Circumferential Acoustic Scanning Tool-Visualization (CAST-V™)

Higher Resolution, Precise Digital Information, and Simultaneous Measurements Provide Complete Acoustic Visualization

The Circumferential Acoustic Scanning Tool, the CAST-V™, provides a wealth of information about your well in both open and cased holes. In open hole, the CAST-V provides complete borehole imaging for accurate, precise formation evaluation. In cased hole, ultrasonic pipe inspection and cement evaluation can now be obtained simultaneously. Operating over a wide range of downhole environments, the CAST-V offers a full 360° profile of the borehole that can be presented in a variety of two- and three-dimensional formats. Powerful, yet user-friendly imaging analysis software is available to process images, histograms, and curve-type data from this advanced logging device.

Primary applications include:
- Casing Inspection (both Thickness and Diameter)
- Ultrasonic Cement Evaluation/Imaging
- Openhole Borehole Imaging
- Fracture Detection

Features of the new system include:
- 100 shots per depth frame measurement provides complete circumferential coverage in casedhole cement evaluation and pipe inspection
- Simultaneous cement evaluation and casing inspection capability
- Combinable with digital full wave sonic bond log tool for reduced rigtime
- Real-time evaluation of complex and lightweight cements with SVP™ (Statistical Variation Plot) processing
- Real-time fluid cell measures both borehole fluid transit time and fluid impedance for measured data correction
- Real-time impedance maps, compressive strength maps, and variance maps
### Cast-V Specifications

<table>
<thead>
<tr>
<th></th>
<th>350°F</th>
<th>175°C</th>
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<tbody>
<tr>
<td>Temperature Rating</td>
<td>350°F</td>
<td>175°C</td>
</tr>
<tr>
<td>Pressure Rating</td>
<td>20,000 psi</td>
<td>138 900 kPa</td>
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<tr>
<td>Outside Diameter</td>
<td>3.625 in.</td>
<td>92 mm</td>
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<tr>
<td>Length</td>
<td>215 in.</td>
<td>5.46 m</td>
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<td>Weight</td>
<td>316 lb</td>
<td>143 kg</td>
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### Casedhole Operation

| Recommended Range of Casing Sizes* | 5 1/2 to 13 3/8 in. | 139 to 340 mm |
| Azimuthal Resolution             | 3.6°                |
| Vertical Sample Rate             | 6 in. / 3 in. / 1 in. |
| Logging Speed                    | 60 ft/min / 30 ft/min / 10 ft/min |

### Openhole Operation

| Recommended Range of Borehole Sizes* | 5 to 12 1/2 in. | 127 to 318 mm |
| Azimuthal Resolution               | 1.8°              |
| Vertical Sample Rate               | 0.3 in.           |
| Logging Speed                      | 20 ft/min         |

*With interchangeable transducer heads