



PUMP INSTALLATION & COMMISSIONING TRAINING

COURSE OVERVIEW

This course provides important information to provide Installation Supervisors and Commissioning Engineers with the knowledge and skill-set to effectively verify that pumping equipment has been correctly installed and then to proceed with a commissioning program that will enable the equipment to be put into reliable operation. Participants will be provided with information on best Industry Practice and documentation to accurately record the condition of equipment at start-up and allow benchmarks for future performance assessment through the service life of the equipment. A certificate of accreditation will be issued by PIA for those participants who demonstrate a satisfactory level of competence.

Theoretical considerations

Installation:

- OH&S considerations and requirements.
- Build concrete base with bolt holes and grout allowance.
- Erection of pumpset on base includes install bolts, leveling and grouting.
- Installation of suction pipes and fittings.
- Installation of discharges and fittings.
- Align pump and driver couplings with:
 - Dial gauges
 - Lasers
- Align belt driven pumps.
- Pump site testing.
- Installation summary

Commissioning:

- OH&S considerations and requirements.
- Commissioning personnel requirements.
- Commissioning tool requirements.
- Commissioning documentation requirements.
- Commissioning prestart checks.
- Commissioning prestart procedure.
- Commissioning start procedure.
- Commissioning run.
- Evaluation of the commissioning run.
- Troubleshooting during commissioning.
- Commissioning stop procedure.
- Pump site testing.
- Commissioning records.
- Commissioning sign off procedure.
- Commissioning summary

Practical Application:

The practical part of the course will involve running recommended commissioning procedures on both electric and diesel engine driven pump sets as follows:

- OH&S considerations and requirements
- Prepare commissioning personnel and tools..
- Prestart checks including pump set alignment and rotation checks.
- Prestart procedure
- Start procedure
- Commissioning run including recording of appropriate reading from pump and driver.
- Review commissioning run readings and what they tell.
- How to troubleshoot commissioning problems.
- Stop pump after commissioning complete.
- Complete commissioning records and sign off on commissioning.

Prior Learning Requirements

Participants are required to have a good working knowledge of the principles of pumping including:

- Pump Notations & Units
- Operation of Pumps
- Construction of Pumps
- The calculation friction losses in pipes and fittings
- The application of the Affinity Laws
- NPSH including cavitation
- Pump performance curves
- The relationship between system resistance and performance curves
- Selection of pumps
- Pump testing
- Record keeping

Evidence may be required that participant has the knowledge outlined above in any of the following forms:

1. A certificate of satisfactory completion of an approved training course by a recognized trainer such as AIM, Strategic Achievement or employer training course.
2. A letter from a recognized employer, PIA member or industry person who can certify the participant having the knowledge as outlined above.
3. Such other evidence as may be determined appropriate by the course organizers,

Course Information: The courses will be held at Link Pumps, 4 Ponting St., Williamstown VIC 3016

Dates	25 February 2015	25 May 2015	24 August 2015
Duration	1 Day	1 Day	1 Day
Course Fee	PIA members: \$400 + GST Non-members: \$500 + GST	PIA members: \$400 + GST Non-members: \$500 + GST	PIA members: \$400 + GST Non-members: \$500 + GST
Course Type	Pump Industry based - On application to PIA website	Pump Industry based - On application to PIA website	Pump Industry based - On application to PIA website