

LASER SHAFT ALIGNMENT

Operational objective:

- *After the course the students will have the ability to align two axes of rotating machinery coupled in accordance with specified tolerances, by means of a laser alignment system.*

GENERAL CONTENT OF THE PROGRAMME

- ALIGNMENT
- TYPES of MISALIGNMENT: Parallel, Angular and Combined
- CONSEQUENCES OF MISALIGNMENT:
 - Accelerated wear of bearings and vibration, wear accelerated in coupling and possible damage to shafts*
- TYPES OF COUPLINGS
 - Rigid couplings
 - Flexible for sliding couplings
 - Flexible elements soft couplings
 - Combined flexible couplings
 - Cardan couplings
- ALIGNMENT METHODS
- ALIGNMENT WITH COMPARATORS
- LASER ALIGNMENT:
 - Horizontal axis
 - Vertical shafts
 - Cardan couplings
 - Train of machines
- TOLERANCES, ERRORS AND CORRECTIONS

Methodology:

- *Lecture in formal classes*
- *Applied exercises*
- *Interaction with the participants*

Logistics:

Duration: 12 academic hours and 12 hours of practice.

Materials: Manual printed in color.

Price: *Subject to specific quotation*