Maintenance Notifications

In addition to regular activities in maintenance, other unforeseeable situations arise from time to time. These malfunctions or other exceptional situations require prompt action on the part of the maintenance organization. To deal with these, the PM System contains a comprehensive notification system for creating and managing company notifications.

Exceptional Work Situations

A maintenance notification describes a technical state of exception in a reference object. If the reference object is known, the functional location, the affected piece of equipment or the malfunctioning assembly can be defined in the notification from the start. If, however, only a production area or an approximate indication of the position within a technical system is possible, then maintenance notifications can also be created without entering a concrete reference object. A more detailed specification can then be made after the technical explanation to supplement the original notification data.

Maintenance notifications represent a workload that needs to be built into planning for the maintenance organization. Using flexible selection processes, the PM planner groups can obtain an overview of the notifications made and allocate them to orders.

Flexible Selection Options

Maintenance notifications are used not only to initiate maintenance tasks, but also for documenting technical completion confirmations. During or after the processing of a maintenance order, the allocated notifications can be supplemented with completion confirmation information. Further notifications may also be created as a result of the technical explanation.

Completion Confirmations

Notification Structure   Maintenance notifications contain notification information, items and tasks. Notifications can be classified with specific data using the classification system. A flexible catalog system constructed on a location or equipment-specific basis, is used for allocating types and causes of damage, object components affected or tasks performed.

■ **Malfunction reports**
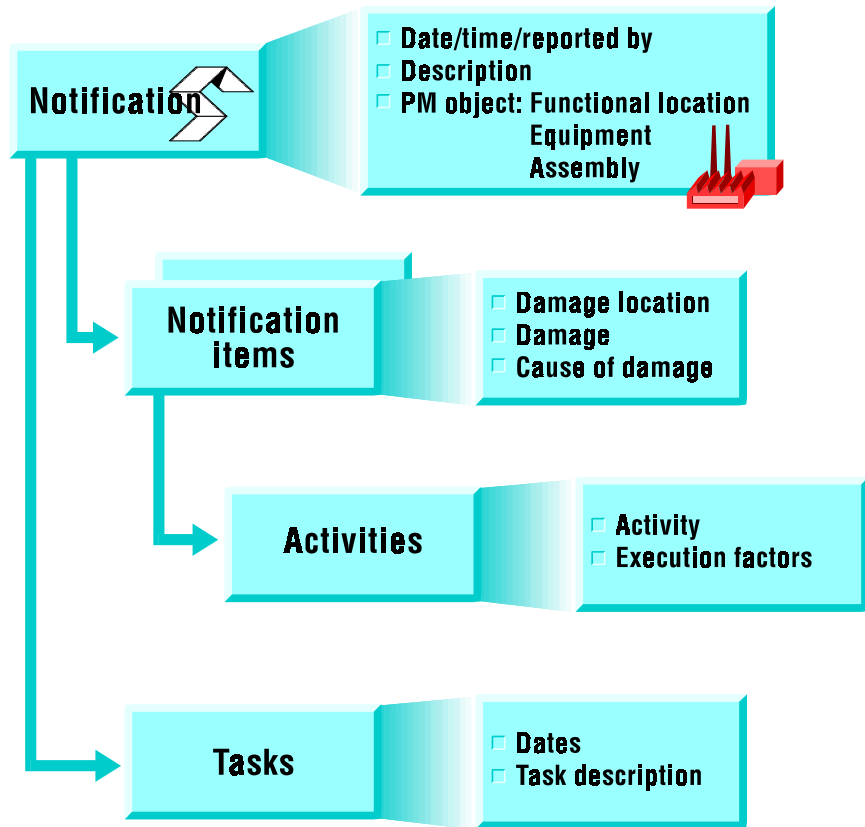
■ **Maintenance requests**

■ **Activity reports**

Figure 4-1: Maintenance Notifications

Elements of a Maintenance Notification

A maintenance notification contains general data on the type, time and name of the person making the notification and information regarding the object concerned. You can enter a functional location, a piece of equipment or an assembly. If this information is not yet known, the notification can also be created without an object and contain only the maintenance plant, location or cost center.

```
┌─────────────────────────────────────────────────────────────────────────┐
│ ─        Create PM Notification: Malfunction report            ▼ ▲       │
│ Notification   Edit   Goto   Details   Environment   System   Help    !  │
│ ┌──┐┌──────────────────────┐ ┌─┐ ┌──┐┌────────┐┌───┐┌─┐ ┌──┐┌──┐┌──┐┌──┐ │
│ │✐ ││                      │ │↓│ │📅│├⇐↑✗┤│Q ?│└─┘ │🔲││🔲││🔲││🔲││ │
│ └──┘└──────────────────────┘ └─┘ └──┘└────────┘└───┘    └──┘└──┘└──┘└──┘ │
│ ┌────────────┐ ┌───────────────┐ ┌──────────────┐                        │
│ │Item detail │ │Item overview  │ │Task overview │                        │
│ └────────────┘ └───────────────┘ └──────────────┘                        │
│ Notification   ┌──────────┐   NotifcatnType  ┌──┐  Order  ┌──────────┐    │
│                │          │                  │M2│         │          │    │
│ Description    ┌──────────────────────────────────┐ ┌────┐             │
│                │Pump malfunctioning (no power)    │ │LgTx│             │
│ Status         │0SN0                                                    │
│                                                  ☐ UserStatus           │
│ MaintPlanGrp   │100│ Mr. Trintz          Planning plant   │3000│        │
│                                                                          │
│ ┌Start/end dates──────────────────────────────────────────────────────┐ │
│ │ StartMalfunct   │22.02.1995│            Priority         │ │         │ │
│ │ StrtMalfn (T)   │12:10:19  │            ☐ Breakdown                  │ │
│ └─────────────────────────────────────────────────────────────────────┘ │
│ ┌Reference object─────────────────────────────────────────────────────┐ │
│ │ FunctLocation  │                          ▽│                        │ │
│ │ Equipment      │P-3000-N002            ▽│  Pump,electrical,150-200 GPM│ │
│ │ Assembly       │                       ▽│                            │ │
│ └─────────────────────────────────────────────────────────────────────┘ │
│ ┌Item─────────────────────────────────────────────────────────────────┐ │
│ │ ObjComponent   │    │             │Itm│ 1    frm  1                  │ │
│ │ Damage         │1003│ Unbalanced                                     │ │
│ │ Text           │                          │ ┌────┐                  │ │
│ │                                             │LgTx│                   │ │
│ │ Cause of damage│    │                                               │ │
│ │ Cause text     │                          │ ┌────┐                  │ │
│ │                                             │LgTx│                   │ │
│ └─────────────────────────────────────────────────────────────────────┘ │
│                                       │DCB (1)│ hwrz03 │OVR│12:18│       │
└─────────────────────────────────────────────────────────────────────────┘
```

Figure 4-2: Creating a Maintenance Notification

Any number of technical details can be entered for a notification as notification items.

Notification Items

A notification item contains information regarding the object component affected, the damage and, if known, the cause of damage, in addition to the damage code.

There can be an unlimited number of notification items; notification items can be changed or supplemented during processing.

Tasks   Any extra tasks necessary, for example, carrying out a technical explanation in loco, or manufacturer information in a warranty case, can be allocated as required to a notification.
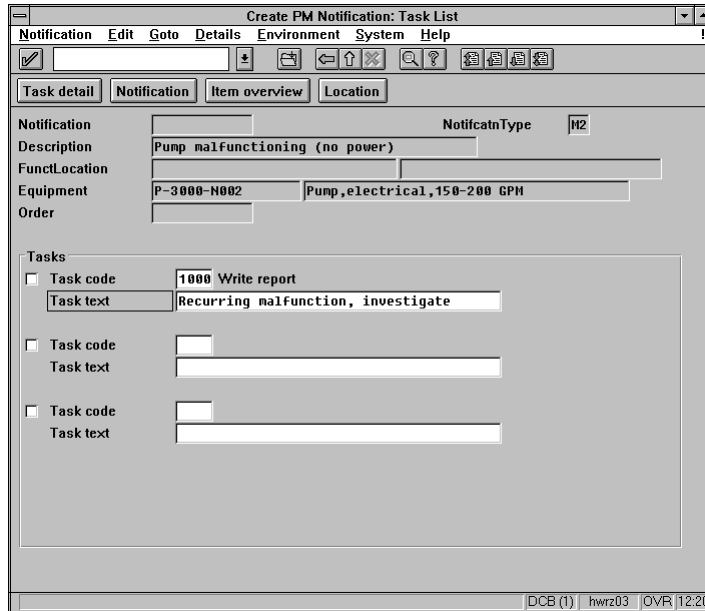

Figure 4-3: List of Tasks

Activities   You can enter any number of activities performed to repair a malfunction for documentation purposes. Predefined tasks are allocated in the task catalog, but you can also describe special tasks in free format, using the word processing function.
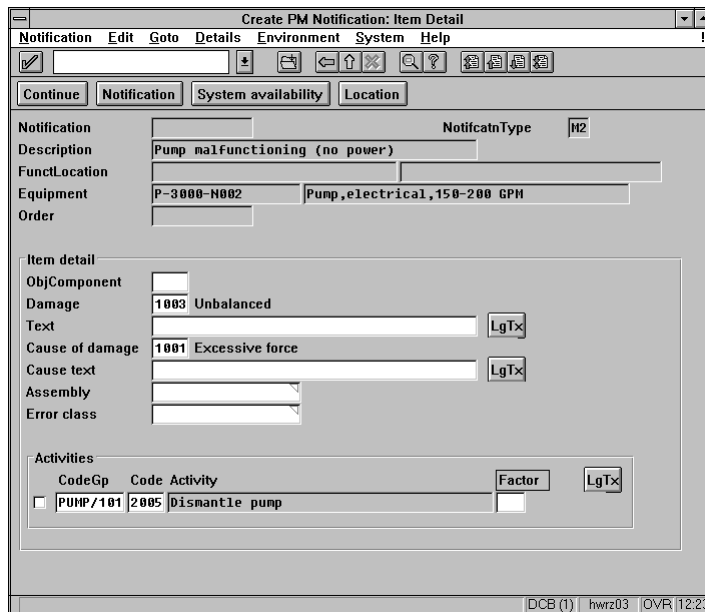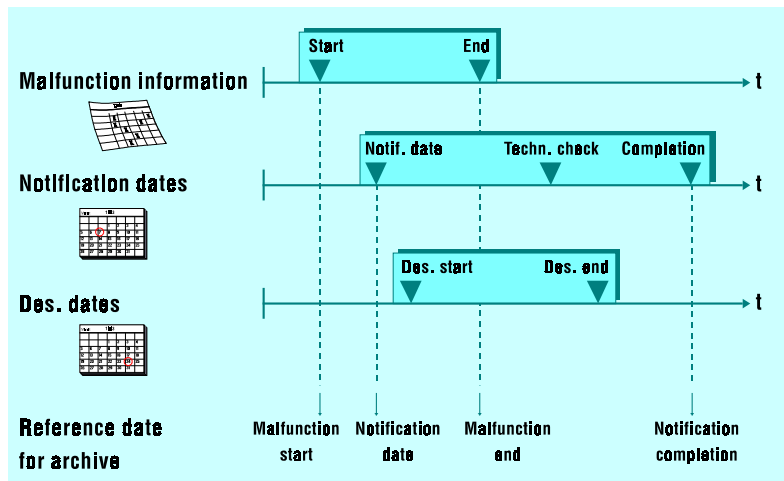
Figure 4-4: Activities

Various events are recorded by their dates in the notification. The start and the end of a malfunction is recorded. The creation and completion times of the notification are entered. The person making the entry can also specify the dates when the task is to be performed.

Dates

Figure 4-5: Schedule Overview

Any additional technical classifications of notification items can be provided with supplementary characteristics using the classification system.

Classification

If further description is required for notifications, notification items, tasks and causes, long texts of any length can be added using the SAP word processing functions.

Word Processing

Using Maintenance Catalogs in Notification Processing

Maintenance catalogs can be implemented for specifying damages, causes of damage, tasks and completion. The catalogs can be freely defined by the user. Catalogs can be created per object group, for example damage catalogs divided by damage to pumps/vehicles, in order to offer the person entering the notification a selection of useful damage codes as soon as the notification is created.

The catalogs are structured into

Catalog Structure

❑ catalog types
    for example, damage catalog, tasks catalog, causes catalog

❑ code groups
    for example, tasks relating to pumps, motors, vehicles

❏ codes

for example, codes for tasks relating to vehicles: brakes tested, chassis measured

Catalog Type Dependent Default Values

As soon as you create functional locations and items of equipment, the default values for the respective catalog types can be determined so that the person entering the notification automatically receives a suggested allocation of catalog entries. However, the user can also change the catalog allocation proposed by the system in individual cases.
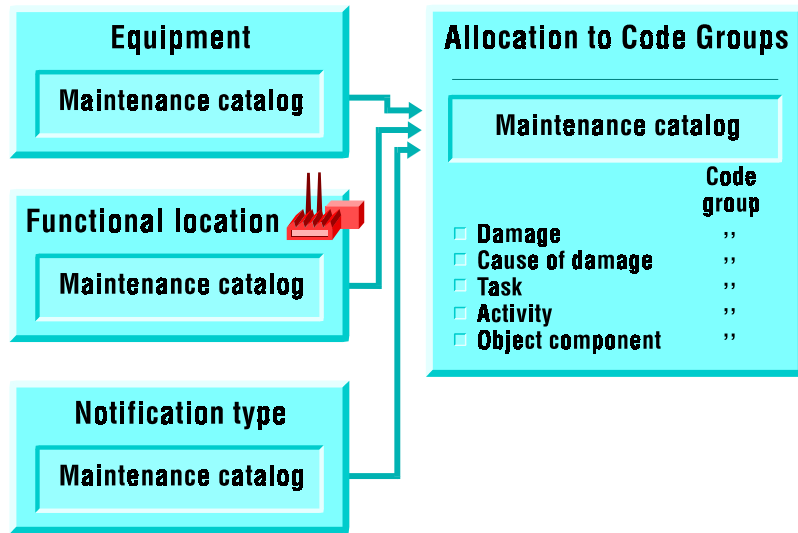

Figure 4-6: Allocation of Catalogs

Selecting Notifications

Maintenance notifications can be selected using numerous selection criteria, including the following:

❑   temporal parameters

❑   organizational parameters, for example cost centers, locations, plants

❑   functional parameters, for example downtime data, damage description
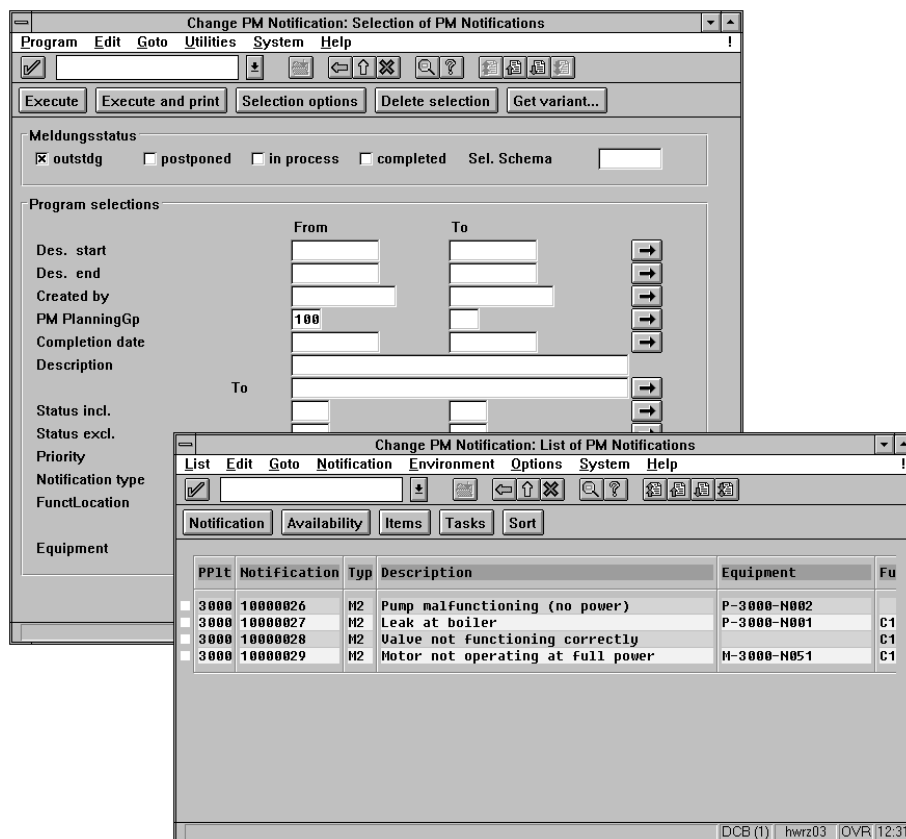
Figure 4-7: Selection of Maintenance Notifications

Notifications can be edited from the list. You can format the list according to your specific requirements (field selection and list sorting options).

During order planning, notifications can be selected from the list for transfer to an order. You can allocate either one or several notifications to an order. This may for example be useful if one order per notification is unreasonable due to the volume of tasks, when a single order can be created for a series of notifications. Allocating the individual notifications to the order means that

**Allocating
PM Notifications
to Orders**

the detailed technical information is not lost and can therefore be evaluated at a later date in the history.

Status Management for Notifications

Process-dependent Status Maintenance

Maintenance notifications are described in their current condition by means of a flexible status management system. These statuses are maintained automatically by means of processing steps such as creating a notification, confirming a technical explanation, the start of processing, or the completion of the notification.

The necessary or possible sequence steps in processing the notification are controlled by the relevant status. Information can also be sent automatically to individuals or to a general distribution list via the planned connection to the MAIL System, to trigger automatic sequential processing.

Variable Status Definitions

In addition to default statuses set by the system, the user has the option of defining additional statuses using the customizing function. This provides you with a simple, flexible means of adjusting the way the notification is carried out, to suit your specific company requirements.

Figure 4-8: Notification Status Overview

Completion Confirmations

Maintenance notifications can be created as a completion confirmation not only for starting, but also for processing or completing a maintenance order.

If, for example, an inspection order has been scheduled for which findings regarding individual technical objects are to be entered during processing, these are taken from the order via notification processing. Depending on the type of finding, the completion confirmation can be entered immediately in the history or, if subsequent processing with a repair order is necessary, as a new, "outstanding" PM notification.

Example

What are the performance features of notification management in the
PM System ?

❑   Up-to-date documentation of technically exceptional situations
❑   Transparency of condition of technical systems
❑   Any number of damage locations, damages, causes and tasks for each
      PM notification
❑   Completion confirmation support using catalogs
❑   Graphic navigation in technical system structures when specifying
      technical objects and assemblies
❑   PM notifications as a basis for a weak point analysis of technical
      systems