



# sealmatic®

## Sealmatic Successfully Commissions API 682 4th Edition Category 2/3 2CW – CS Sealmatic Seal Type B750VK-CS

Critical pumps of Gabbioneta make were installed with single mechanical seals at CPCL, handling Hydrocarbon Naphtha, they needed to be converted from single to a double seal arrangement and Sealmatic was awarded the contract to provide state of the art API 682 4th edition mechanical seals with configuration 2CW-CS, with API Plan 11,75/76. The outboard seal provided is a containment seal. The mechanical seals have been installed on two pumps (DE & NDE) and are performing satisfactory at the site.

The Petroleum Ministry entrusted the well renowned OISD (OIL INDUSTRY SAFETY DIRECTORATE) with the task to undertake measures aimed at enhancing the safety in the Oil & Gas industry in India. Under this mandate CPCL - Manali undertook the projects of converting single mechanical seals to double mechanical seals in compliance with API standards.

The Manali Refinery located at North Chennai has a capacity of 11.1 MMTPA. The refinery is one of the most complex and integrated refineries in India with three Crude Distillation Units (CDU/VDUs), Hydrogen Generation Units (HGUs), Hydro-Cracker unit (HCU), Fluid Catalytic Cracking unit (FCCU), Continuous Catalytic Reforming unit (CCRU), Isomerisation unit, Delayed Coker Unit (DCU), Visbreaker unit (VBU), Diesel Hydro De-sulphurisation unit (DHDS), Diesel Hydro-treating unit (DHDT), Lube Hydro-finishing unit, NMP Extraction unit, Propylene unit and Petrochemical Feedstock unit with fuel, lube, wax & petrochemical feedstocks production facilities.

### Sealmatic Seal Type B750VK-CS

#### Product Description

1. API 682 Category 2 and 3, Type A, Arrangement 2 seal
2. Dual seal in face-to-back configuration
3. Balanced design
4. Dry contact outer seal (containment seal)
5. Cartridge construction
6. Rotating unit with multiple springs

#### Technical Features

1. Suitable for both, retrofits and original equipment
2. Varied selection of materials available
3. Safe operation due to metal torque transmission at the rotating carbon seal rings

#### Typical Industrial Applications

- API 610/ISO 13709 pumps
- Media with gaseous leakage
- Oil and gas industry
- Petrochemical industry
- Refining technology
- Process pumps

#### Performance Capabilities

- Shaft diameter:  $d = 20 \dots 110 \text{ mm}$  (0.79" ... 4.33")
- Pressure:  $p_1 = 42 \text{ bar}$  (609 PSI)
- Temperature:  $t = 40 \text{ }^\circ\text{C}$  ( 40 ° °F)
- Sliding velocity:  $v_g = 23 \text{ m/s}$  (76 ft/s)
- Axial movement:  $\pm 1.0 \text{ mm}$

