Our vectored annular cleaning system (VACS™) G2 technology captures debris downhole and transports it to the surface, delivering clean wellbores for trouble-free operations. Built on field-proven VACS technology that has gained a solid reputation over more than a decade, this new modular design offers enhanced performance and ease of handling, saving time and lowering risk, particularly in deepwater applications.

As fluid flows through the jet nozzles, the VACS G2 system and VACS FLO jet engine produce increased suction pressure at the base of the tool, capturing fines, coarse debris, and junk in the tool basket. The VACS G2 system and FLO engine have been optimized to provide increased reliability and performance during a variety of operations, including post-perforating runs, sump packer cleaning, packer and bridge plug retrieval, and junk retrieval in both open- and cased-hole wells.

The thru-tubing (TT) VACS enables the removal of sands in completions and small liners, removing unmatched quantities of sand to surface in a single trip.

Improvements in the VACS G2 system include significant changes to reduce rig handling procedures. Each module can be manipulated by standard rig elevators. These simplified handling processes eliminate many potential operational, safety, and environmental risks. And the modular design reduces nonproductive time (NPT) by eliminating special rigging requirements. Modules can easily be added for increased debris recovery, giving you the flexibility to use a single solution across a broad range of applications.

The new VACS G2 system is ideal for deepwater applications where minimizing NPT and improving operational reliability is essential to profitability, and also in applications that demand efficiency and cost controls.

Contact your local representative from Baker Hughes, a GE company, today to learn more about how VACS technology can help you perform reliable, cost-efficient cleanouts.

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Applications
• Vertical, deviated, and horizontal wells
• Shallow or deep wells
• Deepwater and HP/HT environments
• Wells with partial or total lost circulation
• Wells with poor debris carrying fluids and weak formations

Benefits
• Reduces HSE risks
• Reduces NPT by eliminating special rigging requirements
• Adapts to an unmatched range of debris removal volumes and applications
• Reduces the likelihood of plugging
• Increases efficiency of debris separation
• Delivers superior debris volume recovery in a single trip
The VACS G2 system and the VACS FLO jet engine can be configured with a debris retainer and multiple accessories (examples A–G) as shown on the left. The TT VACS system can be also be configured with multiple through-tubing accessories (examples H–J).

### Tool Specifications

<table>
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<tr>
<th>Tool Size</th>
<th>OD (in.)</th>
<th>Wash Pipe</th>
<th>Connection</th>
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### Example Accessories

- a. Snorkel
- b. Finger catcher sub
- c. Overshot for straight pick-up only
- d. Overshot with hollow mill insert
- e. Washover shoe
- f. Packer milling shoe
- g. Bridge plug or packer retrieving tool
- h. TT finger catcher sub
- i. TT washerover shoe
- j. Tube with entry guide

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