

MAINTENANCE AT FRAUNHOFER IPA

MAXIMIZED AVAILABILITY AT MINIMIZED COSTS

REORGANIZATION AND OPTIMIZATION
AVAILABILITY ASSURANCE
MAINTENANCE CONTROLLING
SMART MAINTENANCE



OUR SERVICES

REORGANIZATION AND OPTIMIZATION

A company's maintenance management system has to ensure the availability and cost-effectiveness of machines and equipment. Fraunhofer IPA develops holistic concepts and helps you to implement them.

Based on an analysis of your potentials for maintenance improvement we support you in development, selection and implementation of:

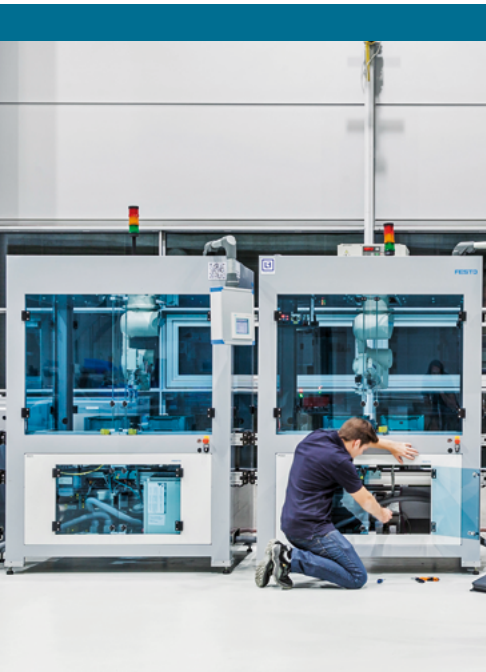
- Maintenance roadmaps and strategies geared towards production requirements
- Requirement driven maintenance organization concepts e.g. Total productive maintenance (TPM)
- Lean maintenance concepts – wastage and loss free processes and workflows
- Risk based maintenance strategies (focus on machine availability)
- Continuous improvement processes (CIP) for maintenance
- Demand orientated sourcing strategies for spare parts
- Computerized Maintenance Management Systems (CMMS)

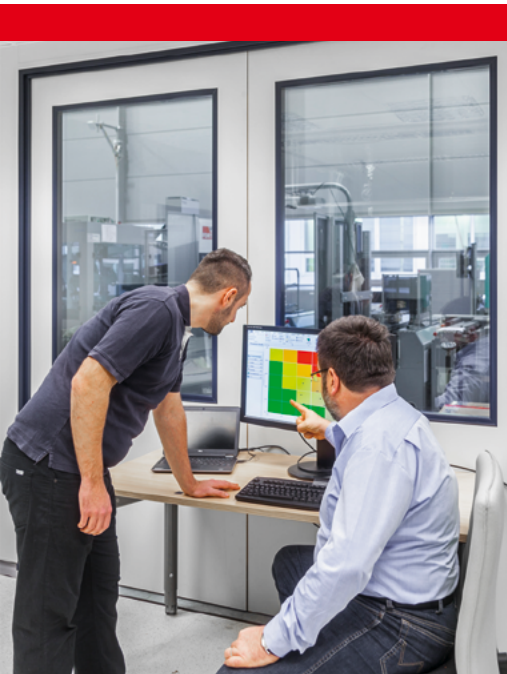
AVAILABILITY ASSURANCE OF PRODUCTION SYSTEMS, MACHINES AND EQUIPMENT

Requirements regarding the reliability and availability of individual machines, equipment and even complete production lines are constantly rising. Fraunhofer IPA identifies potentials in your processes and production systems and helps you to improve their performance.

We support you in analysis and evaluation of:

- Overall equipment effectiveness (OEE) of a single machine
- Effectiveness of complete production lines
- Consequences of production downtimes on the value chain
- Financial losses through downtimes





MAINTENANCE CONTROLLING AND KEY PERFORMANCE INDICATOR SYSTEMS

A clear picture of costs and performance is the basis for an effective and efficient change management and enables a requirement driven management of maintenance. To achieve this objective, Fraunhofer IPA implements an integrated maintenance controlling.

Based on a holistic cost analysis of direct maintenance costs and failure costs we support you in development and implementation of:

- Holistic and effectiveness based maintenance controlling methods and concepts
- Key performance indicators and systems for maintenance
- Maintenance system benchmarks
- Continuous improvement processes (CIP) for maintenance



SMART MAINTENANCE IN THE ENVIRONMENT OF INDUSTRY 4.0

With the technologies of Industry 4.0, the availability of information can be significantly improved in manufacturing. Fraunhofer IPA uses this information to develop optimized, predictive maintenance strategies.

Based on an analysis of your potentials for smart maintenance improvement we support you in development, selection and implementation of:

- Smart maintenance technologies, roadmaps and concepts
- Predictive maintenance strategies based on smart and big data approaches
- Smart solutions to improve maintenance processes

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