



If It Ain't Broke, PM It - BB (Boring)

Preventive Maintenance by Joseph Patton Jr

Reviewed by Nick Sands

Maintenance in general, and preventive and predictive maintenance in particular, is often under appreciated. In Joseph Patton Jr, maintenance has found its champion. Patton is a certified professional logistician, quality engineer, reliability engineer and a Fellow of both the International Society of Logistics and the American Society for Quality. Patton is a veteran of the US Army and Xerox, with a BA and MBA in Marketing. He has written hundreds of articles and authored 8 books on maintenance practices. He is currently chairman of Patton Consultants, founded in 1976. This is the third edition of *Preventive Maintenance*, which was first published in 1983.

The first chapters provide an overview of maintenance and the advantages and disadvantages of Preventive maintenance (PM), which is maintenance that is not corrective or directed towards improvements. Preventive maintenance includes scheduled, on-condition, and condition monitoring maintenance activities. A successful PM program will increase equipment availability and should reduce maintenance costs. Setting up such a program is covered in the remainder of the book.

Patton describes designing a PM program from the bottom up and not from the top down, starting with terminology and teams and then expanding to economics and the optimal investment. Next comes several chapters on types of PM such as condition monitoring, on-condition maintenance and scheduled maintenance using such methods as non-destructive testing, lubrication, and calibration.

The remaining chapters discuss the execution, computer records and metrics of a PM program and finish with special topics. Included are chapters on planning, estimating, scheduling, and shutdown scheduling. The special topics include the hot topic of spare parts.

Patton provides a broad overview of the elements needed in a successful PM program. At times he gets very detailed, usually illustrated by screen shots of outdated maintenance software. His guidance can be applied to instrument maintenance, though there is little direct discussion of instruments in the book. This book is helpful primarily to those who work in a facility without a PM program. It can be boring (BB) if you have a program in place. The third edition is available at ISA for \$68 (member price).