields for Machine ID, Machine type, Manufacturer, Description, Drawing number, Cost center, Location, Date of installation, Serial number, and Supplier. Below this is a 'Failure history' table with columns: Machine ID, Called by, Repaired by, Priority, Job number, Info, Repair started, and Repair ended.

Machine ID	Called by	Repaired by	Priority	Job number	Info	Repair started	Repair ended
BW1	Mike Mechanic	Mike Mechanic	1	0	Trassetka ja k	17.10.2002 11:23:00	17.10.2002 12:30:00
BW1	Mike Mechanic	Mike Mechanic	1	0	Trassetka ja k	17.10.2002 11:23:00	17.10.2002 12:30:00
BW1	TI	TI	1	111		4.6.2003 13:55:00	17.6.2003 11:43:00
BW1	Mike Mechanic	Mike Mechanic	1	0		24.5.2003 15:28:00	24.5.2003 16:36:00
BW1	Mike Mechanic	Mike Mechanic	1	0		8.8.2002 22:13:00	8.8.2002 22:28:00
BW1	Juuso	Juuso	2	0	d sdg sdg s	2.6.2003 8:00:00	2.6.2003 9:47:00



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