

# CFC™/HPVS™ and CFFC™/HPVD™



## High Performance Mechanical Seals

For use on difficult applications including oil pipeline pumping, water injection and boiler feed duties.



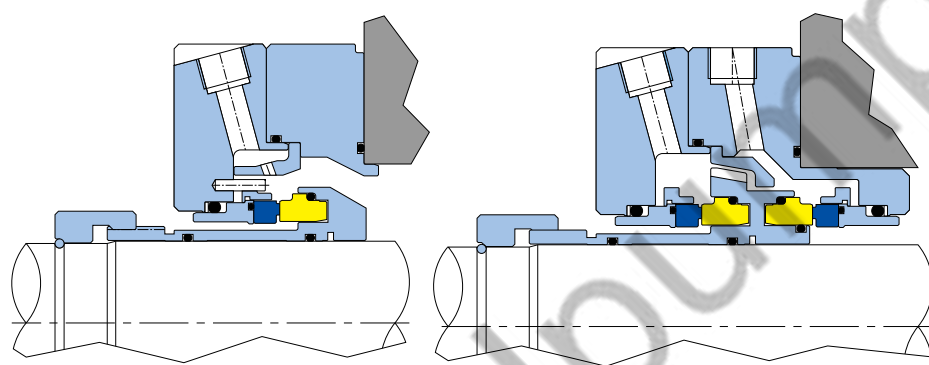
EXPERIENCE THE EXCEPTIONAL



# CFC™/HPVS™ and CFFC™/HPVD™

**These robust seals are designed for use on difficult applications** including oil pipeline pumping, water injection and boiler feed duties.

Finite Element Analysis and hydrodynamic algorithms are used to optimize the monolithic seal face design in order to maintain a stable fluid film. The seals are engineered for maximum service life and have been laboratory tested to extremes beyond their standard capability.



CFC™ - HPVS™

CFFC™ - HPVD™

## TYPICAL DUTIES

- Pressures up to 60barg (870psig) – CFC™ & CFFC™
- Pressures up to 90barg (1305psig) – HPVS™ & HPVD™
- Peripheral speeds up to 60m/s (12000ft/min)
- Temperatures -40°C to +260°C (-40°F to 500°F) \*\*\*

\*\*\* At the seal the temperature would be optimized by appropriate API plan

## General Specification

### Size range

50mm – 150mm (2.000" – 6.000")

### Face options (CFC – HPVS)

Soft / Hard  
Antimony Carbon / Silicon Carbide

### Face options (CFFC – HPVD)

Soft / Hard / Hard / Soft  
Antimony Carbon / Silicon Carbide  
Silicon Carbide / Antimony Carbon

### Elastomer options

Viton® – EPR - Nitrile – Aflas® – Kalrez®

### Metallurgy options

316L SS (standard) DIN 1.4462 (Duplex), Alloy 255 (Super Duplex), Alloy 276 etc.

## KEY FEATURES / BENEFITS

- High speeds – Stationary multi spring design for even face loading
- High pressures – Robust seal faces minimize the effects of pressure distortion
- Monolithic seal faces – maintains flatness under temperature fluctuations
- Axial displacement allowance – combats machine build tolerances and thermal expansion
- Seal face design optimized using FEA and hydrodynamic algorithms
- Seal face loading factory set and statically tested prior to despatch
- Sculptured lug drive – for improved torque transmission
- Compact & robust design – allows seal to be fitted on close bearing centre pumps



**WARNING**

Use double mechanical seals with hazardous products. Always take safety precautions:

- Guard your equipment
- Wear protective clothing

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