414 Centrifuge

The M-I SWACO* 414 Centrifuge* delivers high performance and low operating costs for oilfield and industrial mud and fluids-handling applications.

This highly efficient decanting centrifuge recovers 95% of barite and returns it to the active system, while rejecting finer, low-gravity solids. The advanced design of the stainless steel bowl and scroll maintains an even layer of conveyed solids for more uniform separation and maximum solids-control efficiency.

Features

- Balanced scroll design increases recovery capacity
- High centrifugal force generates centrifugal force of 500 G’s at its operating speed of 1,600 RPM while processing up to 140 GPM (530 L/min)
- Efficient operation processes up to 140 GPM (530 L/min) with a 6- to 10-micron cut on weighted mud systems; processes up to 250 GPM (946.4 L/min) with a 5- to 7-micron cut point on unweighted mud
- Stainless steel bowl, scroll compartment and cover to resist corrosion and abrasion
- Tungsten-carbide scroll points with wide spacing flights at the narrow end create a finer layer of conveyed solids for more uniform separation under high G-forces
- Precision balanced to run at high RPMs for extended periods with greater efficiency, minimizing maintenance and downtime
- Operating safety controls include self-limiting vibration and torque switches to protect against catastrophic failure
- Variable speed electro-hydraulic backdrive is available as an option for the 414 Centrifuge

Benefits

- Recovers 95% of barite, minimizing costly additions while maintaining prescribed mud weights
- Rejects finer, low-gravity solids from drilling fluids
- Cost-efficient operation — reduces discard volume versus dilution displacement alternatives 30 to 60% depending upon mud weights
- Ideal for use with weighted or unweighted mud systems
- Rugged construction and corrosion-resistant materials provide long service life and low maintenance costs in the toughest oilfield environments

Specifications

<table>
<thead>
<tr>
<th>Bowl Size</th>
<th>Length</th>
<th>Width</th>
<th>Height</th>
<th>Weight</th>
<th>hp</th>
</tr>
</thead>
<tbody>
<tr>
<td>in. (mm)</td>
<td>in. (mm)</td>
<td>in. (mm)</td>
<td>in. (mm)</td>
<td>lb (kg)</td>
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</tr>
<tr>
<td>14 x 34</td>
<td>95.4</td>
<td>70</td>
<td>34.1</td>
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<tr>
<td>356 x 864</td>
<td>2,423.2</td>
<td>1,778</td>
<td>866.1</td>
<td>1,832</td>
<td>25/7.5</td>
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The M-I SWACO 414 Centrifuge — precision equipment engineered to handle rugged oilfield service.

**Engineering Drawing: 414 CENTRIFUGE**

All dimensions are expressed in inches (millimeters).