



SlimLine Modules

The DK1 SlimLine Module combines all equipment necessary to provide a safe, accurate and cost effective solution to your bottom loading needs.

The SlimLine uses a unique T-rack design which has evolved from a need for space efficient units. This is especially important when converting from top to bottom loading. This self supporting module has a width of only 1600mm and is comprised of two separate sections - SlimLine Metering Module and SlimLine Bottom Load Conversion Module. It is available with up to 6 loading arms complete with all hydraulic and electrical components required for bottom loading.

Additionally these can be supplied as a Metering Module, which comes fully wired and tested and can be installed in to an existing top load gantry where no metering exists. The outlet pipes are then connected to the existing loading arms or pipes and the supply lines connected to the inlet.

A control system is supplied on a mounting frame and is pre-wired, this frame is mounted on the existing top load platform and connected to the new metering module.

You now have a top load gantry with metering and control.

If at a later date you decide to convert to full bottom loading, simply remove the control module from the platform, take away your platform, and purchase the SlimLine Bottom Load Conversion Module to connect to your outlets.

The control module will mount to the Bottom Load Module as shown in the graphic. The change from top load to bottom load has been completed with minimal down time and virtually no regret cost.

We appreciate that minimising total cost of ownership is a key value driver for our clients. The SlimLine Module has been specifically designed to allow your maintenance staff fast, safe and clear access to all components, making your scheduled maintenance and down time minimal.

Features

- Total turnkey solution, prefabricated and pre-tested, incorporating all framework, galvanising, electrical, pipework, painting, instrumentation, hydraulics, air reticulation and computerisation.
- 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 SlimLine Metering 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 (TAS).

Safety

- Integrated Overfill 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 for bottom loading.



Mutual Success Through Teamwork With Customers

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 provided by Integral wiring and cable trays designed for maximum simplicity of access and ease of maintenance.
- Specific vulnerable wiring is enclosed in rigid conduits.
- 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 2001 depending on requirement.
- Fully qualified pipework welders to International Standards ASME IX 2001. All welders are regularly reviewed and tested under AS/NZS ISO9001:2008 Quality Assurance procedures.
- X-ray welding inspection and testing of all gentries. Complete welding traceability records maintained.
- Hydrostatic testing to ASME B31.3

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

- Modular arm layout to facilitate latter addition of more loading arms.
 - Arm points can be pre-wired to even further simplify future upgrades.
- 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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