



Product Unloading Module

DKI has now 'closed the loop' in the supply chain by designing and integrating the safe, efficient, accurate and fast unloading and metering of liquid hydrocarbon condensate of single and B-double tankers with flow rates of up to 1200lpm.

When unloading a truck, the system can automatically expel the air/vapour present during the vortexing period of the unloading operation with the resultant measurement being to custody transfer standards with NMI Approvals. The module incorporates a single arm Accuload III configured as an unloading controller.

Designed for simplicity and ease of maintenance, the Unloading Module can interface with existing Terminal Automation Systems (TAS) to provide stocks management and administrative functionality.

These modules are in keeping with DKI best design philosophy in that they provide ease of access to all instrumentation and piping for maintenance activities.

Features

- Total turnkey solution, prefabricated and pre-tested, incorporating all framework, galvanising, electrical, pipework, painting, instrumentation, hydraulics, air reticulation and control.
- All manufacturing and fit out disciplines are completed, inspected and tested under AS/NZS ISO9001:2008 Quality Controlled procedures at Diamond Key International works.
- Complete customer Factory Acceptance Test reporting and witnessing if required. FAT covers complete turnkey solution from hydrostatic testing through to computerisation and network testing.
- All components are certified for use in Class 1 Zone 1 Hazardous areas.
- The Unloading Module is supplied complete with Bay Loading Controllers certified for installation in Class 1 Zone 1 areas. These devices integrate driver interface and custody transfer preset metering and control. The units allow a modular metering system to operate in full standalone mode or seamlessly with a Terminal Automation System.

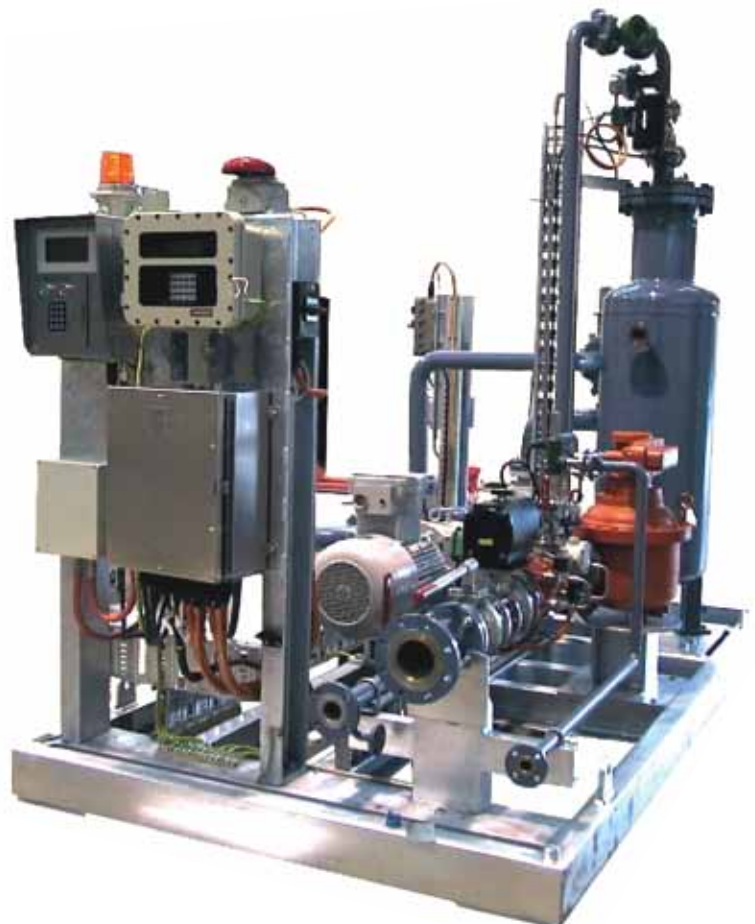
Safety

- Integrated Earthing Protection System
- Emergency stop systems are fully integrated into the design and are installed and tested as part of the turnkey process
- All pipework and wiring is constructed, inspected and tested to all relevant Hazardous Area Standards
- Deadman Button

Wiring

All wiring is carried out to Class 1, Zone 1 Hazardous Area Standards. Only specifically trained and qualified Electricians are employed and all work is carried out to AS/NZS ISO9001:2008 controlled procedures.

- Steel wire armoured cabling for all high voltage wiring
- All Intrinsic Safe wiring to International Standards for separation, identification, termination and cable type
- Mechanical protection and integrity for wiring
- De-aerator, pump and control valves
- Cable tagging and identification of all terminations
- 100% Factory testing of all wiring and terminations
- Fully glanded Explosion Proof connections to all Ex'd enclosures



Structural

- All framework Hot Dip Galvanised for maximum environmental protection.
- Full compliance and inspection to Australian Standards AS-1650.
 - Special designs allow for hot procession without distortion.
 - Large process availability means that gantry frames do not have to be fabricated in small pieces.
- Structure design has been fully developed and assessed compliant for use in Tropical Hurricane prone regions. Australian Standard Zone 4 cyclone rating.

Pipework

- All pipework constructed to International Standards ASME IX 2000 depending on requirement.
- Fully qualified pipework welders to International Standards ASME IX 2000. All welders are regularly reviewed and tested under AS/NZS ISO9001:2008 Quality Assurance procedures.
- X-ray welding inspection and testing of all gantries. Complete welding traceability records maintained.

Painting

- All Pipework is prepared for painting by shot blasting and/or sandblasting to AS1627.4 Class 2.5 and is primed with appropriate primer for top coat.
 - Top coat: Two Pack re-coatable polyurethane enamel.
 - Colour: RAL 7031 Blue Grey.
 - The three coat process is fully maintained to AS/NZS ISO9001:2008.

General

- Adaptable assembly process to integrate customer supplied (free issued) or OEM supplied components if required.
- Integral air reticulation system for PIV's and Emergency shutdown systems if required.
- Fully wired Flame Proof Lighting.
- Vapour Removal System installed or provided for, to enable future upgrading.



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