



Business Performance Sustained

**Best Practice**  
**eXensys – Preventive Maintenance Schedule**

Exensys Software Solutions Ltd.		AA/B/CCDD V x.y
White Paper		W. E. F. dd/mm/yy

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## Introduction:

**Preventive maintenance (PM)** has the following meanings:

1. The care and servicing by personnel for the purpose of maintaining equipment and facilities in satisfactory operating condition by providing for systematic inspection, detection, and correction of incipient failures either before they occur or before they develop into major defects.
2. Maintenance, including tests, measurements, adjustments, and parts replacement, performed specifically to prevent faults from occurring.

While preventive maintenance is generally considered to be worthwhile, it is important to note that there are risks such as equipment failure or human error involved when performing PM, just as in any maintenance operation. Common methods of determining what PM (or other) failure management policies should be applied are; OEM recommendations, requirements of codes and legislation within a jurisdiction, what an "expert" thinks ought to be done, or the maintenance that's already done to similar equipment.

The primary goal of maintenance is to avoid or mitigate the consequences of failure of equipment. This may be by preventing the failure before it actually occurs which PM and condition based maintenance help to achieve. It is designed to preserve and restore equipment reliability by replacing worn components before they actually fail. Preventive maintenance activities include partial or complete overhauls at specified periods, oil changes, lubrication and so on. In addition, workers can record equipment deterioration so they know to replace or repair worn parts before they cause system failure. The ideal preventive maintenance program would prevent all equipment failure before it occurs.

Preventive maintenance is a schedule of planned maintenance actions aimed at the prevention of breakdowns and failures. The primary goal of preventive maintenance is to prevent the failure of equipment before it actually occurs. It is designed to preserve and enhance equipment reliability by replacing worn components before they actually fail. Preventive maintenance activities include equipment checks, partial or complete overhauls at specified periods, oil changes, lubrication and so on. In addition, workers can record equipment deterioration so they know to replace or repair worn parts before they cause system failure. Recent technological advances in tools for inspection and diagnosis have enabled even more accurate and effective equipment maintenance. The ideal preventive maintenance program would prevent all equipment failure before it occurs.

**Overview:**

**Machine**

Machine Code	Origin	Standard Procedure	Work Group	Spare BOM	Life Parameter Code	UOM	Starting Value
M1	Production	SP1	WG1	bom_1	Runing Hours	Hours	50

**Machine Maintenance Details**

**Machine Code: M1**

Type	Parameter Code	UOM	Value	From	To	Attribue Value	Starting Value
Technical	Power	<b>Watts</b>	<b>10</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>
Attribute	Lube Color	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>Clear</b>	<b>NA</b>
Range	Temperature	<b>Deg C</b>	<b>NA</b>	<b>150</b>	<b>200</b>	<b>NA</b>	<b>NA</b>
Consumpti	Runingng Hours	<b>Hours</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>50</b>

**Preventive Maintenance Schedule: PMS\_01 for Machine Code: M1**

From Date 01.09.08  
To Date 30.09.08

Schedule Type	Period Type	Bucket Interval	Interval	Start Date	Parameter Code	UOM	Interval Value	Machine Condition	Estimated duration (hrs.)
Time	Fixed Interval	Weekly	1	01.09.08	NA	NA	NA	Running	2
Usage	NA	NA	NA	NA	Runing Hours	Hours	100	Shut-Down	0.1

Based upon the time based schedule, Maintenance Orders will generate as follows:

Maintenance Order	Start Date
MO1	01.09.08
MO2	08.09.08
MO3	15.09.08
MO4	22.09.08
MO5	29.09.08

For Usage based Schedule, MO will generate as per Maintenance checklist > PPV type > Cumulative Parameter Value

Whenever this value goes beyond the 100 / 200 / 300 / 400 so on, system will generate Maintenance Order

**Benefits:**

1. eXensys PMT module helps in generating preventive maintenance schedule which reduces the loss due to production delays because of poor maintenance.
2. It helps in better conservation of asset and increase the life expectancy of asset, thereby eliminating the premature replacement of machinery.

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3. Timely maintenance reduces the large-scale repairs.
4. Reduced better products, less scarp and rework due to better overall machine condition.
5. Improved safety and quality conditions.
6. Replacement of obsolete machines depending upon the usage.

**Conclusion:**

Preventive maintenance is a schedule of planned maintenance actions aimed at the prevention of breakdowns and failures. The primary goal of preventive maintenance is to prevent the failure of equipment before it actually occurs. It is designed to preserve and enhance equipment reliability by replacing worn components before they actually fail. Preventive maintenance activities include equipment checks, partial or complete overhauls at specified periods, oil changes, lubrication and so on. In addition, workers can record equipment deterioration so they know to replace or repair worn parts before they cause system failure.

