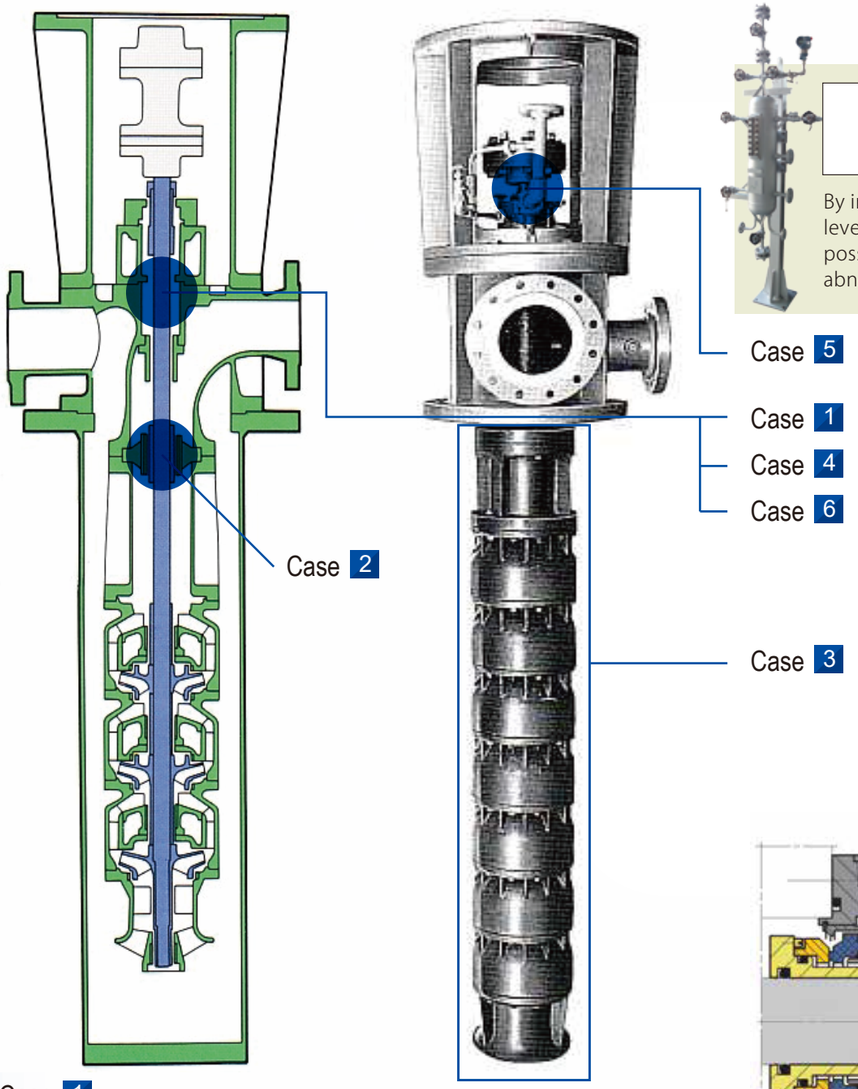
VERTICAL PUMP ENHANCEMENT SERVICE OFFERINGS

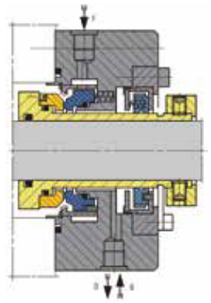
Lifecycle Extension & Energy Savings • Environmental Efficiency

EBARA MODEL:VPCS API 610 PUMP TYPE: VS6

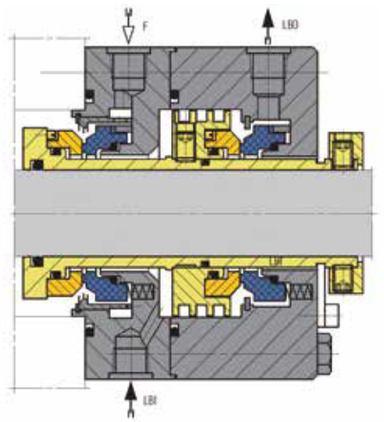


Reservoir Tank
(protective device)
API682 PLAN 52

By installing pressure and level gauges and switches it is possible to detect functional abnormalities or leakage.



Single seal cross-section



Tandem (double) seal cross-section

Case 1

Seal remodeling enhancement (tandem seal)

Transforming a single seal into a tandem double-seal structure helps reduce atmospheric leakage. By installing an auxiliary device (reservoir tank) as well, it becomes possible to detect and prevent liquid leakage by stopping the pump safely before any serious damage can occur.

Case 2

PEEK resin abrasion and erosion resistance enhancement

Application of PEEK resin will improve wear resistance while guarding against corrosive liquids. PEEK will not induce galling during assembly, thereby extending the lifecycle, and improving the stability and maintainability of the pump.

PEEK Resin Enhancement

PEEK bearing high performance resin contains carbon fiber

Case 3

Surface coating wear resistance enhancement

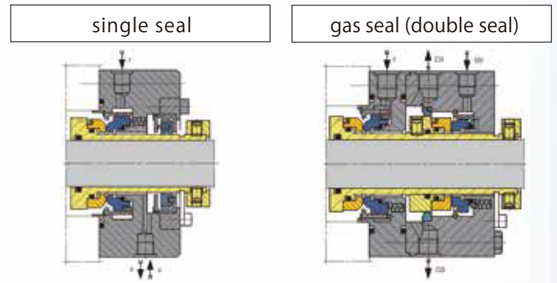
Application of surface coating (thermal spray) to the exterior of wetted parts increases surface hardness and wear resistance. EBARA sprays nickel-based super-heated Colmonoy® surfacing alloys to achieve extremely high surface hardness of HRC 55 to 60 (about HV 690).

*Colmonoy® is a regiestered trademark of Wall Colmonoy

Case 4

Seal remodeling enhancement (gas seal)

Addition of a gas seal to a single seal creates a double seal structure that reduces leakage and improves detection of abnormalities throughout the entire device. The gas seal enhancement can be used for both gas and liquid pumps.

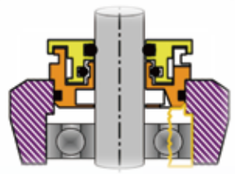


Case 5

Non-contact labyrinth bearing seal

Installation of a precision crafted labyrinth seal with high clearance allows for optimal performance. Its environmentally friendly design reduces harmful waste by suppressing dust intake and stopping oil leakage. Its non-contact structure will prevent power leaks while eliminating shaft wear.

labyrinth seal cross-section



labyrinth seal 3d image

Case 6

Seal remodeling enhancement
(mechanical cartridge seal)

Mechanical seal with cover and shaft sleeve is easy to mount, reducing assembly time and labor.