

FROM PLATFORMS TO REFINERIES, AHEAD ALL THE WAY



# The KSB engineered pumps division is specialized in designing and manufacturing high performance pumps for the oil and gas industry.

## Application

RPH pumps find extensive applications in offshore platforms, refineries and HPI, heavy duty oil and gas services.

## Design

Horizontal, single stage, radially split, centre-line mounted end suction pump in back pull-out design.

It has a single entry closed radial impeller. The pump is designed as per API 610 or ISO 13709 requirements, overhung execution (category OH2 of API 610).

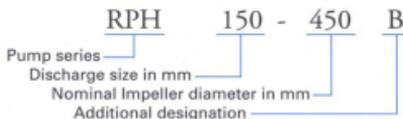
## Special features

Finned bearing housing and air cooling with fan allow operation of the pump without water cooling up to 315°C.

The seal chamber is designed in full compliance with API 682.

All necessary connections for temperature & vibration measurement can be provided on the pump.

## Designation



Additional designation can be:

B - for special hydraulics

I - with inducer

## Operating Data

Pump size:

DN 25 to 250 mm

Capacity:

up to 1500 m<sup>3</sup>/h

Head:

up to 350 m

Operating pressure:

up to 51 BAR

Higher pressure ratings on request

Temperature:

up to 450°C

Flanges:

ANSI B 16.5 class 300/600

## Materials

Standardized materials according table H-1 (API 610)

Part name	API class S5	API class S6	API class C6	API class A8	API class D1
Volute casing	A216 Gr. WCB	A216 Gr. WCB	A487 Gr. CA6NM	A351 Gr. CF8M	A351 CD4 MCu
Impeller		A743 Gr. CA6NM	A743 Gr. CA6NM	A743 Gr. CF8M	A890 CD4 MCu
Casing Cover	A216 Gr. WCB / A516 Gr. 65		A487 Gr. CA6NM	A351 Gr. CF8M	A351 CD4 MCu
Shaft	A434/4140 CL.BB		A276 type 420	A276 type 316	DIN 1.4462
Bearing bracket	A216 Gr. WCB				
Casing wear ring	AISI 420 Hardened			AISI 316 Hard Faced	Duplex
Impeller wear ring	AISI 420 Hardened			AISI 316 Hard Faced	Duplex
Gasket	Spiral wound SS 316 - graphite				
Studs / Nuts	A193 Gr. B7 / A194 Gr. 2H				

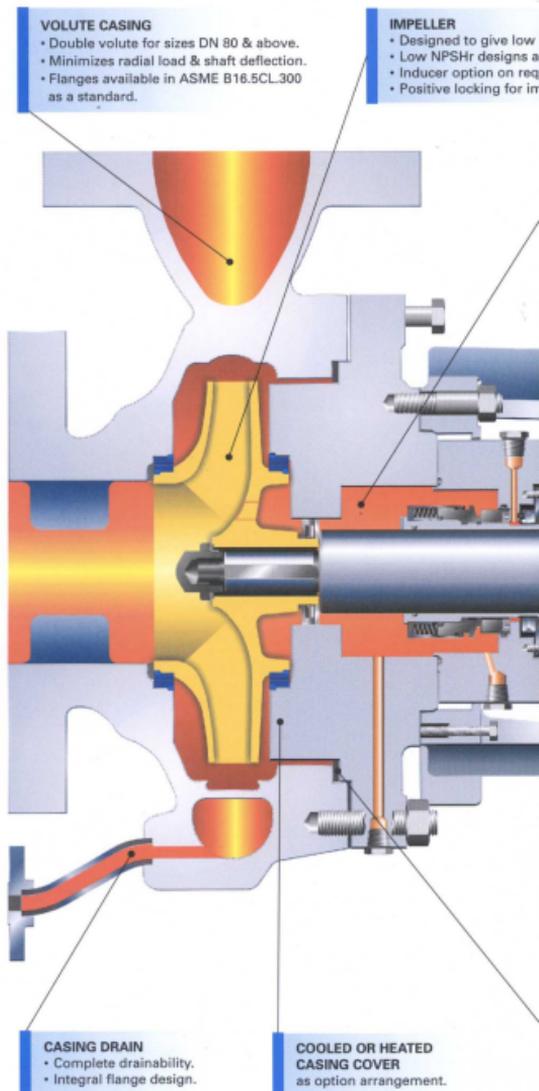
# KSB RPH. All synergies in the field

Mastering all the technologies involved in the oil and gas pump industry, KSB engineers ensure reliability and efficiency on RPH pumps.

KSB has more than 30 year's experience in Quality Management. Its Quality Assurance System was originally designed for nuclear applications.

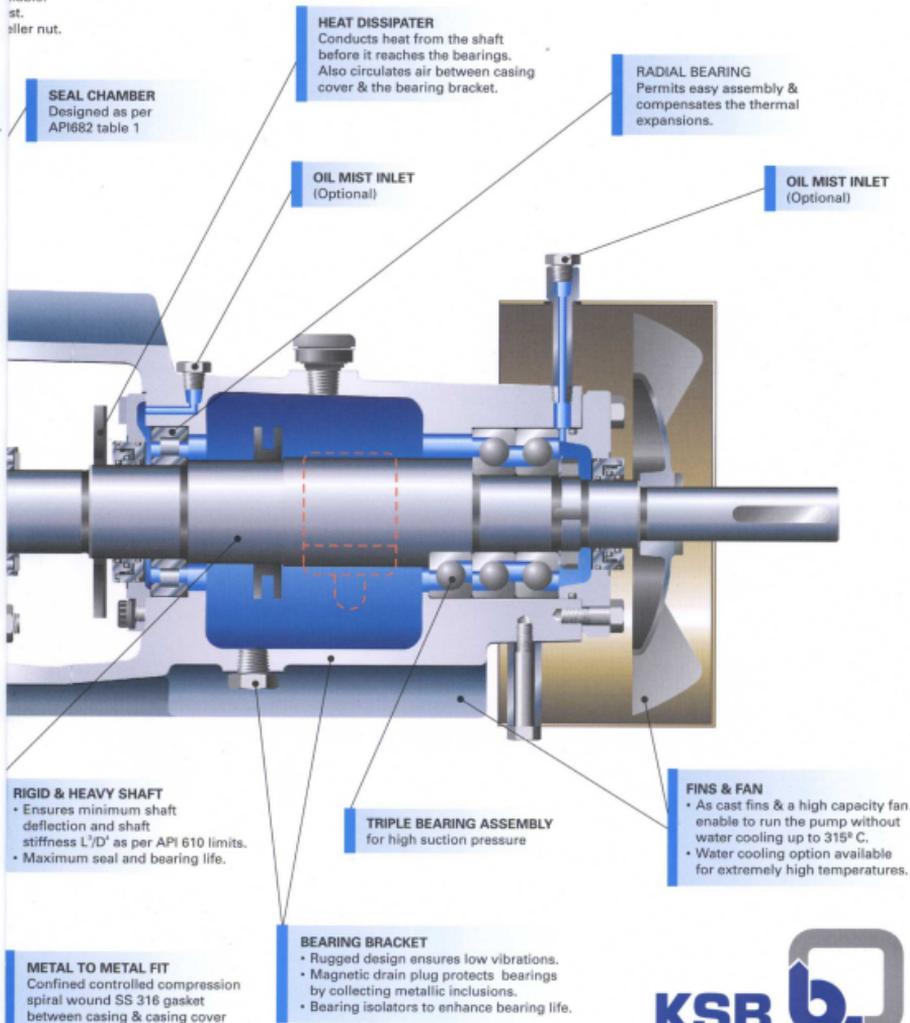
So not surprisingly, it's approved by all the international standards authorities, including the API and ASME.

*KSB can tailor its quality control plans to match customer needs and specifications.*

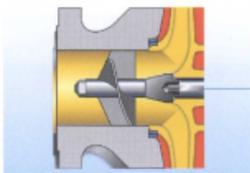


# of centrifugal pumps technologies.

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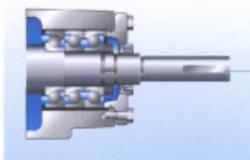


# Special design features



## **INDUCER**

For very low NPSHr requirements



## **TANDEM BEARING ARRANGEMENT**

For high suction pressure



## **WATER COOLED BEARING BRACKET**

For extremely high temperatures



## **COOLED CASING COVER**

For a cooled mechanical seal



## **HEAT DISSIPATER**

For dissipating shaft conducted heat

# Hydraulic coverage

## Selection Chart 60Hz

