

## OHH and OHHL (API 610) type OH2 single stage end suction process pumps



# Main industries and applications

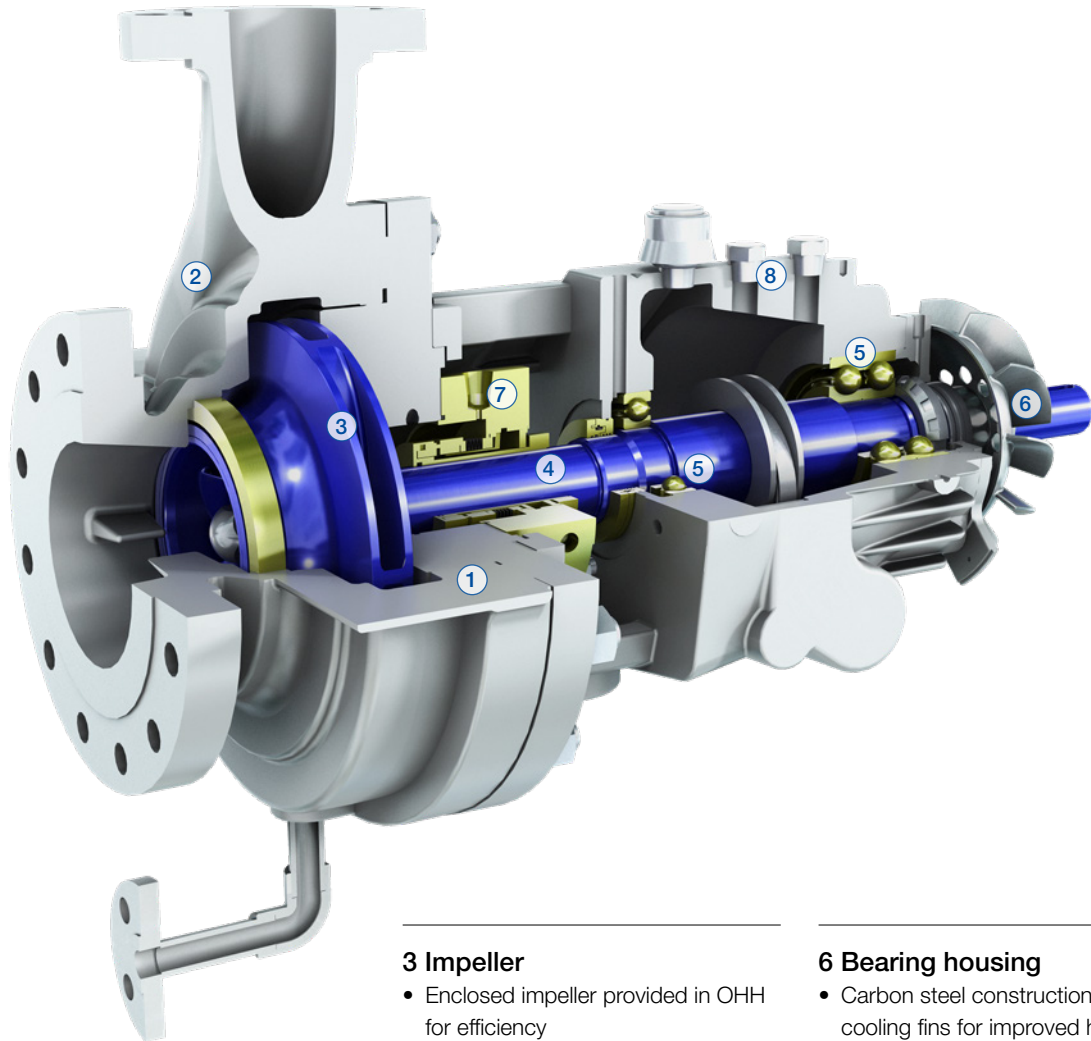
The OHH and OHHL are designed to API 610 for heavy duty process flows and heads. The OHH utilizes a conventional enclosed, high efficiency impeller. The OHHL impeller is semi-open which is required for its unique low flow capability. Both pumps utilize the same mechanical seals, bearings, bearing isolators, bearing housing, and fan. Larger sizes of OHHL are available with an inducer for lower NPSH3.

OHH and OHHL pumps are commonly found in

- Synfuels
- Refining
- Gas processing
- Petrochemicals
- Nitrogenous fertilizer



# Features and benefits



## 1 Casing feet and baseplate

- With the bearing housing foot prohibited by API 610, casing feet and baseplate are heavily reinforced to carry nozzle loads while maintaining alignment to API 610 requirements

## 2 Pressure casing

- Designed to 20% of tensile strength plus 3 mm corrosion allowance for long life
- 300# RF flanges are standard.
- 600# RF with optional high pressure casing

## 3 Impeller

- Enclosed impeller provided in OHH for efficiency
- OHHL utilizes unique semi-open impeller for low flow and high head

## 4 Extra heavy duty, large diameter shaft

- Provides minimal shaft deflection and long seal and wear ring life

## 5 Bearings

- Opposed 40 degrees angular contact thrust bearings with machined brass cage for long term reliability
- C3 ball radial bearing
- Optional triple row thrust bearing and roller radial bearing

## 6 Bearing housing

- Carbon steel construction with cooling fins for improved heat dissipation

## 7 API 682 mechanical seal and API 610 seal chamber

- Fully cartridge seals in API 610 seal chamber for improved seal environment and life

## 8 Bearing assembly

- Four sizes of bearing housing cover the product range for maximum interchangeability
- Low noise fan added for high ambient or high product temperatures
- Ring oil, purge mist or pure mist lubrication

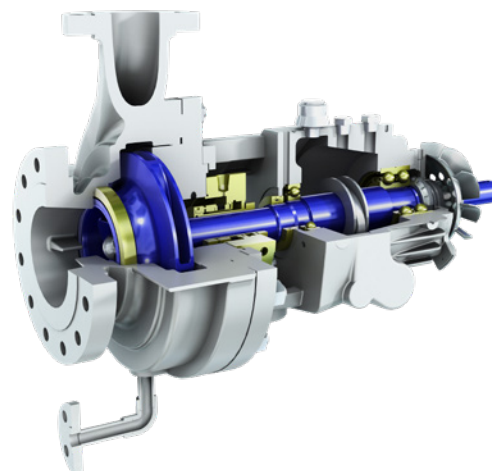
# Specifications OHH

## Material options

API 610 material codes:  
S-4, S-5, S-6, S-8, S-9, C-6, A-8, D-1, D-2, 317L

Common alloys available:  
625, 825, 254, 20, hastelloy C276, titanium Gr.3 & Gr.12

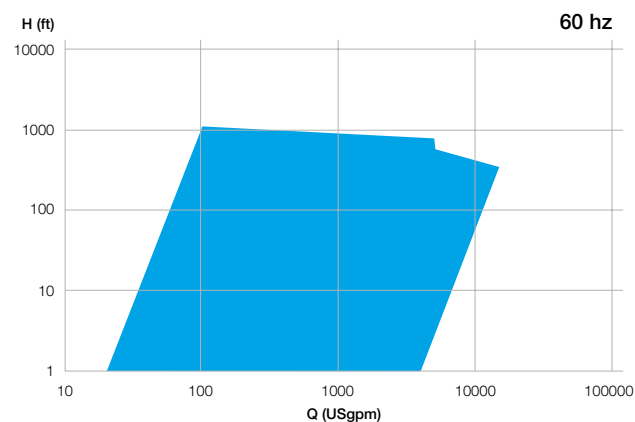
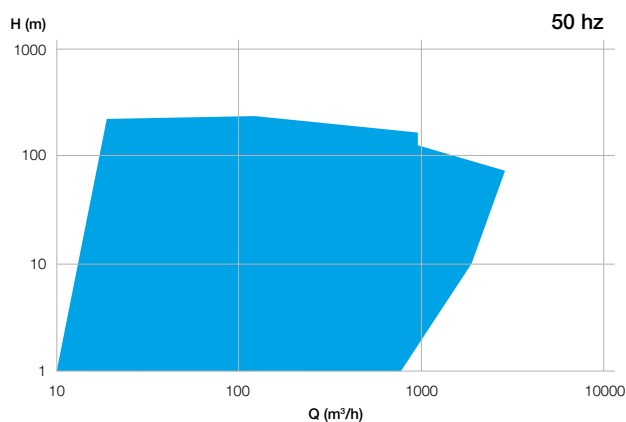
Other special materials are available on request



## Operating data

|                     | 50 Hz                         | 60 Hz              |
|---------------------|-------------------------------|--------------------|
| <b>Pump sizes</b>   | 25 to 400 mm                  | 1 to 16 in.        |
| <b>Capacities</b>   | up to 2'250 m <sup>3</sup> /h | up to 10'000 USgpm |
| <b>Heads</b>        | up to 370 m                   | up to 1'200 ft.    |
| <b>Pressures</b>    | up to 75 bar                  | up to 1'100 psi    |
| <b>Temperatures</b> | -75 to 425°C                  | -100 to 800°F      |

## Performance range



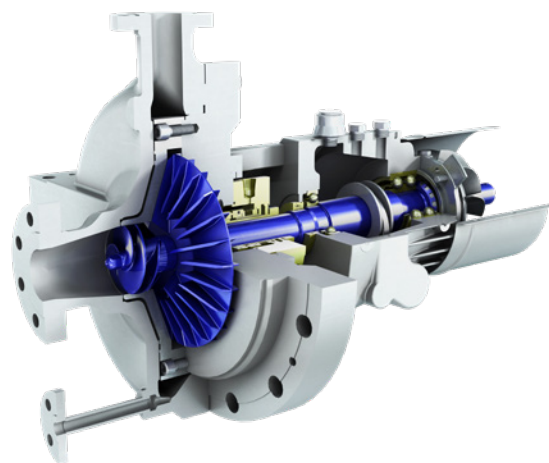
# Specifications OHHL

## Material options

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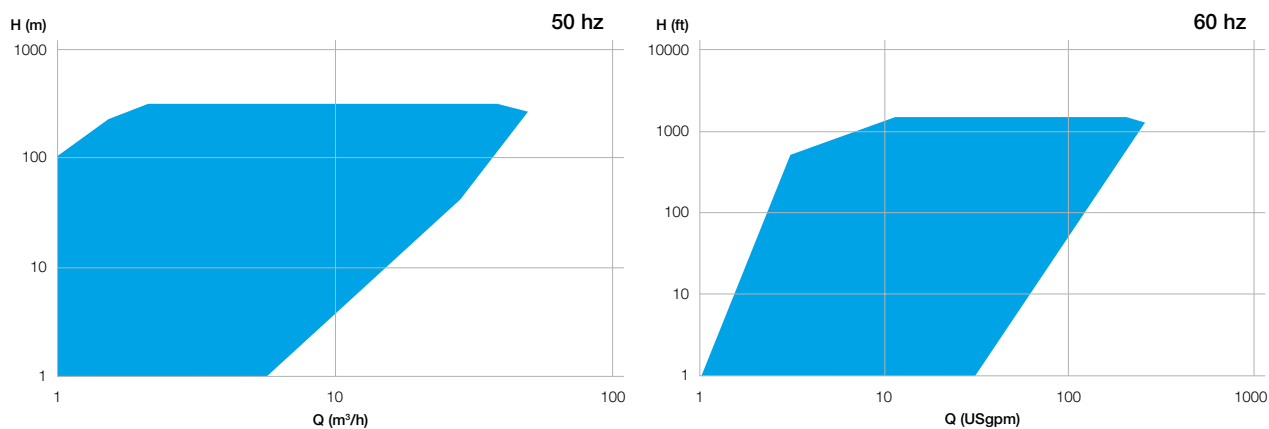
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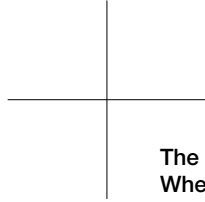


## Operating data

|                     | 50 Hz                     | 60 Hz           |
|---------------------|---------------------------|-----------------|
| <b>Pump sizes</b>   | 25 to 50 mm               | 1 to 2 in.      |
| <b>Capacities</b>   | 1 to 60 m <sup>3</sup> /h | 4 to 260 USgpm  |
| <b>Heads</b>        | up to 450 m               | up to 1'500 ft. |
| <b>Pressures</b>    | up to 51 bar              | up to 740 psi   |
| <b>Temperatures</b> | -75 to 425°C              | -100 to 800°F   |

## Performance range





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The Flow Equipment division specializes in pumping solutions specifically engineered for the processes of our customers. We provide pumps, agitators, compressors, grinders, screens and filters developed through intensive research and development in fluid dynamics and advanced materials. We are a market leader in pumping solutions for water, oil and gas, power, chemicals and most industrial segments.

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