



**sealmatic**<sup>®</sup>

## Sealmatic Delivers Plan 52 & 53B With Wireless Sensing Networks To Cut Operating Costs & With Mechanical Seals As Per API 682 4th Edition

### For BPCL Mumbai - OISD Project – Conversion of 23 single mechanical seals to double mechanical seals.

In a process plant, the primary goal of the maintenance team is to improve operations, cut energy use and enhance safety. Wireless sensors and networks can be used in a wide range of process measurements, as compared to wired alternatives, with faster installation time and minimal disruption.

As a leading sealing solution provider as per API 682 4th edition, Sealmatic offers various API Plans such as 52, 53B etc with extensive wireless technology, which includes transmitters, gateways and proven application solutions.

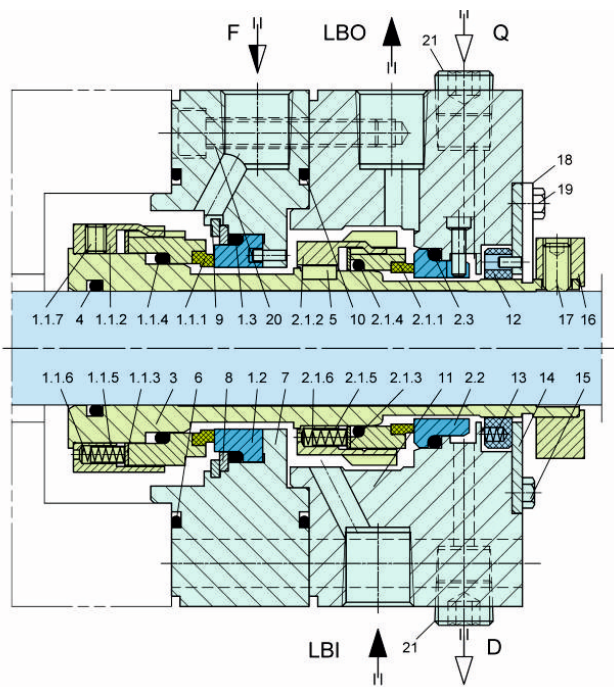
Sealmatic designed, fabricated and supplied state of the art 23 API Plans with a wide variety of technical features thus benefiting the end user with advantages such as: process monitoring and measurements which are remote and uneconomical to consider for wired monitoring, equipment health monitoring, environmental monitoring, energy management, regulatory compliance etc.

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 various refineries in India undertook the projects of converting single mechanical seals to double mechanical seals in compliance with API standards.

We are extremely pleased to mention that under the OISD norms Sealmatic has successfully executed an order for various pumps in the CDU & DHDS plant at BPCL Mumbai to meet demanding operating conditions as mentioned below, thus bringing areas of design, operation and maintenance with a view to achieve the highest safety standards in a cost-effective manner.

Sealmatic offers the widest portfolio of seals and seal supply systems in accordance with API 682 4th edition. Sealmatic's API-compliant mechanical seals offer technically competent, practical solutions that provide significantly greater safety and process reliability in refining technology, petrochemical, oil & gas and chemical industries.

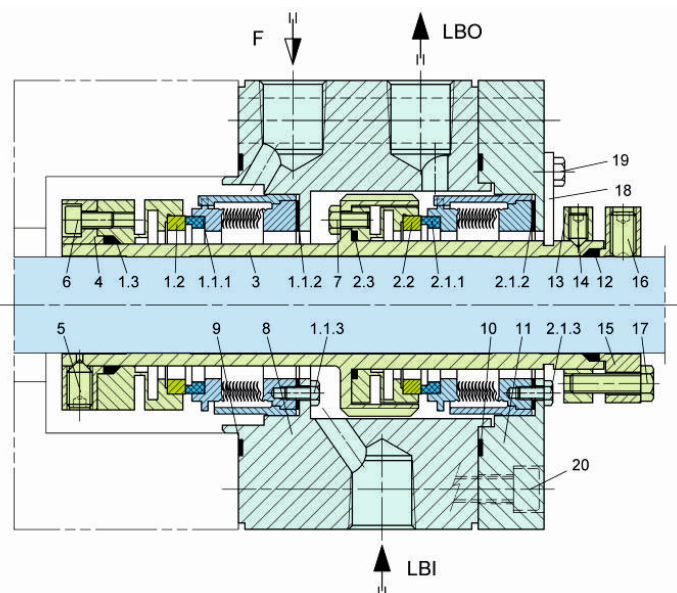
API 682 4th Edition Mechanical Seals BPCL MUMBAI (Phase 2)											 <small>Sealmatic India Pvt Ltd.</small>		
Sr No	Plant	Unit	Seal Drawing No.	Speed	API Plans	Media	Temp. Max °C	Viscosity .cP	Specific gravity	Suction pressure kg/cm <sup>2</sup> A	Discharge pressure kg/cm <sup>2</sup> A	Vapor pressure kg/cm <sup>2</sup> A	Seal Type
1	MMCD4	CDU4	91-B750VK/55-PTa4 R2	2900	13, 52, 61	HYDROCARBONS	120	100	1	1.7	9.8	1.03	API
2	MMCD4	CDU4	91-B750VK/70-PTa6 R2	2910	11, 52, 62	CAUSTIC (SULPHUR)	50	1.4	1.12	35.2	22.7	0.2	API
3	MMCD4	CDU4	91-B750VK/90-PTa5 R2	2930	11, 52	NAPHTHA (RECIRCULATED SOLVENT)	65	0.4	0.724	20.14	29	0.26	API
4	MMDHD	DHDS	91-B740F-D/43-G913 R1	2900	53B	AMINE SOLUTION	40	1.1	1.02	1.1	7.8	0.07	API
5	MMDHD	DHDS	91-B740F-D/43-G914 R1	2900	53B	HYDROCARBON PUMP	45	-	1.22	3.5	5	-	API
6	MMDHD	DHDS	91-B750/48-G16-PTa2 R2	2955	11, 52	RAW NAPHTHA TRANSFER	40	0.21	0.617	1.98	10.23	1.8	API
7	MMDHD	DHDS	91-B750VK/58-PTa1 R2	2955	32, 52	SOUR WATER	37	0.67	0.983	2	19	1.01	API
8	MMDHD	DHDS	91-B750VK/70-PTa5 R2	2925	32, 52, 61	SOUR WATER	90	1	1	10	5.03	-	API
9	MMDHD	DHDS	91-B750VK/58-PTa2	2925	11, 52	SOUR WATER	110	0.6	0.985	2	4.5	-	API
10	MMFCC	FCCU	91-UFL650/60-PTa3 R3	2970	02, 52	CIR.OIL	332.5	0.34	0.751	3.1	11.5	-	API
11	MMFCC	FCCU	91-B750/50-PTa2 R2	1400	52	GASOLINE	50.5	-	-	15.2	16.2	-	API
12	MMFCC	FCCU	91-B750/50-PTa2 R2	1430	52	GASOLINE	50.7	-	-	15.5	16.5	-	API
13	MMFCC	FCCU	91-B750VK/60-PTa4 R2	2910	11, 52, 61	SOUR WATER PUMP	45	0.62	-	2	7	-	API



## B750VK

### Performance Capabilities

- Shaft diameter:  $d = 20 \dots 110 \text{ mm}$  (0.79" ... 4.33")
- Pressure:  $p_1 = \dots 42 \text{ bar}$  (609 PSI)
- Temperature:  $t = -40 \text{ °C} \dots +176 \text{ °C}$  (+220 °F) (-40 °F ... +349 °F (+428 °F))\*
- Sliding velocity:  $v_g = 23 \text{ m/s}$  (76 ft/s)
- Axial movement:
  - $d \leq 40 \text{ mm} \pm 1.0 \text{ mm}$
  - $d > 40 \text{ mm} \pm 1.5 \text{ mm}$
- \* Engineered up to 260 °C (500 °F) with FFKM (K) secondary seals



## UFL650-Ta

### Performance Capabilities

- Shaft diameter:  $d_1 = 20 \dots 110 \text{ mm}$  (0.79" ... 4.33")
- $p = \text{vacuum} \dots 20 \text{ bar}$  (... 290 PSI)
- Temperature:  $t = -130 \text{ °C} \dots +400 \text{ °C}$  (-202 °F ... +752 °F)
- Sliding velocity:  $v_g \dots 50 \text{ m/s}$  (... 164 ft/s)

