

## FUNDAMENTALS OF VACUUM TECHNOLOGY

- physical basics
- pressure measurement in vacuum
- vacuum generation
- vacuum components

## LEAK DETECTION IN THEORY AND PRACTICE

- leak description (virtual / real)
- leak detection methods
- setup of a helium leak detector
- leak detection and troubleshooting

## CUSTOM WORKSHOP

- topics selected according to customer requirement
- dates on request

## CUSTOM WORKSHOP ON VACUUM PUMPS

- design and operating principle
- commissioning / maintenance plans
- troubleshooting and analysis
- special tools

## SEMINAR PVD- / CVD-PROCESSES

- physics / chemistry
- differences in the various PVD processes
- differences in the various CVD processes

## VACUUM WORKSHOP FOR OPERATOR

- topics selected according to customers vacuum system
- dates on request

## WORKSHOP MASS SPECTROSCOPY

- physics / chemistry
- setup of a mass spectrometer
- evaluation / interpretation of the measurement results

## WORKSHOP TOTAL-/PARTIAL PRESSURE MEASUREMENT

- total / partial pressure differences
- advantages of total / partial pressure measurement
- pressure / time behavior of vacuum systems

## TROUBLESHOOTING ON VACUUM SYSTEMS

- basic knowledge of fault detection
- procedure in case of faults
- practical exercises

## VACUUM TECHNOLOGY FOR APPRENTICES

- basic knowledge of vacuum technology
- vacuum generation / measurement
- potential hazards in vacuum systems / safety measures

## VACUUM TECHNOLOGY FOR NON-TECHNICIANS

- What is a vacuum?
- How to generate a vacuum?
- What are the effects on vacuum systems?