PRODUCT DESCRIPTION

The iMining SMARTFLOW™ pump series has been designed to improve the safety, consistency and maintenance requirements of explosives loading operations in the mining industry. The SMARTFLOW™ pump makes use of selectable predetermined mixing ratios for the delivery of emulsion, sensitizer and hose lube, while decreasing friction and energy losses in emulsion pump. This results in a reduction in heat build-up, improved efficiency and a decrease in product deterioration during pumping operations. These characteristics allow SMARTFLOW™ pumps to exhibit significant safety and operational benefits over existing pump technologies in the industry.

SMARTFLOW™ pumps are available in two sizes and can be implemented in underground and surface pumping operations, retrofitted to existing equipment or on new iMining pumping systems. Pumps are available in two configurations:

S-series Configuration: Designed to deliver emulsion and chemical sensitizer directly into blastholes in surface and underground blasting operations. (Emulsion, sensitizer and lubrication are delivered in multiple isolated chambers within the pump, preventing a reaction prior to entering the loading hose.

T-series Configuration: For the transfer of emulsions between transfer vessels and the loading of microballoon sensitised emulsions into blastholes.

<table>
<thead>
<tr>
<th>SMARTFLOW™ S-Series</th>
<th>SF1 (1 inch)</th>
<th>SF2 (2 inch)</th>
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</thead>
<tbody>
<tr>
<td>Max flow rate (L/min)</td>
<td>40</td>
<td>150</td>
</tr>
<tr>
<td>Max pressure (Bar)</td>
<td>50</td>
<td>15</td>
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</tbody>
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DESIGN FEATURES

- SMARTFLOW™ pump technology improves the safety of pumping operations by significantly reducing friction in the pump
- Pump emulsion, sensitizer and hose lube through a single pump, increasing simplicity and reducing capital investment in pumping systems
- Preset mixing ratios, delivery pressure and delivery rates for consistent pump performance
- Compatible with the iMining BLASTTRACK™ control system to increase transparency throughout your operation

BENEFITS

- Increased safety in explosives pumping operations
- Significant reduction in charging unit complexity and capital requirements
- Compatible with chemically sensitized and micro-balloon formulations
- Pre-set mixing configurations for consistent pump performance
- Simplified maintenance requirements