Coupling Corporation of America

Vertical Clamp Coupling™

The most adjustable vertical coupling is also the easiest to install

The most adjustable vertical pump coupling is also the easiest to install. Vertical Clamp Couplings are a major improvement over other standard vertical couplings. Using the patented Anderson Clamp Hub design, it eliminates all keys and “clamshells” while allowing the user to easily change the position on the shaft, as well as the amount of pump rotor lift. Best of all, the alignment can be adjusted after installation to improve seal and bearing life.

Vertical Pumps • Vertical Turbines

Key Benefits

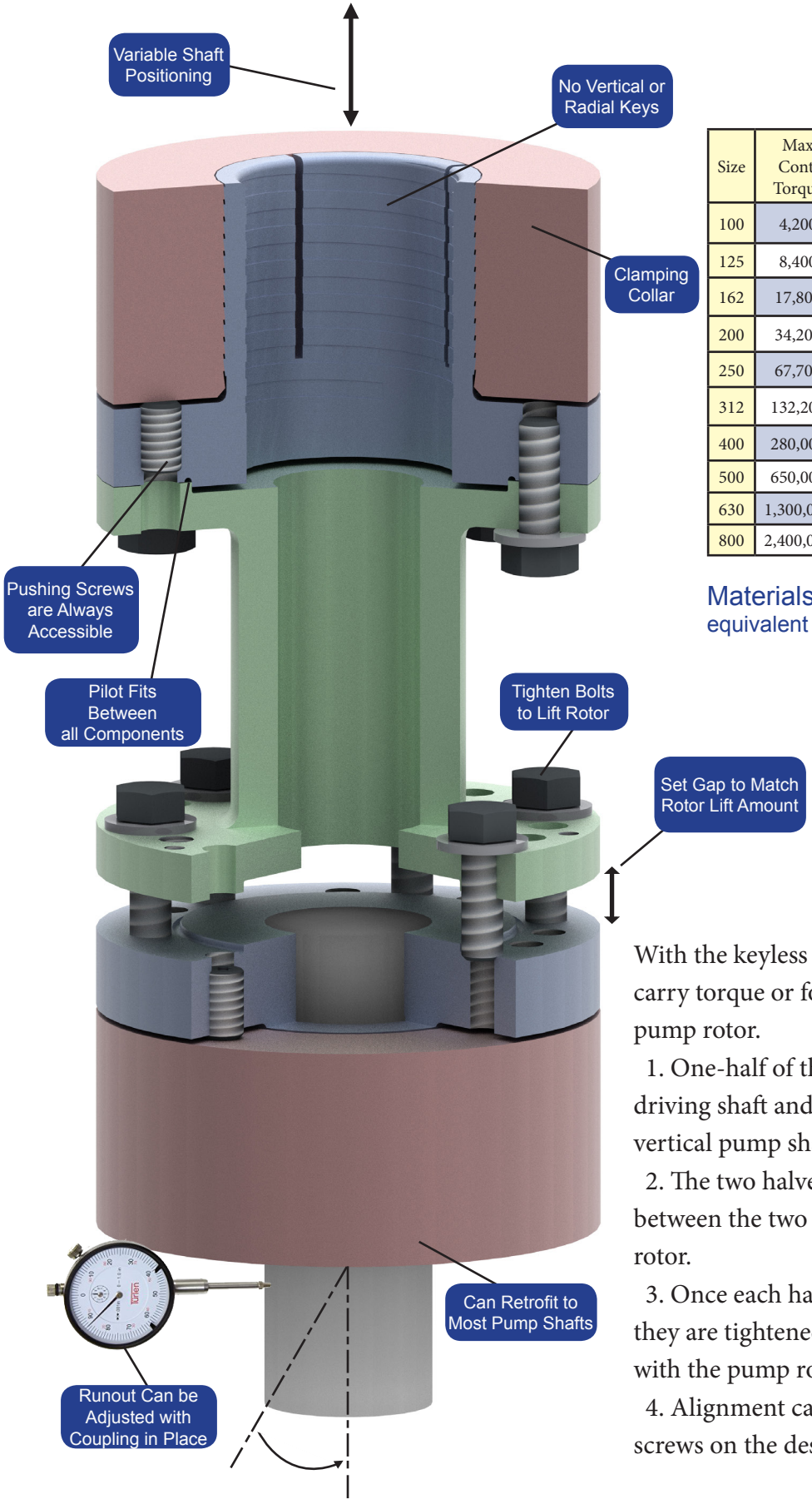
- Capable of handling an enormous amount of thrust
- Perfect for pumps with significant weight
- Inherent concentricity of the device
- No more clamshells or sloppy hub fits
- No need to adjust the clamshells to fix the balance
- Increase seal and bearing life by easily adjusting pump shaft runout





The Patented Vertical Clamp Coupling

U.S. Patent No. 8,782,866



Size	Max Cont. Torque	Peak Torque	Vertical Load	Total Weight	OD	Min Bore	Max Bore	Min Shaft Length
100	4,200	8,400	10,000	12.0	3.75	0.75	2.38	1.90
125	8,400	16,400	12,500	27.0	5.25	1.50	4.00	1.90
162	17,800	35,600	20,000	33.0	5.50	1.63	4.00	Variable
200	34,200	68,400	25,000	50.0	6.75	2.13	4.88	Variable
250	67,700	135,400	45,000	90.0	8.63	2.50	5.25	Variable
312	132,200	264,400	90,000	110.0	10.50	3.20	6.26	Variable
400	280,000	560,000	Custom Design					
500	650,000	1,300,000						
630	1,300,000	2,600,000						
800	2,400,000	4,800,000						

Materials - Hub body and collar - 4000 series or equivalent alloy steel including stainless or other exotics.

The Design

With the keyless connection, there is no need for a vertical key to carry torque or for a split horizontal key to hold the weight of the pump rotor.

1. One-half of the Clamp Coupling slides onto the driving shaft and clamps into place; the other half clamps onto the vertical pump shaft. The sleeve is added and bolted to one side.
2. The two halves are positioned in such a way that the gap between the two is equal to the amount of lift needed on the pump rotor.
3. Once each half is tight, the connecting bolts are installed; as they are tightened, the bottom half of the Clamp Coupling, along with the pump rotor, is lifted the correct amount.
4. Alignment can be adjusted by further tightening the load screws on the desired side while measuring pump shaft runout.

Coupling Corporation of America

250 N. Main St., Jacobus, PA 17407 1-800-394-3466 717-428-0570 Fax 717-428-2865

www.couplingcorp.com

Aug. 2017