The maintenance of industrial plant and machinery is a key field of activity for technicians and skilled tradesmen working in mechanical and electrical engineering.

Key area in technical training

The level of attention devoted to the subject of maintenance by the curricula is therefore high.

TEACHING AND LEARNING SYSTEMS RELATING TO MAINTENANCE

GUNT-Gerätebau GmbH offers you a wide range of wholly practice-oriented teaching and training systems relating to technical maintenance with which you can cover essential learning content:

- Use of specific manufacturer’s documentation for maintenance, inspection and repair
- Reading and understanding engineering drawings
- Familiarisation with machine and system components
- Understanding maintenance as the interaction between inspection, maintenance and repair
- Planning and assessing maintenance sequences and steps
- Practical execution and documentation of maintenance operations
- Testing and commissioning of repaired systems
- Assessment of malfunctions, detection of faults

The GUNT training systems are ideally suitable for students’ group working, and of course for project-oriented working methods.

What is maintenance?

‘Maintenance’ as defined by German industry standard DIN 31051 is a complex field, so the range of teaching and training systems we offer in this area is very diverse.

MAINTENANCE TO DIN 31051

- Maintenance
  - Maintaining the required condition
  - Cleaning, lubricating, adjusting
- Inspection
  - Recording and assessing the actual condition
  - Measuring, testing, diagnosing
- Repair
  - Restoring the required condition
  - Replacing, correcting

With the plant shut down only, and in accordance with the maintenance instructions
With the plant running and shut down, in accordance with inspection instructions
With the plant shut down only, based on work order and after thorough preparation

This Maintenance chapter of the GUNT catalogue should be read in close conjunction with the other sections.

This chapter deals with the process of familiarisation with component and their functions, reading and understanding engineering drawings or operating instructions, and familiarisation with technical terminology and language. The assembly exercises can be conducted in relatively short periods of time (within lesson units) and do not as yet require any particular technical experience. Fault diagnosis and maintenance measures are not yet central to the training systems set out in this chapter.

The real, industrial nature of the exercises is higher than in the Assembly Projects. Typical maintenance methods and testing procedures are offered as learning content. Some of the exercises take a lot of time to complete and amount to substantial project work. Demands are made on technical skills.

LEARNING THROUGH PRACTICE...

The teaching systems familiarise trainees with the specific methods of monitoring plant/machinery condition, such as the early detection of bearing or gear damage. We work primarily with vibration analysis methods which constitute diagnostic steps for preventive maintenance or targeted repair.

...SO THE THEORY IS EASY!