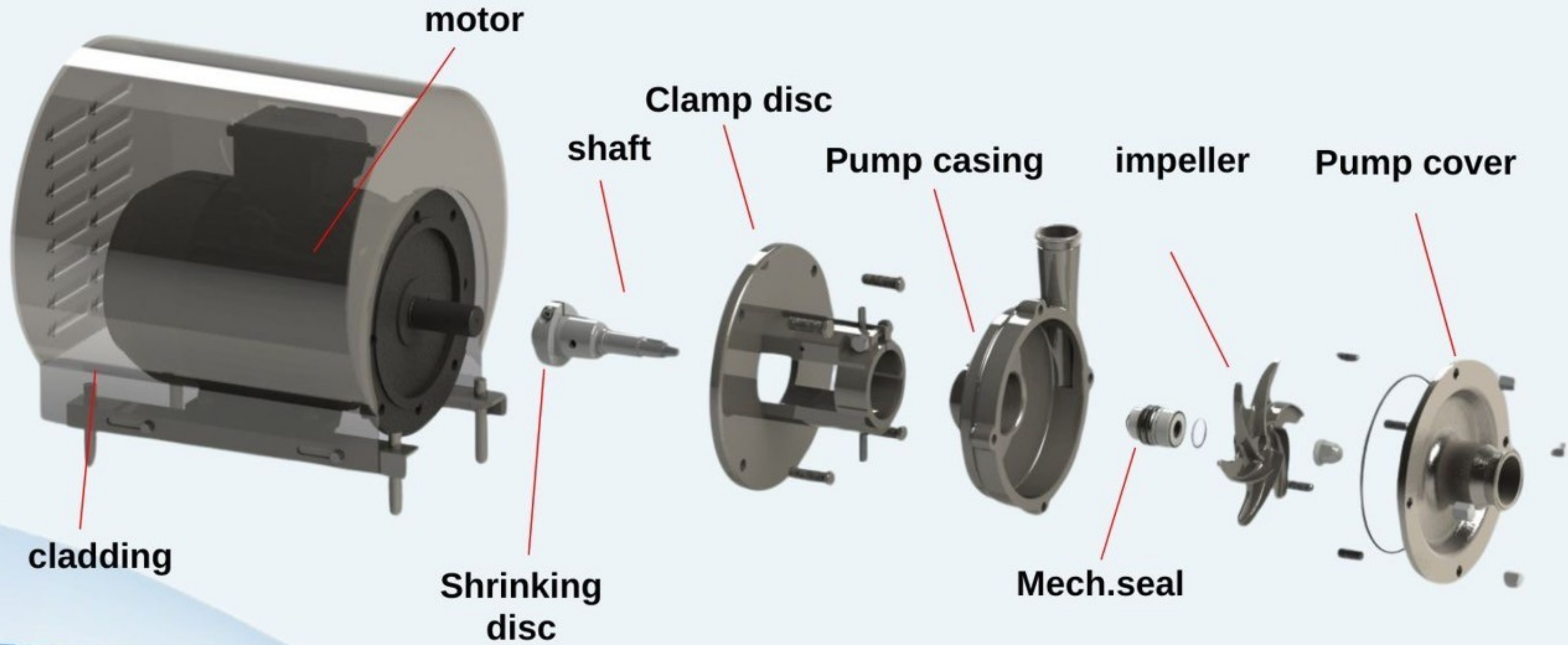


Centrifugal Pump – HPC series



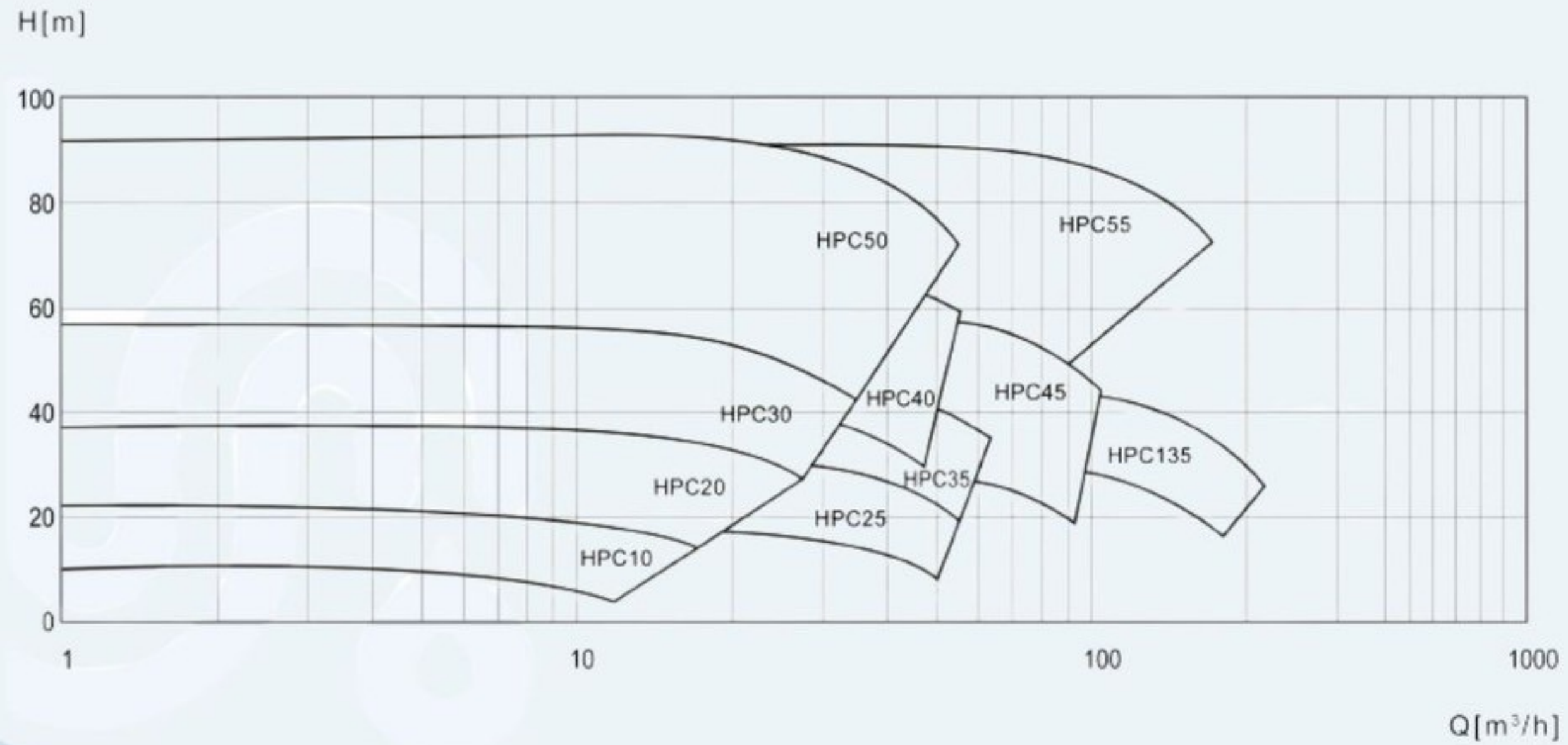
Open impeller design, 316L material, the precision casting pump body ensures the pump running stably.

Explosive view

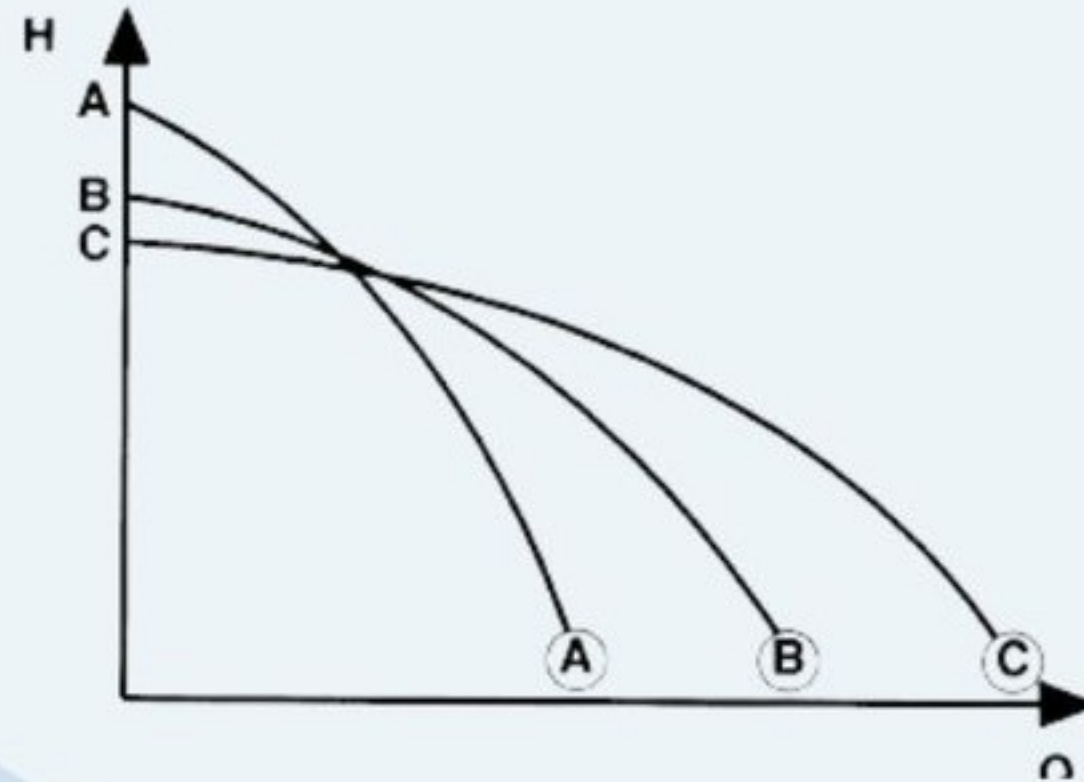
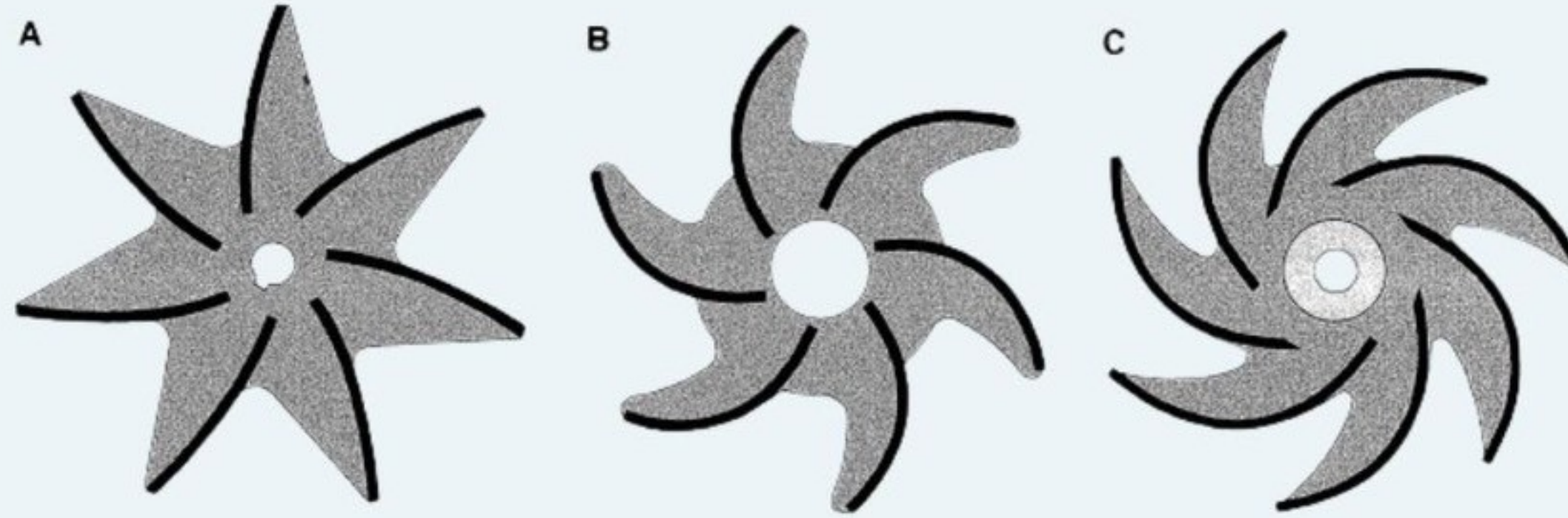


Performance Curve

HPC n=2900min⁻¹

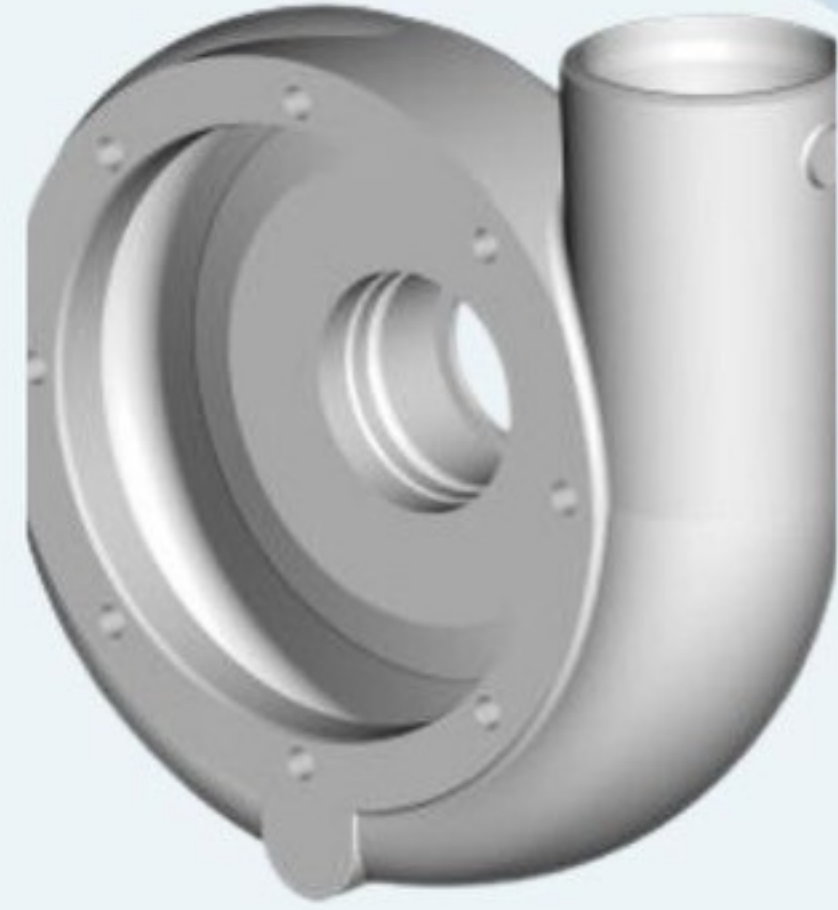
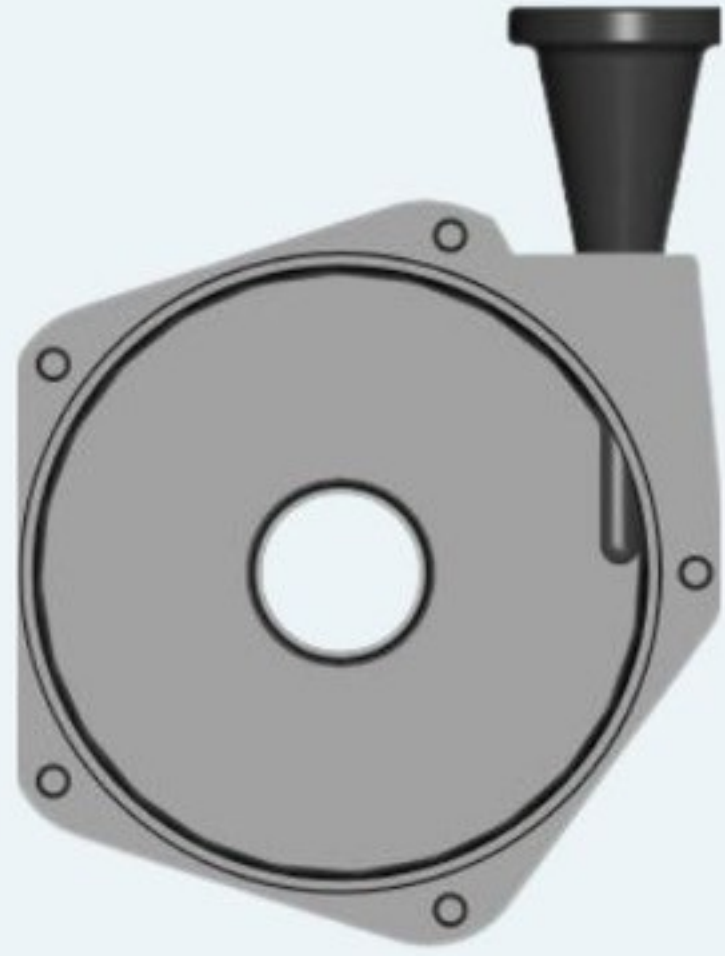


The impact of different impeller designs on pump performance



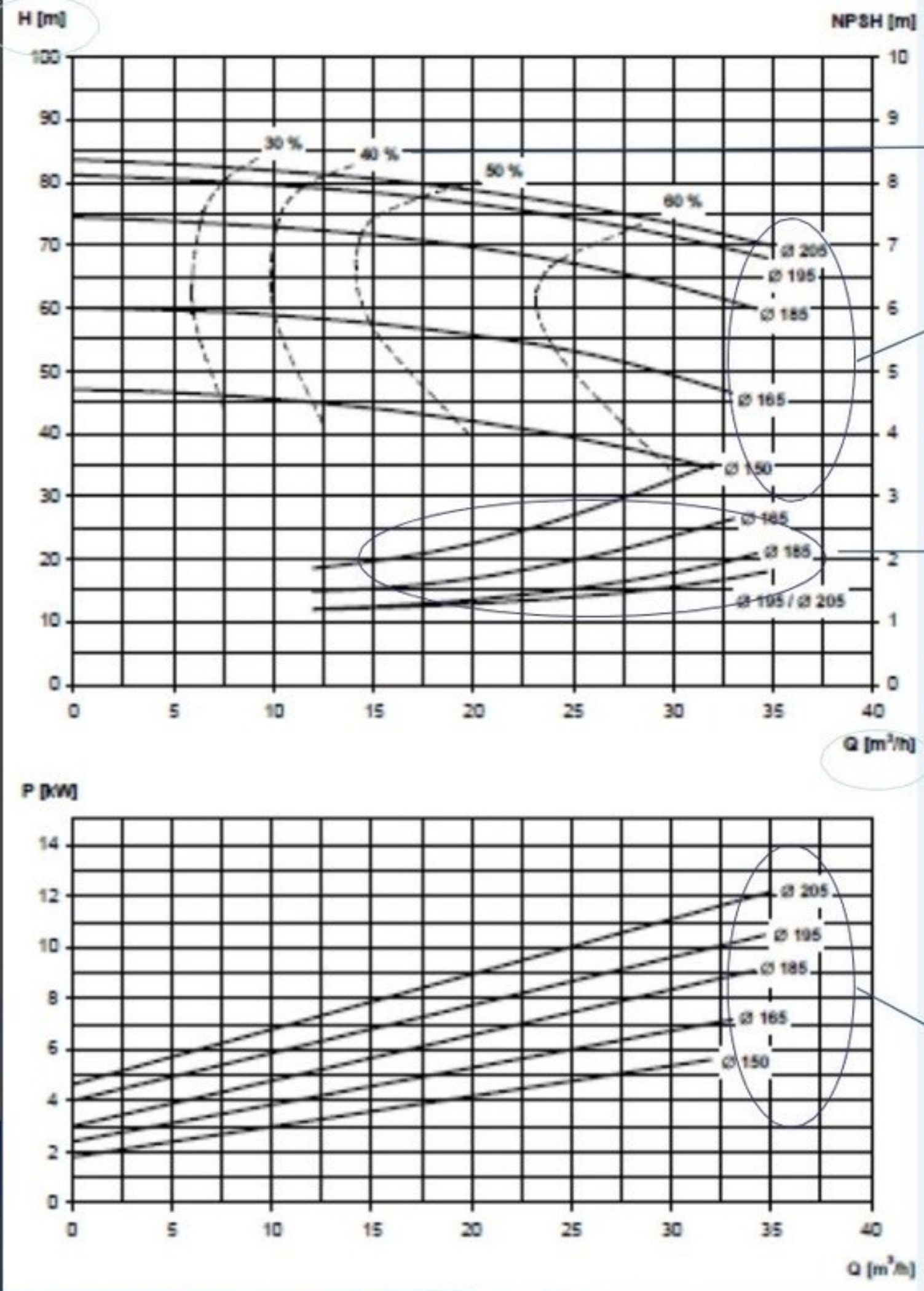
 **HYPERFLOW**

RENOX
RENOX FLOW EQUIPMENT CO.,LTD.



Performance Curve

H Head



The efficiency of the pump near this operating point

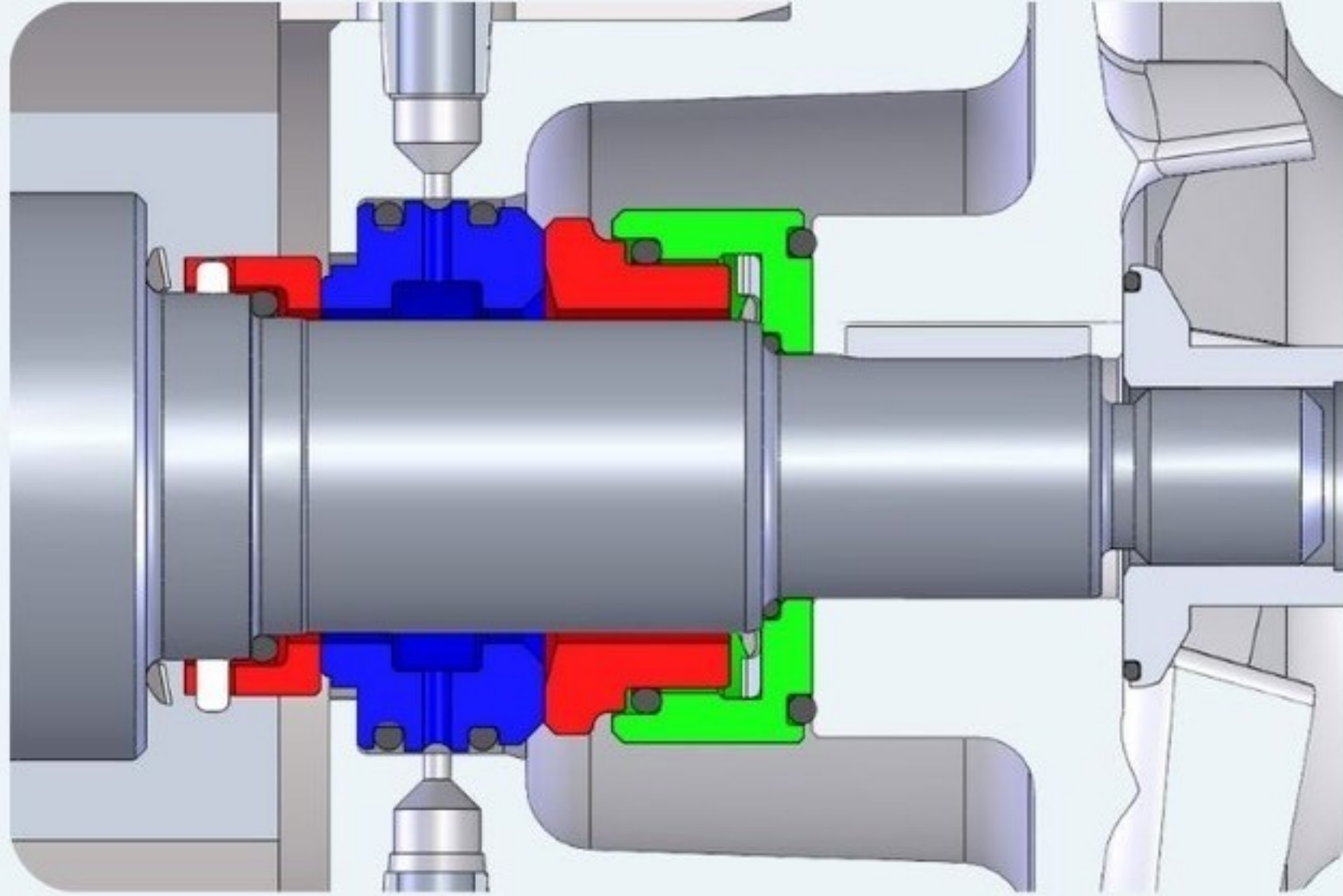
QH curves with different impeller diameters

NPSH require value with different impeller diameters

X axis flow

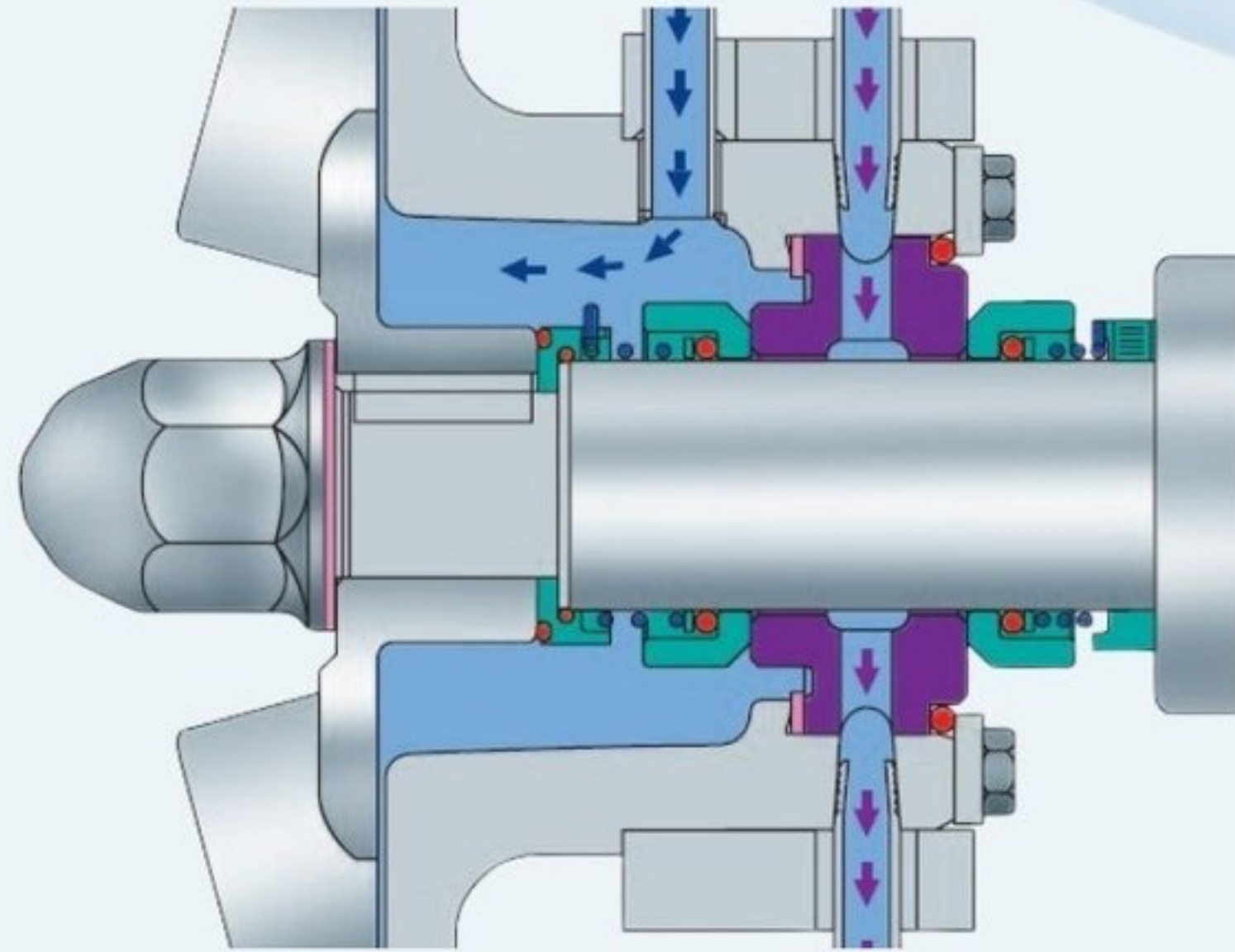
Motor power curve under different impeller diameters

Real hygienic seal design



Hyperflow

The spring doesn't contact the product, hygienic



Fristam

The spring contact the product, not hygienic

Real hygienic seal design

There is a risk of cleaning when springs come into contact with materials (Extracted from EHEDG machine sealing group literature)

The principle of mechanical seals are two seal faces axially pressed together face to face. One seal face (C in Figure 2) is stationary, fixed in the housing which the shaft is going through. The other seal face (B in Figure 2) is attached on the rotating shaft. The rotating seal face is pressed towards the stationary seal face by the spring (F in Figure 2) and by the hydraulic load from the product pressure. Note that this is only to describe a simple mechanical seal design; the design presented in Figure 2 is not applicable for hygienic applications.



Figure 2. Simple Mechanical seal design, Not hygienic!

A:Product area, B:Rotating seal face, C:Stationary seal face, D:Rotating shaft, E:Secondary seals, F:Spring, G:Set screw, H:Stop ring

Real hygienic seal design

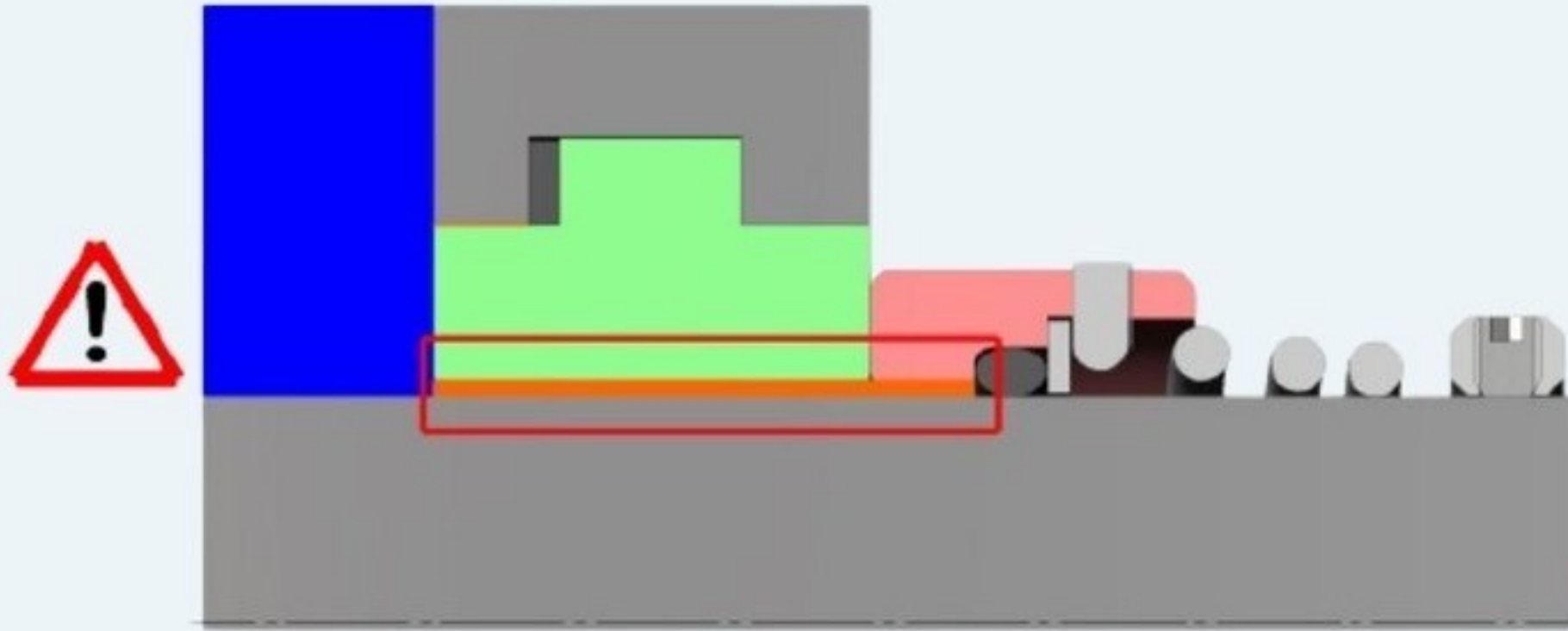


Figure 8. Outboard seal with dead end, not possible to clean. Not hygienic!

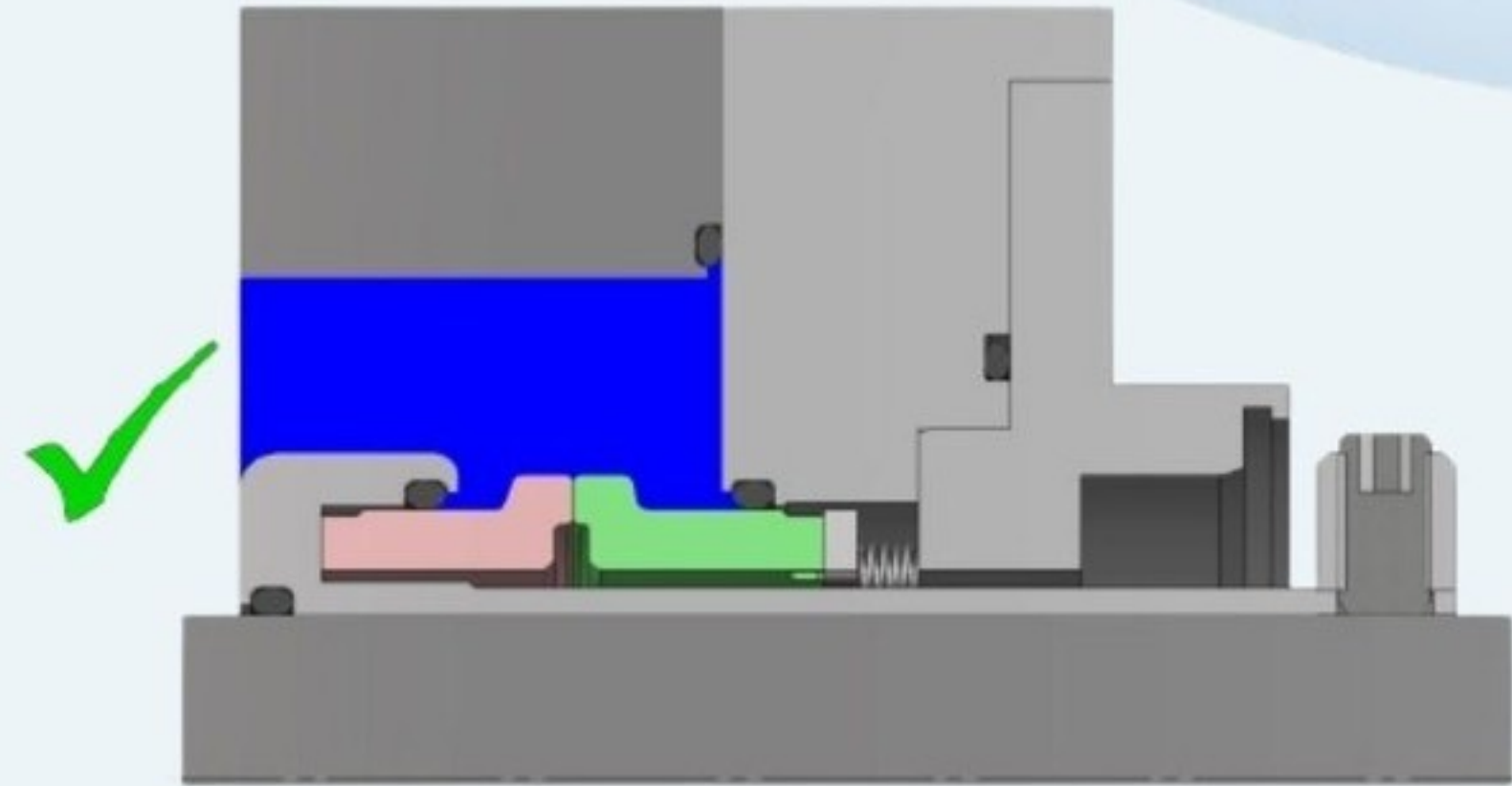
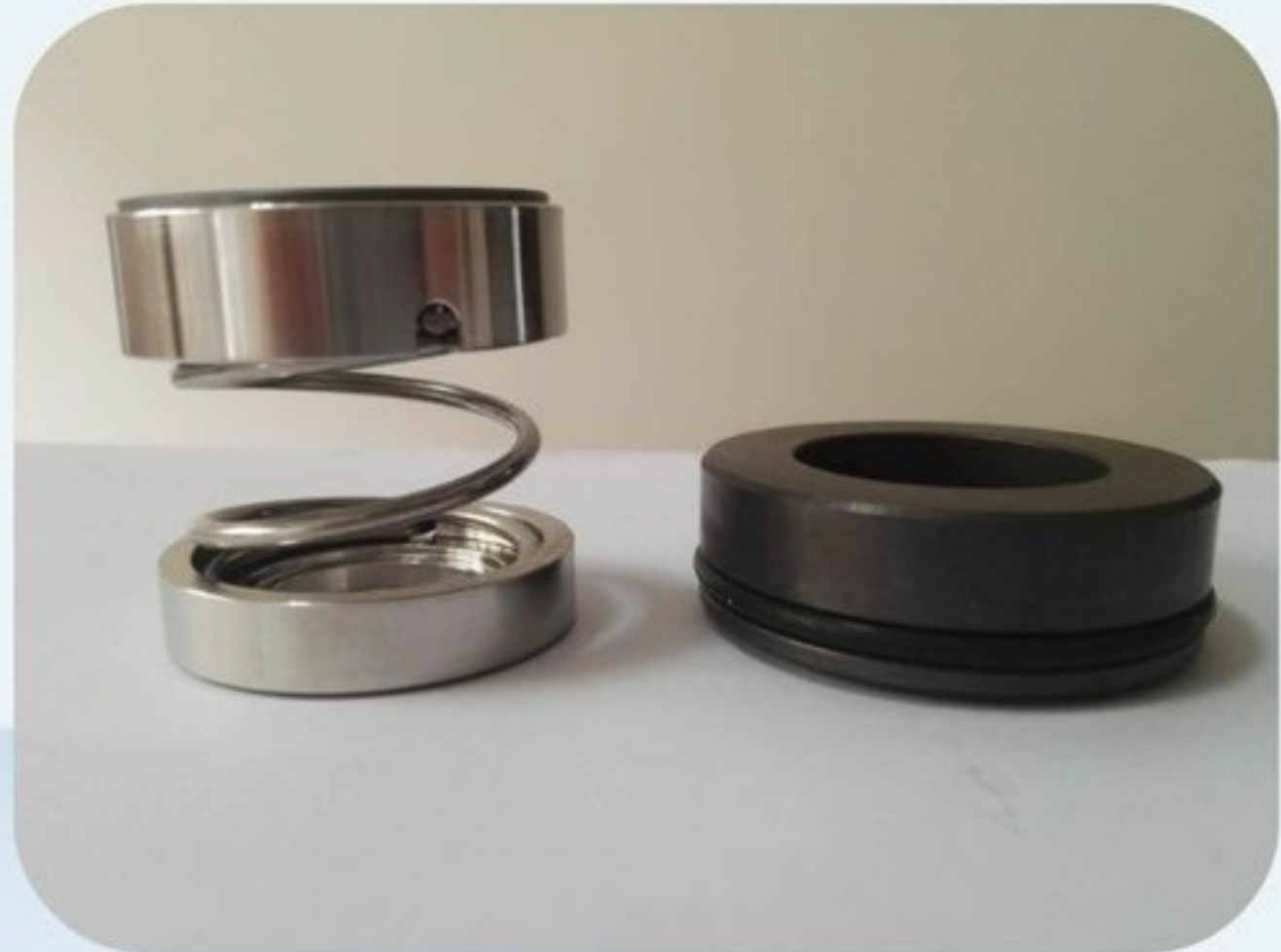


Figure 9. Mechanical seal in the product flow

Structure advantage:

- More in line with the sanitary requirements, HPC series pumps adopt the packaged mech. Seal, the spring does not touch the fluid, to avoid the risk of unclean spring cleaning.



traditional Mech.seal



HPC Mech.seal

Packaged mech.seal

Easy assembly design

Easy to lock pump shaft



The hole make it easy for mounting/ dismounting the impeller nut

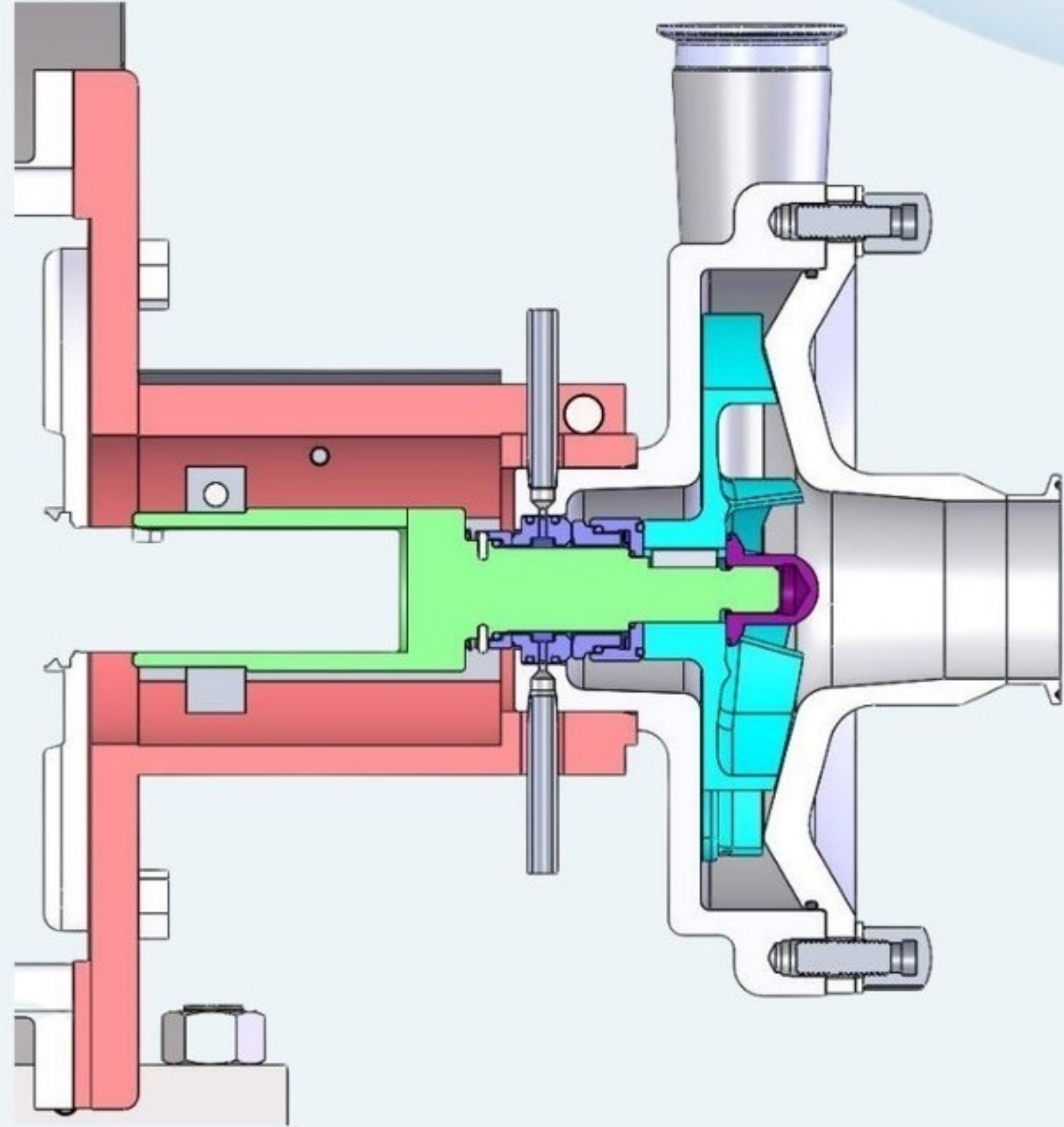


Easy to maintain design

easy to replacement seals

Unnecessary to dismantle
pump casing

Unnecessary to adjust to gap
between impeller and pump
casing



Applications in the pharmaceutical industry



Application in dairy food





Sterilization machine



Chromatographic separation



evaporator