



QUALITY, CONTROL & OVERSIGHT IN PRODUCTION HOLES

PRODUCT DESCRIPTION

The iMining SMART**RING™** Pumping System has been designed for flexible loading in lateral and uphole loading operations.

The pumping system takes advantage of iMining in-house IP through the implementation of dual SMARTFLOW $^{\text{\tiny M}}$ pumps for consistent pressure and flow under heavy duty production loading conditions.

SMART**FLOW™** Pumps eliminate unpredictable slippage and wear present in progressive cavity up-hole loading systems, reducing maintenance requirements and increasing consistency in loading operations.



Flexible control of the SMART**RING™** Pumping System is achieved through the BLAST**TRACK™** control system. The safety and control system uses a range of safety and performance sensors throughout the pumping and loading system to facilitate optimal product delivery, hose retraction, reel and boom control. The pumping systems can controlled from the remote control panels in a loading basket or standing away from the system in a designated safety area.

Loading data & quality reports are routed directly to supervisors where variation reports allow for a clear comparison of planned vs. actual performance. This systematically reduces operator non-conformances in loading operations.

SMARTRING™ pump & control kits are developed to individual customer specifications & can be supplied in kit or complete pumping systems. Tank dimensions are available to suite site specific carriers & pump kits & control systems can be integrated with existing technologies for the upgrade of existing loading fleets.

DESIGN FEATURES

- Oversight over fleet location, loading performance, product quality, product usage and individual operator performance
- Control of loading parameters, retraction rates and boom control through BlastTRACKTM control system allowing for precise control of loading operations
- Integrated control of loading arm and charging parameters allowing for precise charge placement in the hole

BENEFITS

- Increase operator safety in high risk mining environments
- Selectable density loading for optimal energy distribution in the blast
- Reduced maintenance requirements & machine down-time through "plug and play" systems
- Remote control of charging operations with basket panel or remote HMI