



Australian Government

Assessment Requirements for AHCIRG310 Operate and maintain irrigation pumping systems

Release: 1

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Modification History

Release Number	TP Version	Comments
1	AHCv1.0	Initial release

Performance Evidence

The candidate must be assessed on their ability to integrate and apply the performance requirements of this unit in a workplace setting.

The candidate must provide evidence that they can:

- adjust pump settings
- check and clear or replace filters
- check and top-up fluids, including coolants, lubricants and hydraulic oils
- check oil quality and levels
- clear blockages
- inspect and clean pumps
- lubricate pumps
- monitor pressures and flows
- prime a pump
- replace belts
- replace worn components, including pump seals, liners and impellers
- set valves and check for wear and leakages
- tension fasteners and y-belts
- use amperage testing equipment

Knowledge Evidence

The candidate must explain:

- advantages and disadvantages of each pump type
- automatic pump switches including timers, pressure switches, irrigation controllers and flow switches
- basic principles of hydraulics (flow vs. pressure)
- discharge and flow rates
- impellers, rotors and stators
- properties of water including pressure and flow rates

- pump components and their principles of operation
- pump performance and fault finding
- pumps and their application in irrigation, such as centrifugal, vertical turbine, submersible and propeller
- pumps that are suitable as booster and floating pumps
- reading pump gauges and controls
- service requirements of pumps
- valves and their uses
- workplace and equipment safety requirements

Assessment Conditions

Assessors must satisfy current standards for RTOs.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>