A rugged and reliable tool, the TurboRunner™ makes sure that completions access all planned reserves, whilst significantly reducing flat time and the risk of off-depth completions.

The TurboRunner™ provides high-speed reaming to land completions and liners at Target Depth, without the need for surface rotation.

With its unique design combining turbine powered reaming with low circulating pressures, the TurboRunner™ is particularly useful for making sure that final strings, casings, liners or completions get to Target Depth in more problematic wells.

Our pioneering design protects the completion from vibration, reactive torque and pressure spikes. As a result, there is no chance of other equipment in the string

THE BENEFITS

• Reduce well construction costs
• Ream completions to Target Depth without surface rotation
• Minimise the risk of damage to ‘delicate’ strings with low vibration and torque
• Reduce wiper trips
• Create reliable connections
• Protect intelligent completions
• Minimise loss of reservoir section
• Maximise ROI

IN NUMBERS

Conventional Technology | TurboRunner™

72 HOURS SAVED
One quarter of the time required to prepare the hole compared to conventional technology.

$800,000
$250,000

70% COST SAVINGS
3 days saved on a typical offshore well results in around $350,000 saved.

3
1

66% MORE EFFICIENT
Because the Turborunner™ can ream through obstructions that other types of technology cannot.

FEWER WIPER TRIPS
## Imperial Data Figures

<table>
<thead>
<tr>
<th>Tool Specifications</th>
<th>TRS500</th>
<th>TRS700</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reamer Size (in)</td>
<td>6.500 / 6.250 / 6.000 / 5.875 / 5.750</td>
<td>8.250 (Up to 10.500 on request)</td>
</tr>
<tr>
<td>Stabiliser Size (in)</td>
<td>6.470 / 6.220 / 5.970 / 5.845 / 5.720</td>
<td>8.220 (Or as specified with reamer)</td>
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<tr>
<td>Body Size O.D. (in)</td>
<td>4.820</td>
<td>7.085</td>
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<tr>
<td>Drill-Thru Diameter</td>
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<td>N/A</td>
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<tr>
<td>Length (ft)</td>
<td>9.410</td>
<td>9.360</td>
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<tr>
<td>Weight (lbs)</td>
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<td>732</td>
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<tr>
<td>Burst Disc Options (psi)</td>
<td>1200 / 1800</td>
<td>1200 / 1800</td>
</tr>
<tr>
<td>Max DLS (°/100ft)</td>
<td>32</td>
<td>39</td>
</tr>
<tr>
<td>Turbine Stages</td>
<td>50</td>
<td>40</td>
</tr>
<tr>
<td>Top Sub Strainer TFA (in²)</td>
<td>27.30</td>
<td>31.65</td>
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<tr>
<td>Reamer Ports TFA (in²)</td>
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<td>3.80</td>
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<tr>
<td>Burst Disc TFA (in²)</td>
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<tr>
<td>Max-Operating Set-Down Weight (lbs)</td>
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<td>Material Grade (Body), ksi</td>
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<td>L80 or Equivalent, 80</td>
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<tr>
<td>Temperature Rating</td>
<td>– 205°C (Higher temperature grades available upon request)</td>
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## Metric Data Figures

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<tr>
<th>Tool Specifications</th>
<th>TRS500</th>
<th>TRS700</th>
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<tbody>
<tr>
<td>Reamer Size (mm)</td>
<td>165.10 / 158.75 / 152.40 / 149.25 / 146.05</td>
<td>209.55 (Up to 266.70 on request)</td>
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<tr>
<td>Stabiliser Size (mm)</td>
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<td>Body Size O.D. (mm)</td>
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<td>Weight (kg)</td>
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<td>Burst Disc Options (bar)</td>
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<tr>
<td>Max DLS (°/30m)</td>
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<tr>
<td>Turbine Stages</td>
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<tr>
<td>Top Sub Strainer TFA (mm²)</td>
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<td>Reamer Ports TFA (mm²)</td>
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<td>Burst Disc TFA (mm²)</td>
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<tr>
<td>Material Grade (Body), MPa</td>
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<td>L80 or Equivalent, 551</td>
</tr>
<tr>
<td>Temperature Rating</td>
<td>– 205°C (Higher temperature grades available upon request)</td>
<td></td>
</tr>
</tbody>
</table>

- Material grade of the body can be changed on request, lead times may vary.
- Performance charts are given out separately as they are dependent on the fluid weight being used on casing/completion run.
- Patent number: GB 2520187