

# Efficient Maintenance

with **maint.tec**

## ■ Increase Productivity through e-Maintenance

IT technologies are permeating all areas of business life resulting in a significant increase of overall productivity. The potentials to optimise the maintenance processes are considerable and must be utilized.

## ■ **maint.tec**

**maint.tec** effectively aids in implementing modern maintenance strategies for dynamic preventive maintenance control, corrective maintenance, logistics, documentation management and cost controlling. **maint.tec** comprises state of the art client-server

programming as well as integrating web server and internet technology, thus laying the foundation for an efficient e-maintenance solution.



## ■ Preventive Maintenance

Ensuring equipment availability and optimising preventive maintenance through dynamic control

## ■ Corrective Maintenance

Efficient corrective maintenance through knowledge management and pragmatic planning

## ■ Stock Management

Optimising the logistics through integration into the maintenance workflow

## ■ Procurement Management

Lean procurement processes by applying internet technologies

## ■ Controlling

Focused maintenance control through extensive and up-to-date cost information

# Optimising Preventive Maintenance through Dynamic Control

## ■ Maintenance is a Dynamic Process

The intervals for preventive maintenance task orders must be critically checked and adjusted according to inspection results. Thus over-maintenance is avoided.

Task descriptions must be modified in accordance with knowledge on site. This is crucial in optimising the work.

Planning needed materials and having them prepared for the maintenance tasks optimises the logistics.

## ■ Wear-Data based Maintenance through an on-line Interface to the Equipment

Implementing an on-line interface to the equipment optimises the preventive maintenance intervals, since the intervals are automatically adjusted according to usage and wear.

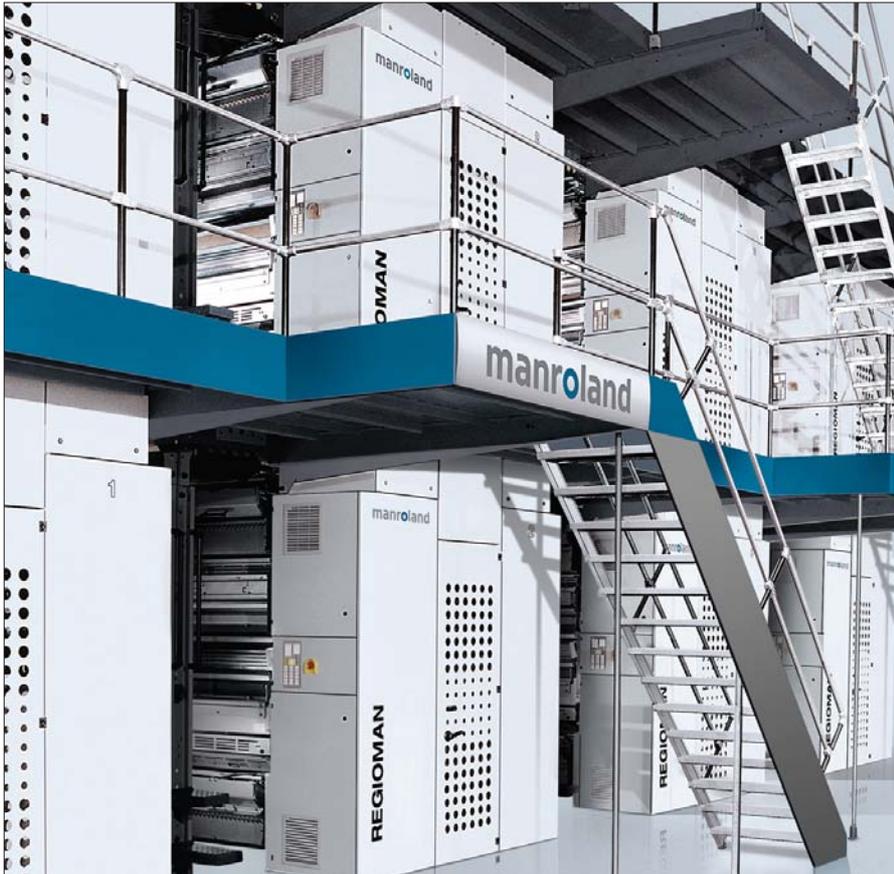
## ■ Planning in Advance based on Maintenance Overview and Capacity Plans

By including the planned time for each maintenance task, it's possible to anticipate the necessary capacity in respect to personnel and equipment.

## ■ Extensive Electronic Documentation

Documentation from the manufacturers, such as maintenance and operation manuals as well as spare parts catalogues are converted to internet-formats and stored on the server. This makes it possible to access up-to-date technical documentation from any PC in the company network.

Based on the functionality of a web server any document can be found using a search engine. Navigation incorporates standard internet technologies such as hyperlinks and image maps.



„In order to be competitive on the world market we must drastically reduce our maintenance costs and that quickly.“ From an inquiry from a large chemical company

# Efficient Corrective Maintenance through Knowledge Management and Pragmatic Planning

## ■ Focused Maintenance based on Historical Data

Everyone is familiar with the problem – the production equipment is down and the foreman isn't available. If only his notes were on hand...

With **maint.tec** the corrective maintenance information for all equipment is stored on the server and available to everyone. Powerful search tools enable one to simply

find needed historical data in order to carry out the repair in a focused way.

## ■ Increased Efficiency through more planned Maintenance

Complex production equipment typically have a cost per hour of several thousand dollars. Even short breakdown periods are extremely expensive. From the maintenance point of

view it's the unplanned repairs that are most costly. Maintenance personnel must be withdrawn from other tasks and often things must be improvised in order to get the production back on track as soon as possible. Just by raising the quota of planned maintenance a few percent pays off the investments in **maint.tec**.

# Optimising the Logistics through Integration into the Maintenance Workflow

## ■ Finding Spares quickly

Medium-sized companies tend more and more to give up on keeping particular stock personnel. Especially then it becomes important to quickly find out if a certain part is on stock and where it is stored. With **maint.tec** anyone can easily search for and find the desired parts – this without much training.

## ■ Planning Spares

By planning which spares are needed in maintenance tasks the company is able to restock on time and to have needed parts prepared for the maintenance tasks.



# Lean Procurement Processes by Applying Internet Technologies

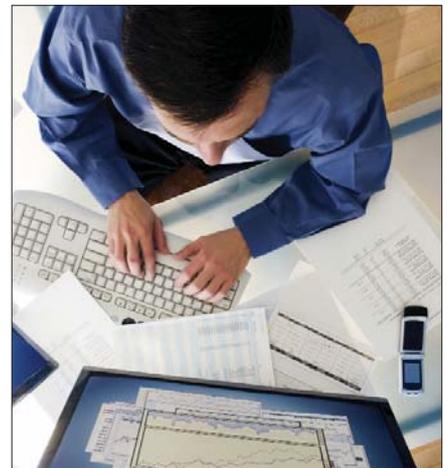
## ■ Reducing Administration Tasks

Applying lean processes has the effect of requiring the persons, who generate requests for purchase or orders, fill out the basic data. This requires simple input methods and systematic insurance of data integrity. Since **maint.tec** fulfils these requirements it's not only used by the maintenance departments for ordering but also by other departments as a front-end input system with interface to dedicated procurement systems. After the order has been

entered and approved, it can be directly forwarded to the supplier via e-mail.

## ■ Supervising Procurement Processes

By entering the deliveries and invoices it's easy to supervise outstanding activities and to check the delivery and invoice data.



# Focused Maintenance Control through extensive and up-to-date Cost Information

## ■ Keeping Cost Budgets

Modern cost management requires that the persons responsible for their budgets stay within their cost limits. This however necessitates that up-to-

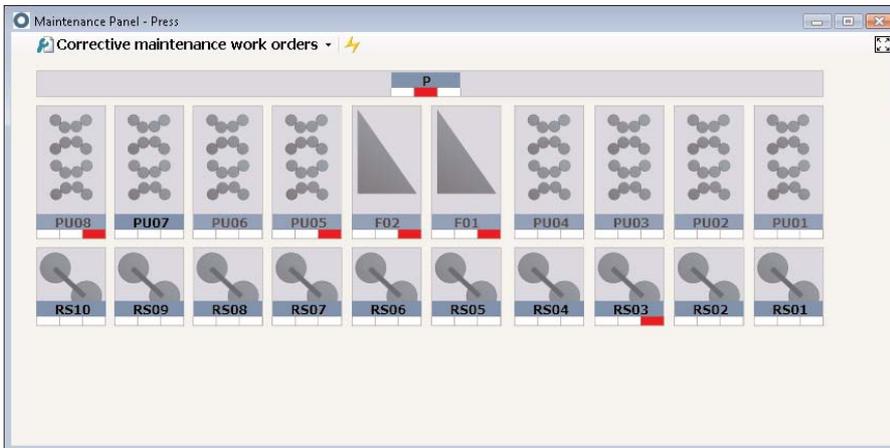
date cost data is readily available. Working with the cost controlling module of **maint.tec** the maintenance can be controlled in a focused way and the budget targets kept.

## ■ Quick Overview

A so-called traffic light function allows a quick overview of maintenance tasks one needs to keep an eye on.

# **maint.tec**

## Maintenance Control with Traffic Light Function



Based on the maintenance panel overview work orders can be controlled according to urgency and priority.

## **maint.tec** at a Glance

### ■ Preventive Maintenance

- Ensuring equipment availability through timely preventive maintenance
- Time saving through permanent optimisation of maintenance intervals
- More efficient maintenance by optimising the maintenance workflow
- Wear-data controlled maintenance
- Optimising the logistics by planning materials for maintenance

### ■ Documentation

- Integrating manufacturer documentation with equipment data, maintenance plans and materials data
- Up-to-date documentation accessible from every workstation

### ■ Corrective Maintenance

- Increasing the percentage of planned maintenance
- Effective assistance of ad hoc repairs
- Analysis of historical data in order to repair more quickly
- Increasing equipment availability through weak spot analysis

### ■ Stock Management

- Stock supervision
- Adapting purchase strategies based on consumption

### ■ Procurement Management

- Reducing administration tasks for project overviews, budgets and purchasing processes
- Supervision of outstanding deliveries and invoices as well as checking of delivery and invoice data

### ■ Controlling

- Cost controlling using controlling instruments

## Efficient Project Management by EMTEC IT-Solutions

EMTEC IT-Solutions is specialised in effectively implementing e-maintenance projects. In many projects we have proven our ability to apprehend the needs of our customers and realize successful customer-specific solutions. The results have been an assessable productivity increase in the maintenance processes.

### ■ Turn-Key Solution

Successful maintenance projects require an extensive engineering know-how and in-depth familiarity with the software so that the system can be utilised profitably within a short time.

### ■ Typical Project Workflow

In workshops we compile together with the customer the customising of the system.

Maintenance plans and maintenance control based on manufacturer documentation and plant-specific data are specified together with the customer and then implemented. Manuals and spare parts catalogues are converted to internet-specific formats so that they can be accessed from all workstations. Maintenance and logistic workflows are critically checked and optimised.

The installation and putting into operation of the system is done competently by EMTEC IT-Solutions. A well-developed training program ensures maximum usage of the system functionality.

The project normally concludes with a success assessment regarding the goals set from the beginning and an outlook for future goals.

## EMTEC IT-Solutions

### Get to know us!

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