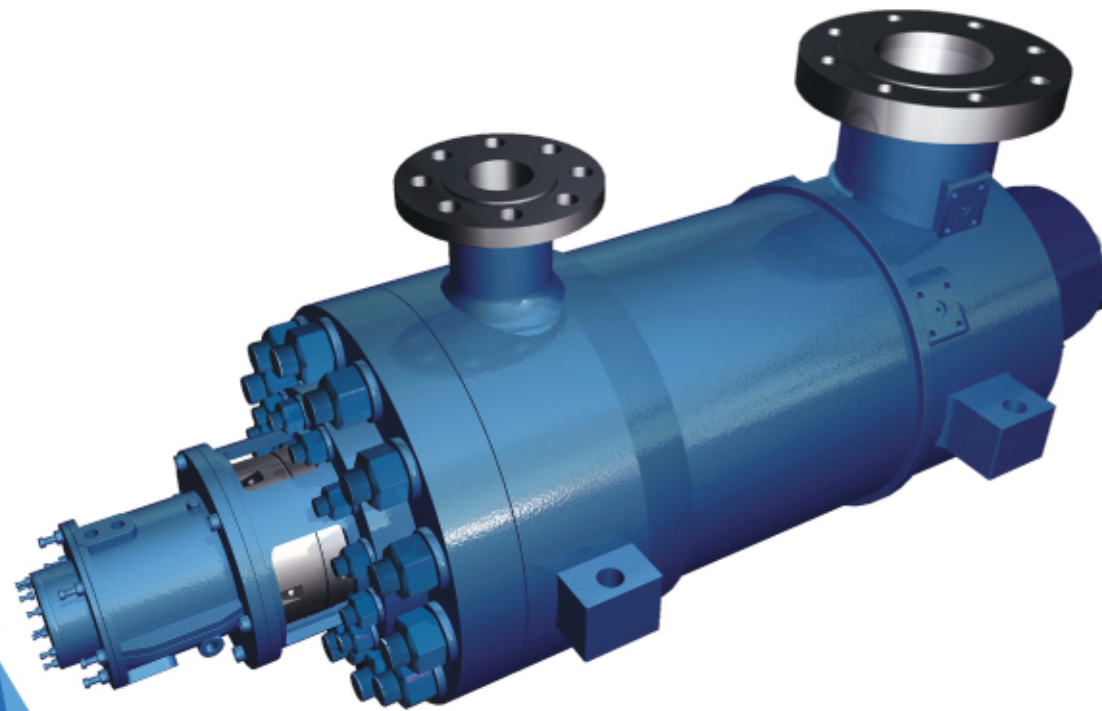


API 610 10th Edition Process Pump(BB5)

API 610 10th Edition Process Pump(BB5)

# RSMP-B

Series



# RSMP-B SERIES

## API 610 10th Edition Process Pump

- Pump size : 38 to 203mm
  - Capacity : Max 1040m<sup>3</sup>/hr
  - Delivery head : Max 3,000m
  - pressure : Max 300 bar
  - Temperature : -30°C to +425°C
- Material : DCI, WCB, CF8, CF8M, CD4M, CN7M, HASELLOY B&C, standard labyrinth.
- Easy to install and maintenance
  - Enclosed impeller investment casting
  - Excellent interchangeability

The TRUFLO BB5 pump is horizontal, double casing, radially split and multistage pump and between bearing design suitable for high pressure, high speed and high temperature applications.

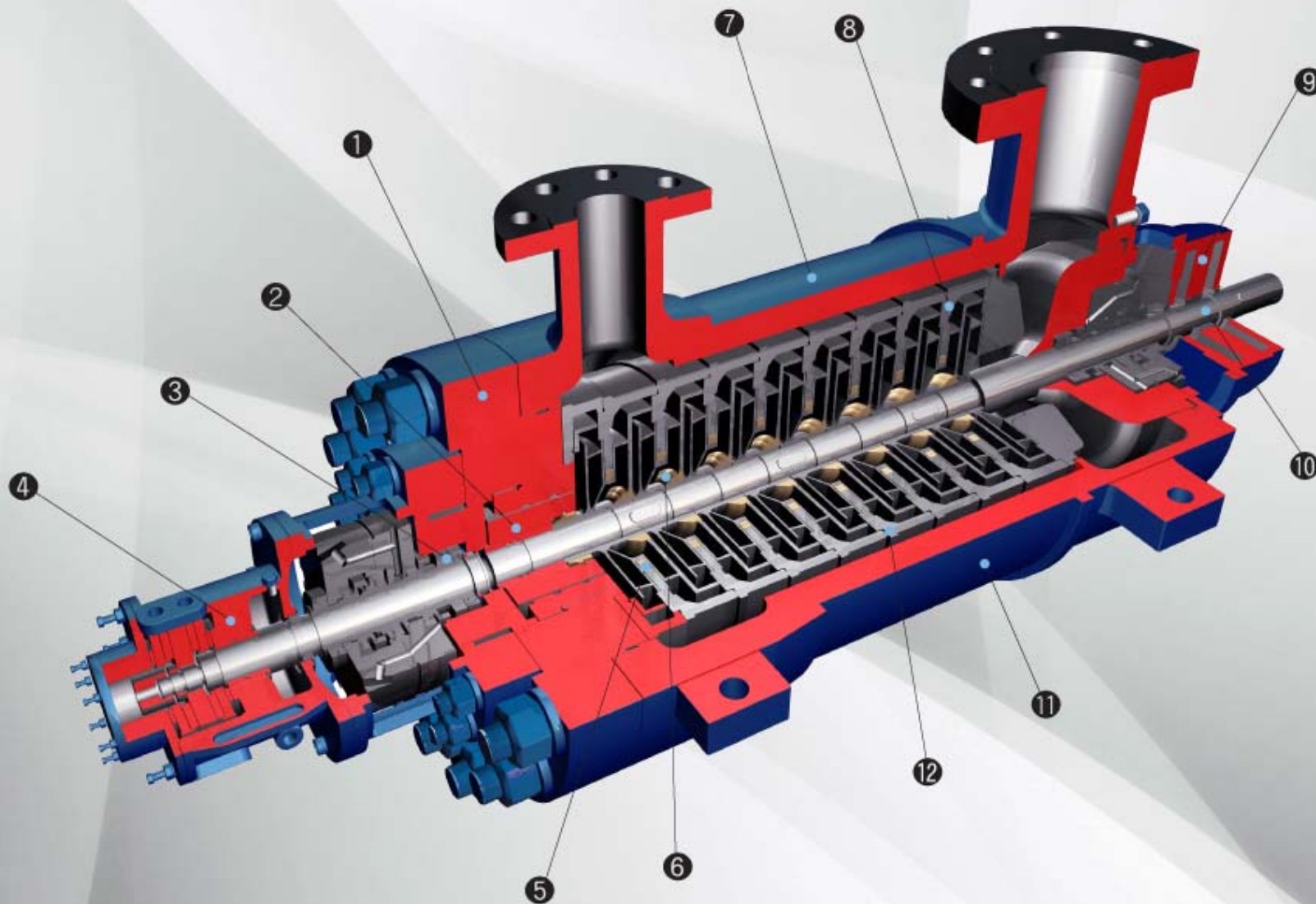
The simple construction of Truflo BB5 pump offers ease of maintenance and installation.

### APPLICATION

#### Oil & Gas

- Refinery
- Petrochemical Services
- Crude Oil Transfer
- Water injection
- Boiler Feed

API



### 1. Casing Cover

- Flanged head, studs/nuts
- Flanged head
- O-ring or spiral wound gasket

### 2. Axial Balance Device

- Balance drum or disc
- Low specific gravity
- Special materials

### 3. Mechanical Seals

- API 682 (ISO 21049) seals
- Single, dual, dual pressurized
- Non-contact gas secondary

### 4. Self-Equalizing

- Fan cooled ring oil, or oil mist lubricated tapered roller or 7300 series double ball with machined brass cages, or
- Double acting tilting pad with force feed lubrication system

### 5. Diffusers / Impellers

- Allow replacement of individual stage pieces vs. entire inner volute
- O-ring or metal-to-metal stage casing fits
- Key driven enclosed impellers
- For PI applications shrink fit, split rings, axially secured impellers, and stepped shaft at each stage
- Blank stages can be supplied for future conditions

### 6. Wear Parts

- Variety of materials, hardness, and hard coatings available depending on pump material and application
- PEEK with reduced clearances available on clean fluids for enhanced efficiency

### 7. Interstage Takeoff

- Partial flow takeoff from intermediate stage
- Able to stack high capacity and low capacity diffusers/impellers on same rotor for optimized stage takeoff
- Common on boiler feed pumps
- Available on recycle process applications
- Saves cost of additional pump

### 8. First Stage Impeller

- Low NPSHr design is standard
- Single or Double suction
- Design by operating conditions

### 9. Radial Bearings

- Ring oil or oil mist lubricated roller or ball bearing with C-3 clearance
- Ring oil or force feed lubricated sleeve bearings available
- Bearing designs available for high speed

### 10. Heavy Duty Shaft

- Designed for low stress level
- Fully machined
- Dynamically balanced
- Straight bore, tapered bore, or hydraulic fit under coupling available per API 610

### 11. Barrel

- Centerline mounted for thermal stability and maximum nozzle load capability
- Cast with nozzles and flanges
- Forged barrel with NDE of nozzle welds
- Pin-and-key-slot thermal expansion system
- Jacketing, insulation or noise blankets available

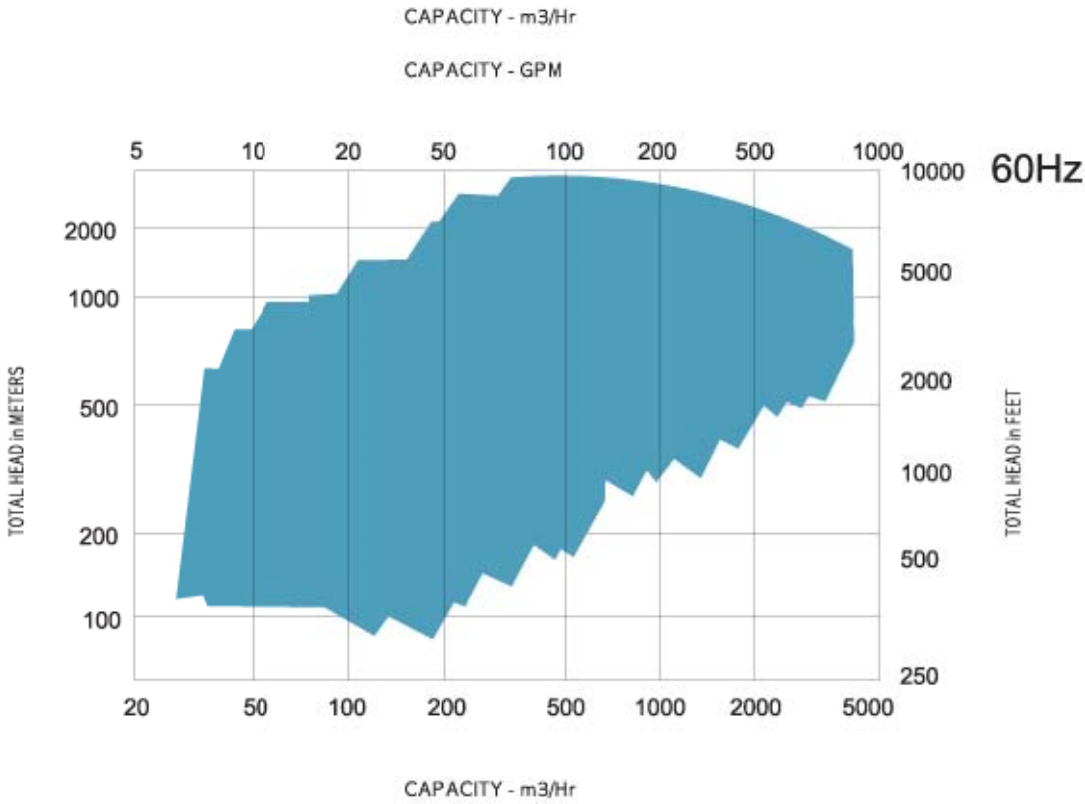
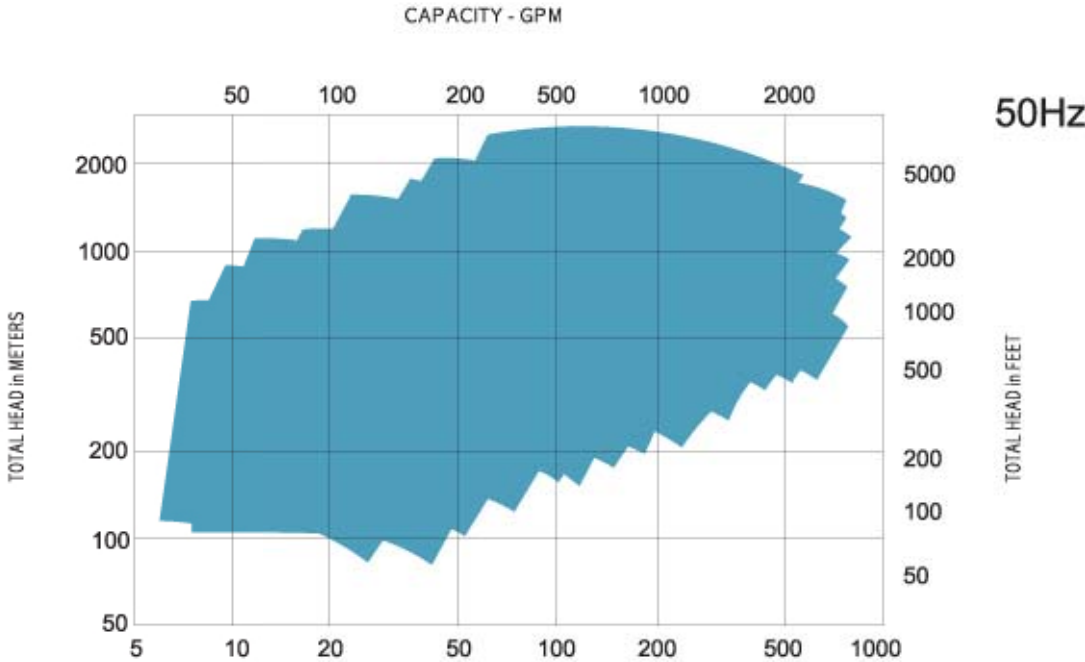
### 12. Pump Inner Cartridge Assembly

- Stage casings sealed by discharge pressure
- Free to expand towards discharge cover during warm-up
- Inner tie bolts for assembly/disassembly
- Coupling hub, inboard radial bearing and inboard seal chamber removal required on small pumps to remove cartridge
- Larger pumps have barrel bore diameters larger than bearing housing which allows cartridge to be removed with those parts assembled

**API 610 10th Edition Process Pump (BB5)**

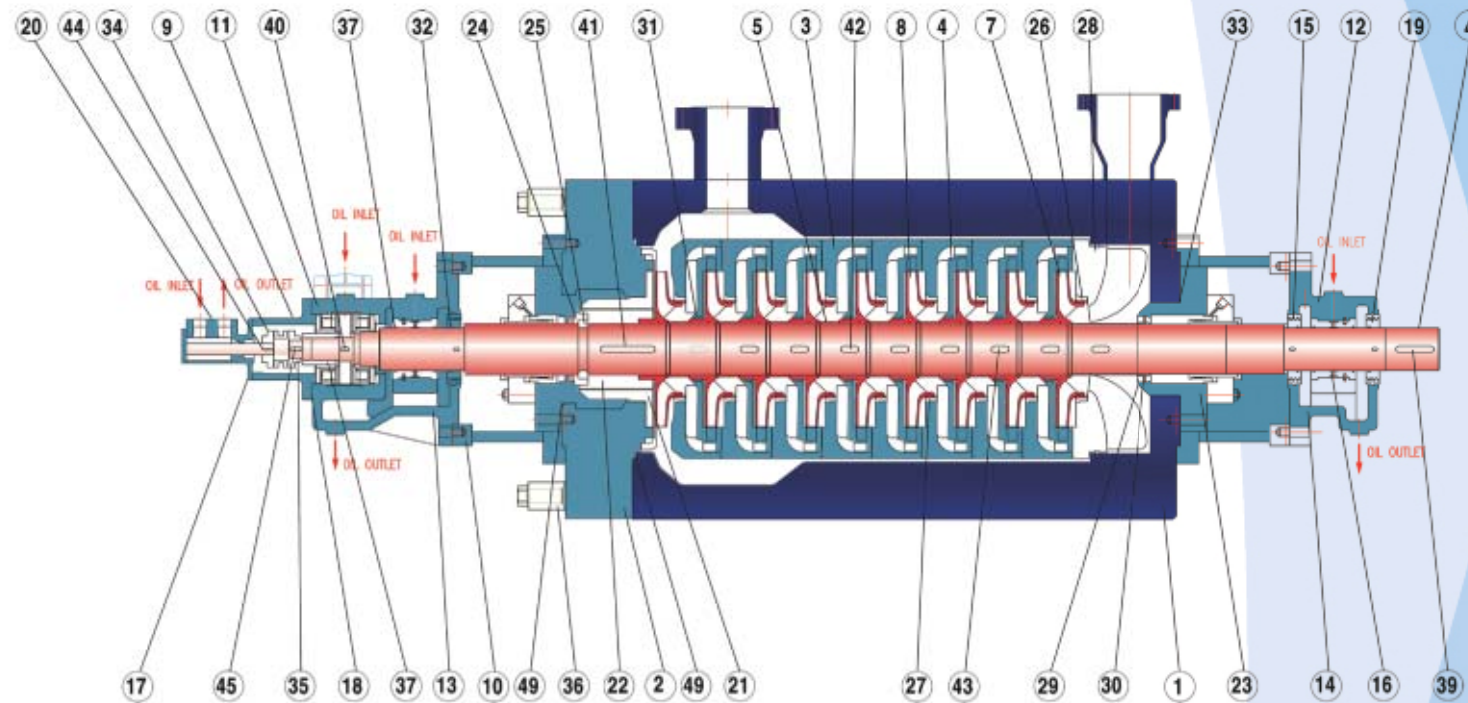
# Pump Selection Guide

## PUMP Performance Range



# RSMP-B Series

## DIMENSIONS



## CONSTRUCTION DETAILS

NO	PART NAME
1	CASE
2	HEAD
3	STAGE CASING
4	DIFFUSER
5	STAGE SLEEVE(1st~9th)
6	SHAFT
7	IMPELLER(1st)
8	IMPELLER(2nd~9th)
9	OIL PUMP ADAPTER
10	ADAPTER
11	UPPER BRG. HOUSING NDE
12	UPPER BRG. HOUSING DE
13	LOWER BRG. HOUSING NDE
14	LOWER BRG. HOUSING DE
15	INPRO SEAL NDE

NO	PART NAME
16	BEARING SHEEL
17	SHEET GASKET
18	SHEET GASKET
19	INPRO SEAL DE
20	OIL PUMP UNIT
21	PRESS. REDUCING BUSH
22	PRESS. REDUCING SLEEVE
23	STUFFING BOX
24	SPLIT RING RETAINER
25	SPLIT RING FOR NO.22
26	SUC. SPACER WEARING
27	IMPELLER WEARING
28	SUC. SPACER
29	PACKING BOX BUSH RETAINER
30	PACKING BOX BUSHING RADIAL

NO	PART NAME
31	DIFFUSER BUSH
32	O-RING
33	GASKET (STUFFING BOX)
34	COUPLING
35	COUPLING
36	CASE NUT
37	O-RING
39	KEY(CPLG.)
40	KEY(THRUST COLLAR)
41	KEY(BALANCE DISK)
42	KEY(IMPELLER 2nd~9th)
43	KEY(IMPELLER 1st)
44	KEY(OIL PUMP)
45	KEY(OIL PUMP SIDE)
49	HEAD GASKET

Bulletin No. EX-013 Rev.0(2010.10)