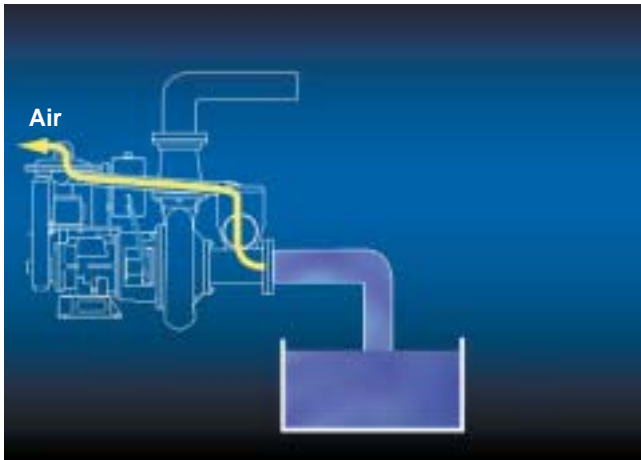
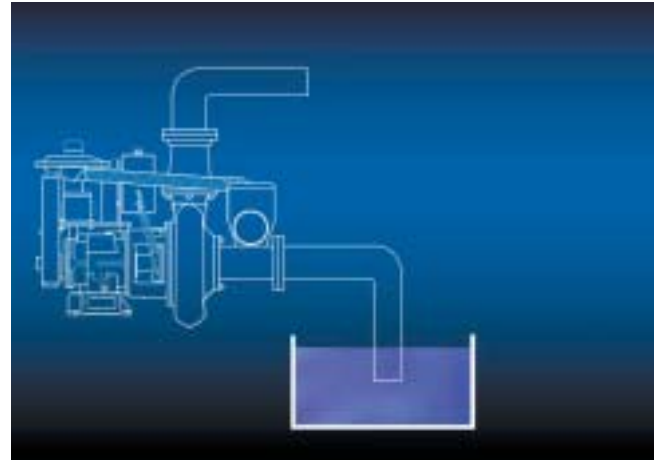


Cornell's Redi-Prime System

Cornell Pump Company's fully automated self-priming and re-priming system for centrifugal frame and engine mounted pumps.

Starting

The pump motor or engine is started thus rotating the pump shaft and impeller. The Redi-Prime system requires no attendance, so engines or motors can be started automatically or remotely. The Redi Prime vacuum pump is located on top of the bearing frame and is connected to the pump shaft by a cog type belt. The mechanical seal of the pump is protected by the Run-Dry system during this dry operation as the impeller is rotating.

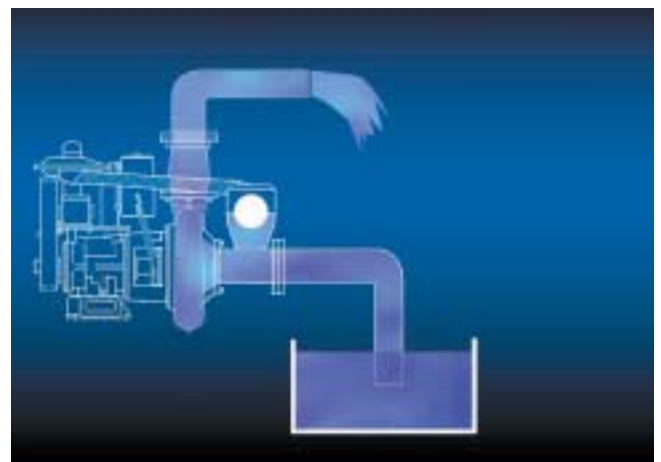


Priming

As a vacuum is created it is applied to the suction spool of the pump through a canister ball chamber. The check valve located on the pump discharge is automatically closed and all vacuum forces are directed to suction. As the vacuum pressure increases, water will be forced by gravity up the suction and into the pump. Lifts of up to 28 feet can be achieved

Operation

As the water enters the pump, the vacuum pump will continue to remove the air located in the suction. As this air is removed the pump will complete the priming process. Priming can be fast using the 50 SCFM diaphragm vacuum pump. As the canister fills with water the ball will float upward and seal off the chamber protecting the vacuum pump. Should the pump lose prime, the ball will reopen the passageway and allow the vacuum pump to assist the pump in re-priming itself.



Redi-Prime Pump Requirements:

- 4" or larger pump frame or engine mount configuration
- mechanical seal
- Run-Dry option



ISO9001:2000 CERTIFIED

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