SUMMARY

Achieving exact moisture content levels in frac sand is a critical requirement due to American Petroleum Institute (API) standards and customer satisfaction. In order to meet these needs, many companies over-dry the sand, thus driving up the cost of production. Conversely, wet sand in the process line binds up screens causing production shutdown. The SMART III NIR On-line Moisture Measurement System offers a proven method to meet certain targets for processing frac sand.

INDUSTRY BENEFITS

- Meets regulations: System calibrated specifically for sand to meet American Petroleum Institute (API) standards
- Reduced drying cost: Gives operator ability to know moisture into the dryer and adjust volumetric flow rate
- Deliver more consistent moisture content: Avoid clogged screens from sand that is too wet
- Less down-time: Easily-mounted, durable sensor suited for harsh plant environments

SMART III NIR PRODUCT FEATURES

- Simplified optics design cuts maintenance and calibration requirements
- Readings are updated 30 times per second as material passes the sensor to enable rapid drying control
- Simple-to-learn user interface with advanced reporting available for power users
- Patented process of filtering reflected energy from sample reduces ambient light and color interference
- Auto-ranging is used to adjust the NIR Sensor output to an optimum level for reliable processing

KEY SPECIFICATIONS

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<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
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<tbody>
<tr>
<td>Moisture Range</td>
<td>0 to 0.1%</td>
<td>0 to 60% [wet weight]</td>
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<tr>
<td>Update Rate</td>
<td>30 moisture calculations per second</td>
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<tr>
<td>Penetration Depth</td>
<td>Up to 1mm</td>
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