



# PUMP HYDRAULICS / MECHANICAL SEALS

## TROUBLESHOOTING / OPERATIONS & INSTALLATION

### COURSE DESCRIPTION

Our nationally renowned pump & seal instructor, with years of field expertise, field troubleshooting (for some of the largest pump and seal companies in the world) will reveal essential maintenance and troubleshooting techniques that have either been overlooked or never taught in the first place.

In our years of applying precision maintenance techniques, we have learned to EXPECT pumps and seals to run trouble free without the replacement of expensive mechanical seals or bearings, until such time as the impeller, casing, or wear rings wear out and "pump won't pump." This is a direct result of improved pump performance and extended MTBF brought about by craft mechanics that have learned how to – ***"Do it Once, Do it Right!"***



Upon completion of this course, participants will know how to operate & troubleshoot pumps. Even more importantly, they will understand how pumps should run trouble free for 100,000 hours instead of the 10,000 to 30,000 hrs. and driving up repetitive maintenance costs.

Precision Maintenance Skills 3 uses additional training aids, such as a cut-away pump, real pump parts, seals, hydraulic simulator, 800# pipe strain simulator, and real casings & impellers. Using these Training aids, we'll take the students through the fine details of proper (and precise) pump rebuilds, repairs, impeller adjustments, bearings, packings, and mechanical seals. Just 1 common repair we demo can save thousands of dollars in unnecessary thrown away pump parts each year. Savings in mechanical seal life is staggering.

\*No prerequisites required  
24-Hours



### TOPICS COVERED

- Opening & closing various vales to create real life field and plant conditions
- Troubleshooting & corrections to operate pumps on their curve
- "De-mystifying" Pump curves so the average mechanics/supervisor can troubleshoot
- Proper starting & stopping procedures w/ proper flows
- Troubleshoot & correct common field problems that most people "guess wrong"
- Packing, sealing & gland water issues corrected