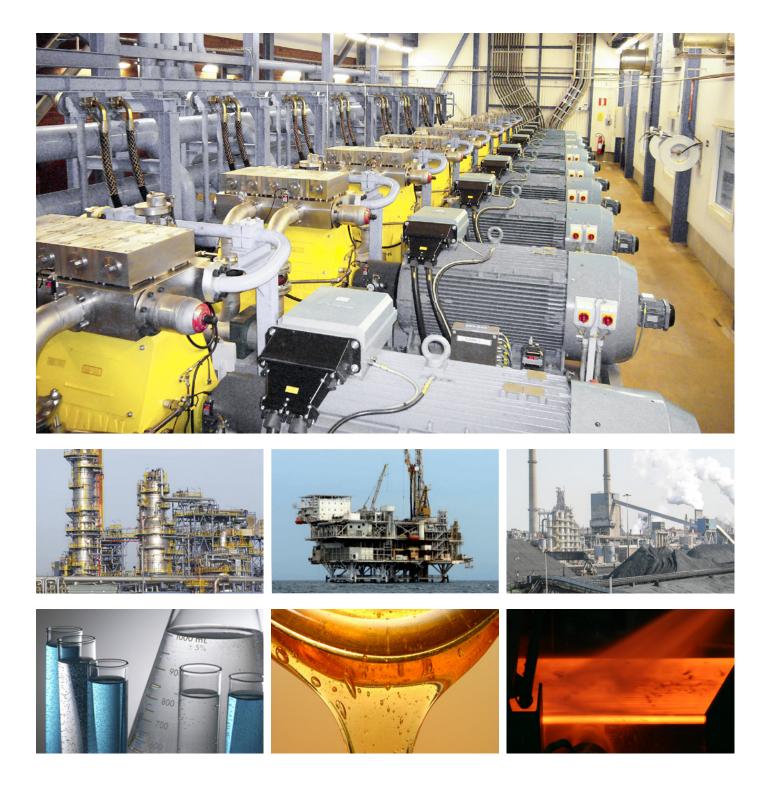
## HAMMELMANN

## hammelmann-process.com



# **Process pumps** HAMPRO-Series

Chemical pumps

Pumps for produced water

Pumps for the offshore industry

Pumps for the iron and steel industry

#### Twin conical valves

The conical shape allows low wear operation even with contaminated media. Suction and discharge valves are both conical design.



#### Bellows system

The bellows are the hermetic seals for the power end to prevent the intrusion of fluid or gas.



The Zero Emission design ensures that the pumped medium is sealed off from the surrounding atmosphere enabling environmentally threatening, toxic and explosive fluids to be pumped safely at up to 4000 bar.

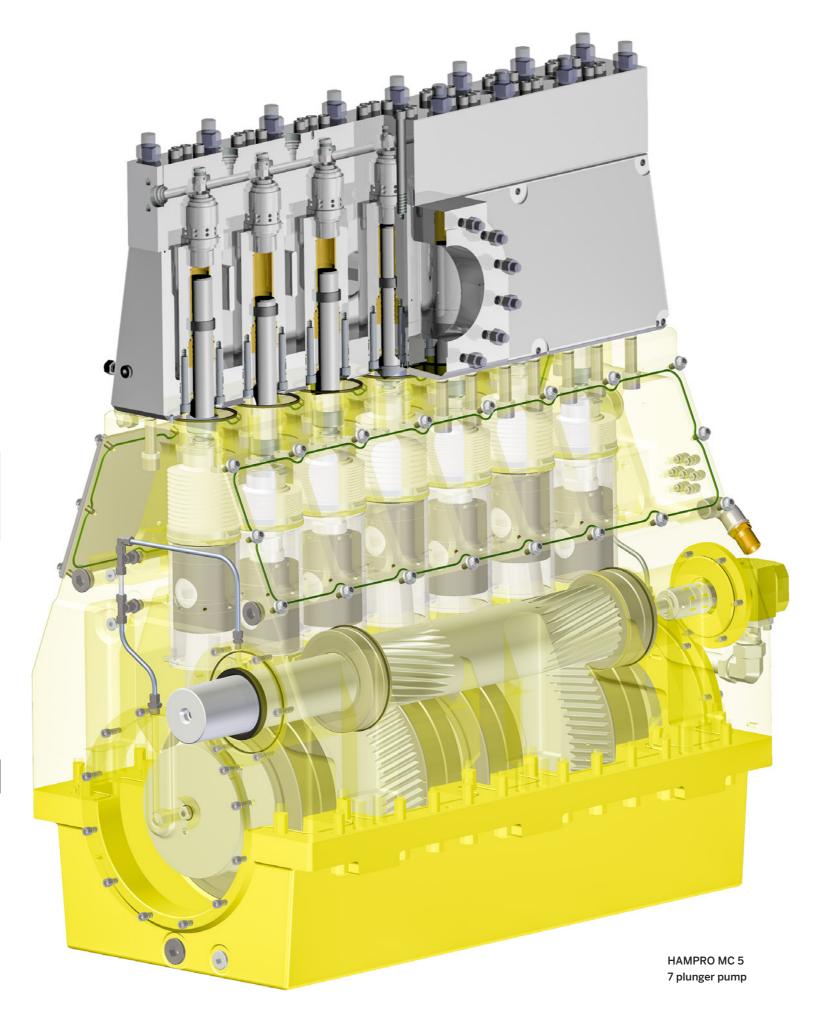
#### Energy efficiency

Hammelmann plunger pumps convert 93 to 98 % of the shaft power to hydraulic energy.



Standards ISO 9001

Machine directive 2006/42/EC ISO 14001 ATEX 94/9/EC OHSAS 18001 API 674



#### High flow pump head

Pump models HAMPRO 380, 500, 800 and MC with plunger diameters of 90 mm and above are outfitted with high flow pump heads.



#### Long life sealing systems

The choice of the high pressure sealing system depends upon the pump's application.





#### Labyrinth seal



#### Tungsten carbide plunger

#### Minimal footprint

Packed seal

Compact design is the result of integral speed reduction gear end and vertical configuration.



#### Performance data HAMPRO series

Туре	max. <b>bar</b>	max. m³/h	kW
15	2320	4,1	11
25	3500	4,1	15
45	4000	6,1	30
75	4000	8,0	45
125	4000	13,5	90
175	4000	19,5	132
255	4000	32,6	200
385	3000	59	330
505	3000	75	430
805	3000	124	710
MC 5	3000	176	1000

Fluid temperatures: -40 up to +200 °C Viscosities: up to 2000 mPa s

## **Chemical pumps**



#### Typical fluids

Acrylic acid Adipoladipinat Amine Ammonia Butane Carbon dioxide Crude oil Ester Fatty acids Glucose Hot water Hydrocarbons Methyl ester Pentane Process water Propylene Vinyl acetate Waste water



### Pumps for the offshore industry





Typical fluids Diesel Ethanol Glycol LDHI Methanol Crude oil Scale Inhibitor

## Pumps for produced water



**Typical fluids** Produced water Sea water Salt water

#### Fluid data

Temperatures: -40 up to +200 °C Chlorides: up to 300.000 ppm suitable for  $H_2S$ 



## Pumps for the iron and steel industry





**Typical fluids** Water Hydraulic oil

Processes Metal powder production Descaling Hydrostatic lubrication

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