

# **VBR**

# Variable-bore rams that seal on a wide range of pipe diameters

## **APPLICATIONS**

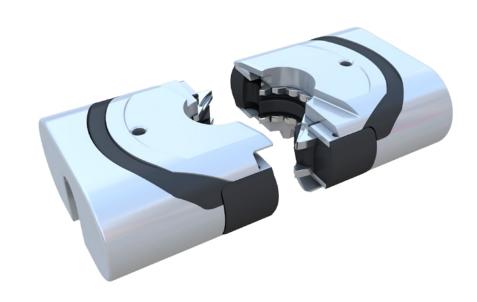
Drilling and production operations

### **BENEFITS**

Improved operational efficiency and certainty

### **FEATURES**

- Sealing on a range of diameters
- Self-feeding elastomers
- Large reservoir of packer rubber to ensure a long-lasting seal under all conditions
- Ram packers that lock into place and are not dislodged by well flow
- Compatibility with
  - U\* surface ram-type BOP
  - UII\* subsea ram-type BOP
  - TL\* offshore ram-type BOP
  - EVO\* compact offshore ram-type BOP
- Suited for H<sub>2</sub>S service per NACE MR0175



VBR variable-bore rams.

Cameron VBR\* variable-bore rams enable sealing a standard BOP on several different pipe diameters. The rams' mechanism of closure is similar to standard pipe ram packers. The packers extend forward of the ram body faces. When the rams are closed, the packers contact each other on the leading surfaces at the sides of the pipe bore. As the rams continue to close, the rubber and specially designed inserts in the packers are displaced inward to close the packers around the pipe.



BOP	VBR-II Ram Size, in	
7¹/₁₅-in 3—15M U BOP	2%-31/2	
	21/8-4	
11-in 3–5M U BOP	21/8-5	
11-in 3—10M U BOP	21/8-5	
11-in 10M U BOP	3½-5	
11-in 3—10M U BOP	3½-5	
11-in 15M U BOP	21/8-5	
135⁄8-in 3–10M U BOP	21/8-5	
	31/2-51/2	
	31/2-51/8	
	4½-7	
13⁵⁄⊌-in 15M U BOP	31/2-5	
	31/2-57/8	
	5–7	
135%-in 10M T or TL BOP	21/8-5	
	31/2-51/2	
16¾-in 3–10M U BOP	31/2-51/2	
	5–7	
18¾-in 10M U BOP	31/2-75/8	
18¾-in 10M UII BOP	21/8-5	
	31/2-75//8	
18¾-in 15M UII BOP	31/2-5	
	5–7%	
18¾-in 5–10M T or TL BOP	31/2-75/8	
18¾-in 10M EVO BOP	31/2-5	
	31/2-51/2	
	31/2-65%	
	31/2-75/8	
18¾-in 15M T, TL, or EVO BOP	3½-5	
	3½-5½	
	3½-65%	
	3½-75%	

Variable-bore-ram packers require the use of VBR-II rams.

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