

# Cornell's Run-Dry Seal

Cornell Pump Company's solution to protecting mechanical seals from damage caused by operating without pumping fluid present – running dry.

## Description

The Cornell Run-Dry system is a unique state of the art solution for providing continual lubrication to mechanical seals. Run-Dry provides a gland on the back side of the mechanical seal through which lubricant can circulate providing lubrication and cooling to the delicate hardened seal faces of the mechanical seal. The result is exceptional seal life regardless of operating conditions from full flow to no flow – Run-Dry.

## Applications

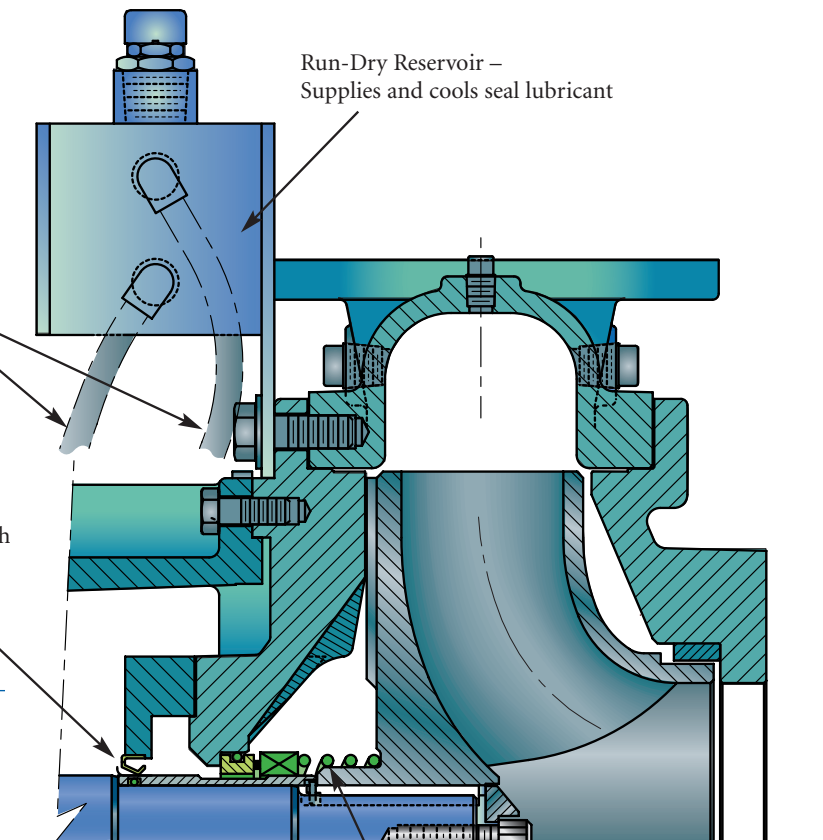
Any application where there is a probability, either planned or unplanned, that the pump could be operated in a dry condition. Dry operation could be the result of priming activities, the deliberate operation of the pump in a dry condition, or the accidental loss of prime while pumping.

Lines to and from Gland and Reservoir Entrance and Exit Ports on Gland are tangential so as to take advantage of the pumping action of the shaft

Renewable Lip Seal Sleeve provides ideal surface finish for Lip Seal

## Operation

Lubricant leaves the lower portion of the reservoir through a flexible hose and enters the bottom of the Run-Dry gland. The gland is housed within the pump backplate sealed on the drive end by a lip seal operating on a chromed portion of the stainless steel shaft sleeve. The pump end of the gland is sealed by the mechanical seal. Through this relationship with the mechanical seal, lubrication is provided to the seal and seal protection is achieved. The Cornell Run-Dry gland has two ports entering into it. The rotating shaft provides pumping action for continuous flow of the lubricant from the reservoir to the gland and back through the lower and upper ports. With this circulation of lubricant, heat is transferred from the mechanical back to the reservoir. The reservoir provides the opportunity for the lubricant to cool and the capacity to insure that lubricant is always available for the Run-Dry gland.



Seal is Elastomeric or Metal Bellows type, depending on pumpage temperature



ISO9001:2000 CERTIFIED

**Cornell Pump Company**

Portland, Oregon

Phone: (503) 653-0330

Fax: (503) 653-0338

e-mail: [info@cornellpump.com](mailto:info@cornellpump.com)

web page: [www.cornellpump.com](http://www.cornellpump.com)