



Start your Process

Process plunger pumps HAMPRO Series

Chemical Industry

HAMPRO pump features

Oil & Gas Industry

Steel Industry

FPSOs

Company

Start your Process

More than 2000 Hammelmann process pumps are in use world wide in almost all branches. The following examples are a small selection of the wide range of applications and equipment options.

Selected references

Chemical Industry - Part 1

Fatty acid process	6
Low Density Polyethylene	8
Wet oxidation	10
Adhesive production	12

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Chemical Industry - Part 2

Boiler feed water	16
Plastic production	18
Extraction with supercritical CO ₂	20

Oil & Gas Industry

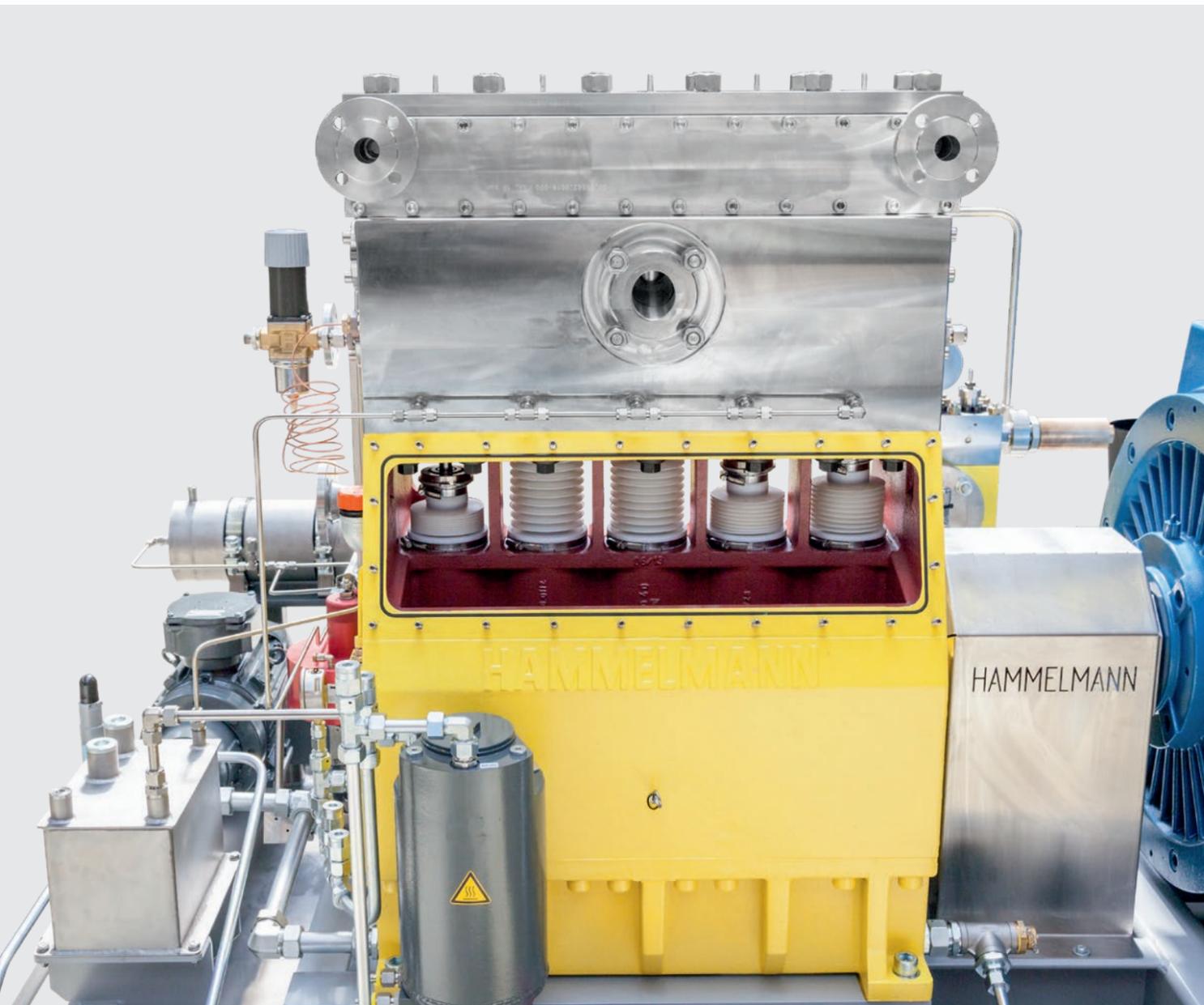
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Steel Industry

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HAMPRO PUMPS CHEMICAL INDUSTRY

Areas of application

Chemical Industry - Part 1

Fatty acid process	6
Low Density Polyethylene	8
Wet oxidation	10
Adhesive production	12

Chemical Industry - Part 2

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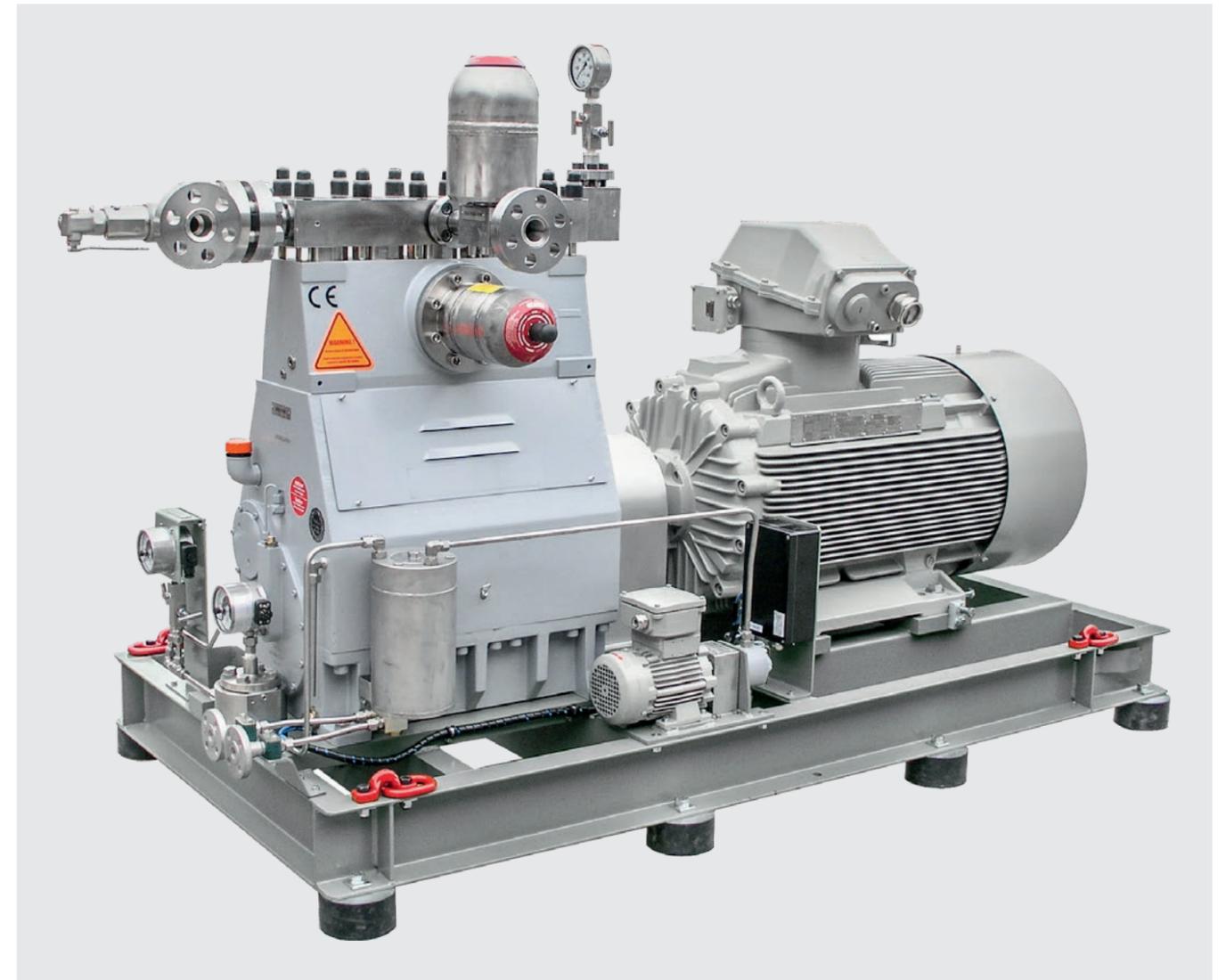
HAMPRO pump features	14
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Fatty acid process



HAMPRO range

- Methanol pumps
- Fatty acid pumps
- Ester pumps
- Pumps for fats and oils
- Splitting water pumps



Methyl ester pump

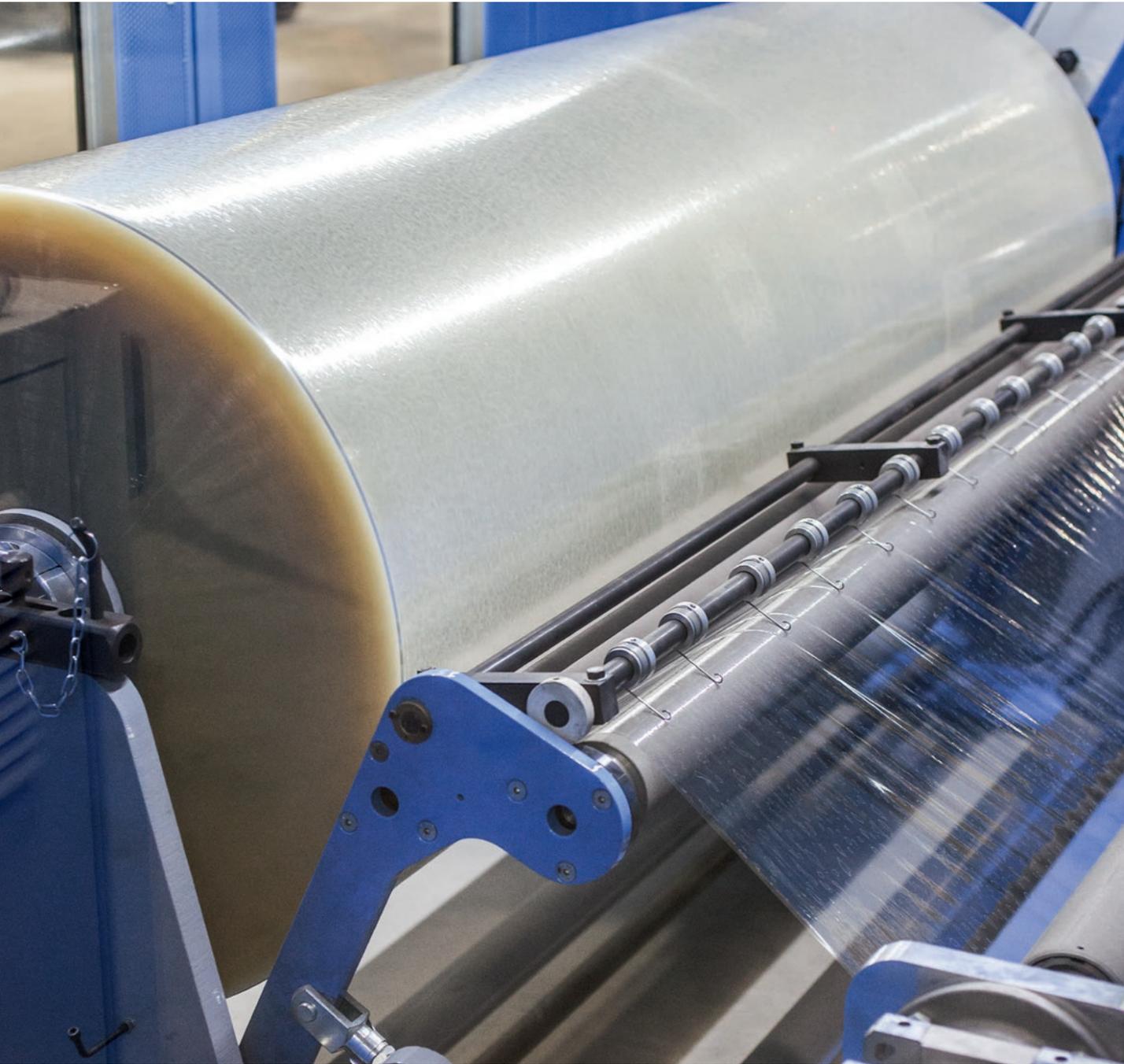
Reference project Thailand

- Scope of supply:
- Pump on base frame with electric motor
 - Suction and discharge side dampers
 - Instrumentation
 - Frequency converter

Type HAMPRO 255

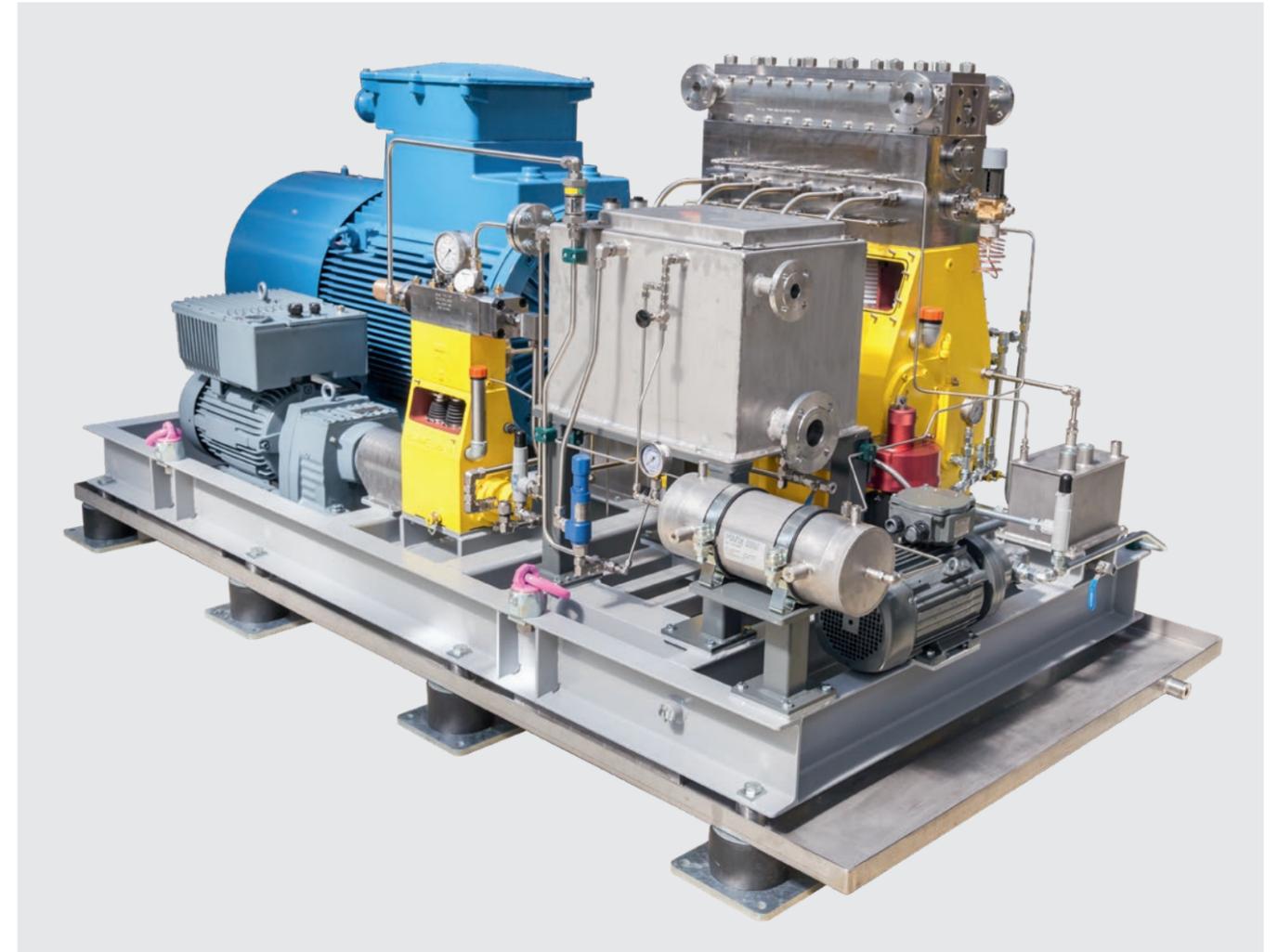
- Discharge pressure: 285 bar
4,100 psi
- Flow rate: 15 m³/h
66 gpm
- Fluid pumped: Methyl ester
- Fluid temperature: 70° C
160° F

Low Density Polyethylene



HAMPRO range

- Modifier pumps
- Acrylic acid pumps
- Methacrylic acid pumps
- Vinyl acetate pumps
- Acrylate pumps



Methacrylic acid pump

Reference project Germany

- Scope of supply:
- Pump on base frame
 - High pressure barrier system
 - Seal monitoring

Type HAMPRO 255

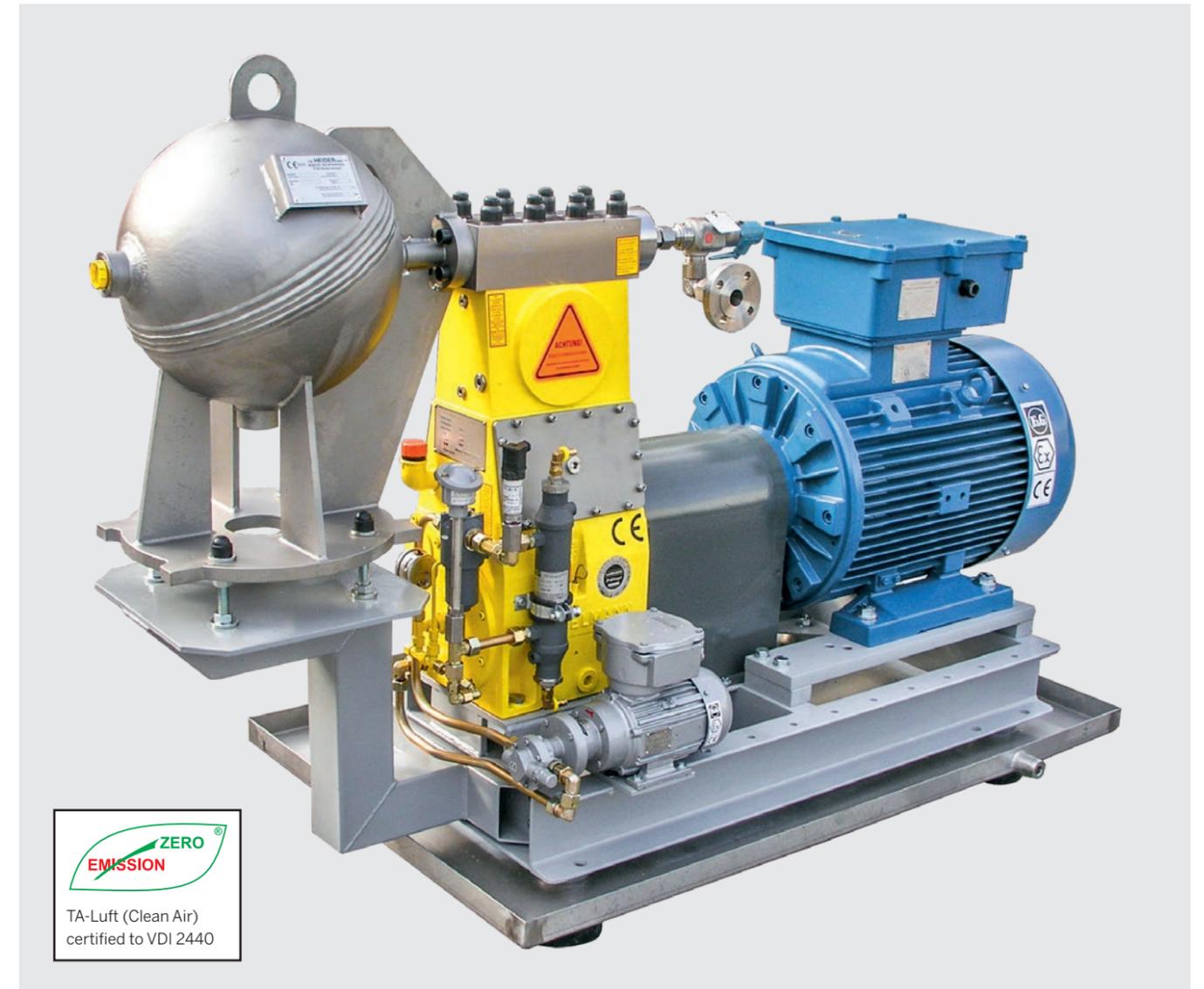
Discharge pressure: 2500 bar
36,000 psi

Flow rate: 2 m³/h
8 gpm

Fluid pumped: Methacrylic acid

Fluid temperature: 40° C
100° F

Wet oxidation



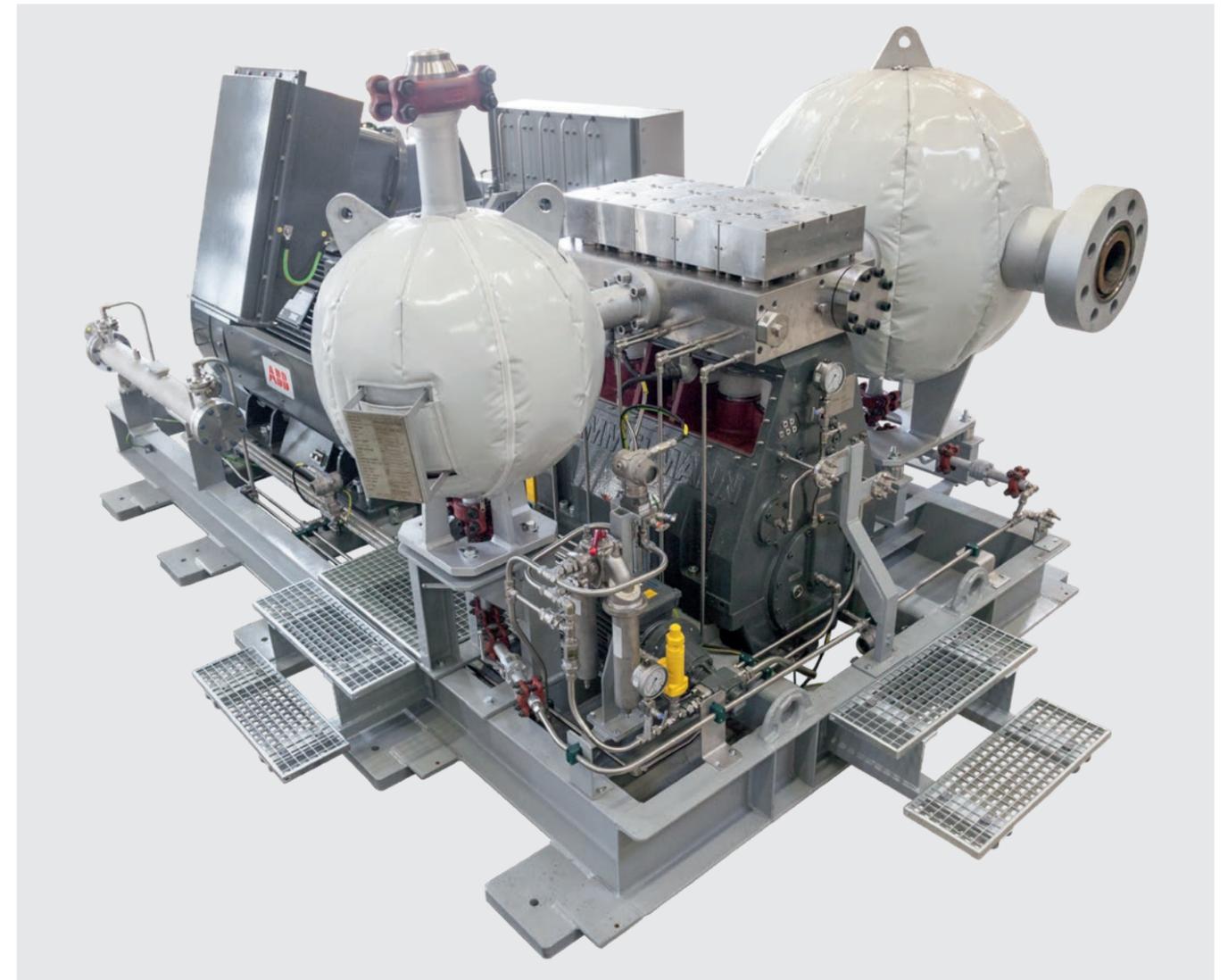
Waste water pump

Reference project Germany

- Scope of supply:
- Pump on base frame with electric motor
 - Discharge side resonator
 - Pressure safety valve

Type HAMPRO 75

- Discharge pressure: 171 bar
2,500 psi
- Flow rate: 5 m³/h
22 gpm
- Fluid pumped: Waste water with boric acid
and organic residues
- Fluid temperature: 90° C
190° F



Solvent pump

Reference project Singapore

Scope of supply:

- Pump on base frame with medium voltage motor
- Suction and discharge side resonators
- Instrumentation
- Frequency converter

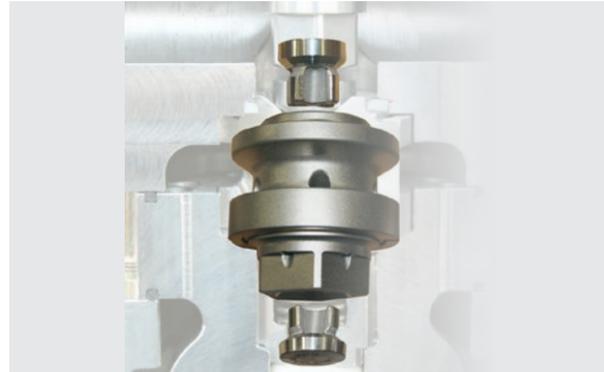
Type HAMPRO 805

Discharge pressure: 297 bar
4,300 psi
Flow rate: 62,4 m³/h
275 gpm
Fluid pumped: Solvent
Fluid temperature: 90° C
190° F

HAMPRO pump features

Twin conical valves

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



Bellows system

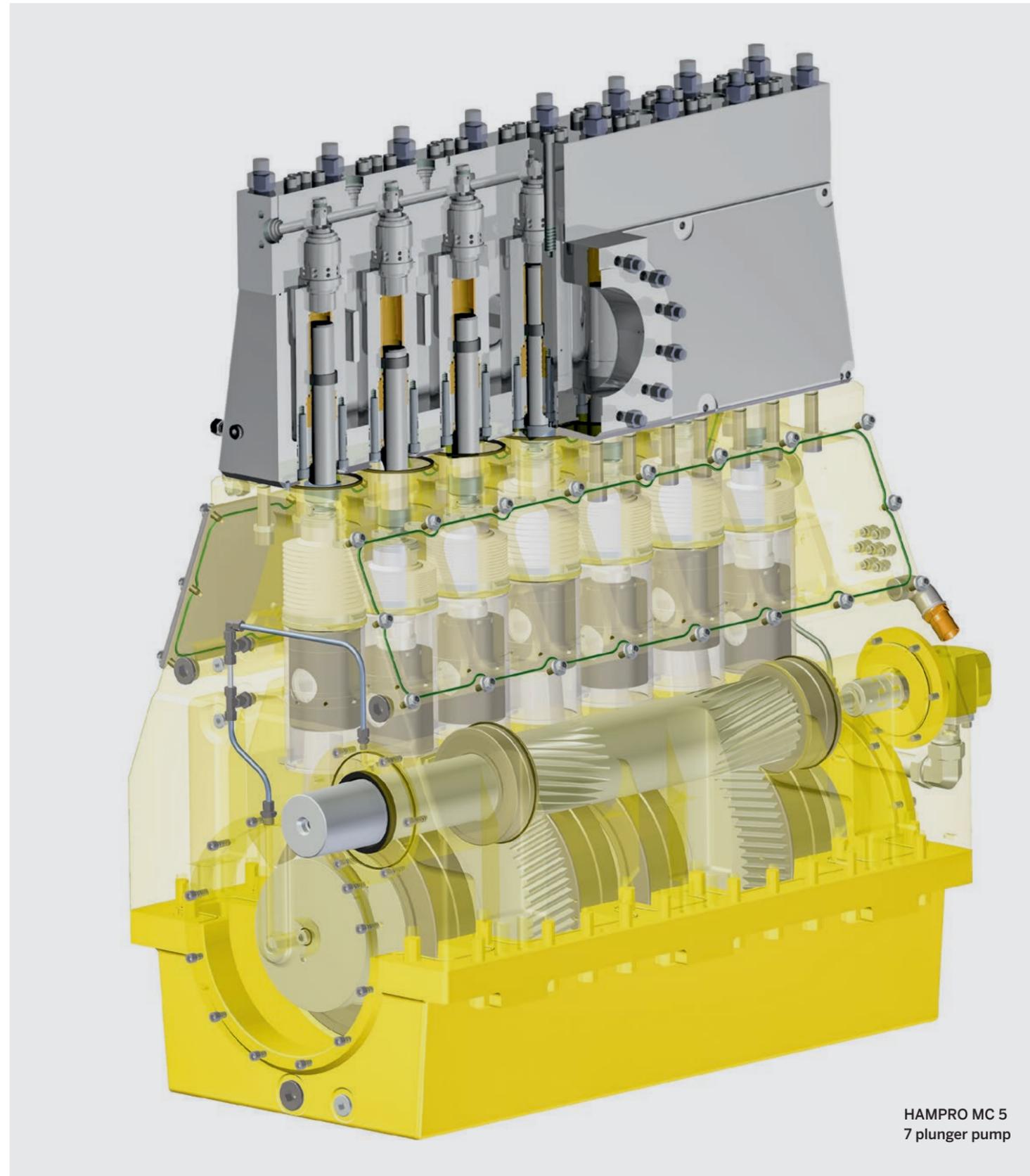
The bellows are the hermetic seals for the power end to prevent the intrusion of fluid or gas.



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

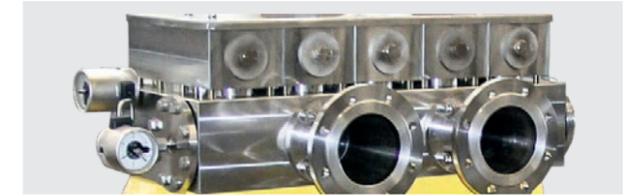
Hammelmann plunger pumps convert 93 to 98 % of the shaft power to hydraulic energy.



HAMPRO MC 5
7 plunger pump

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

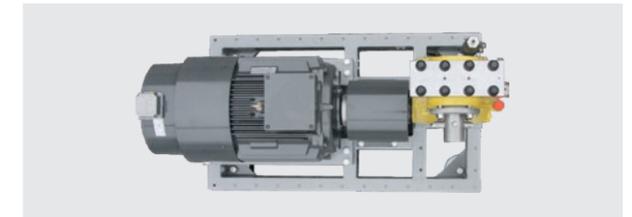
The choice of the high pressure sealing system depends upon the pump's application.



Packed seal Labyrinth seal Tungsten carbide plunger

Minimal footprint

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



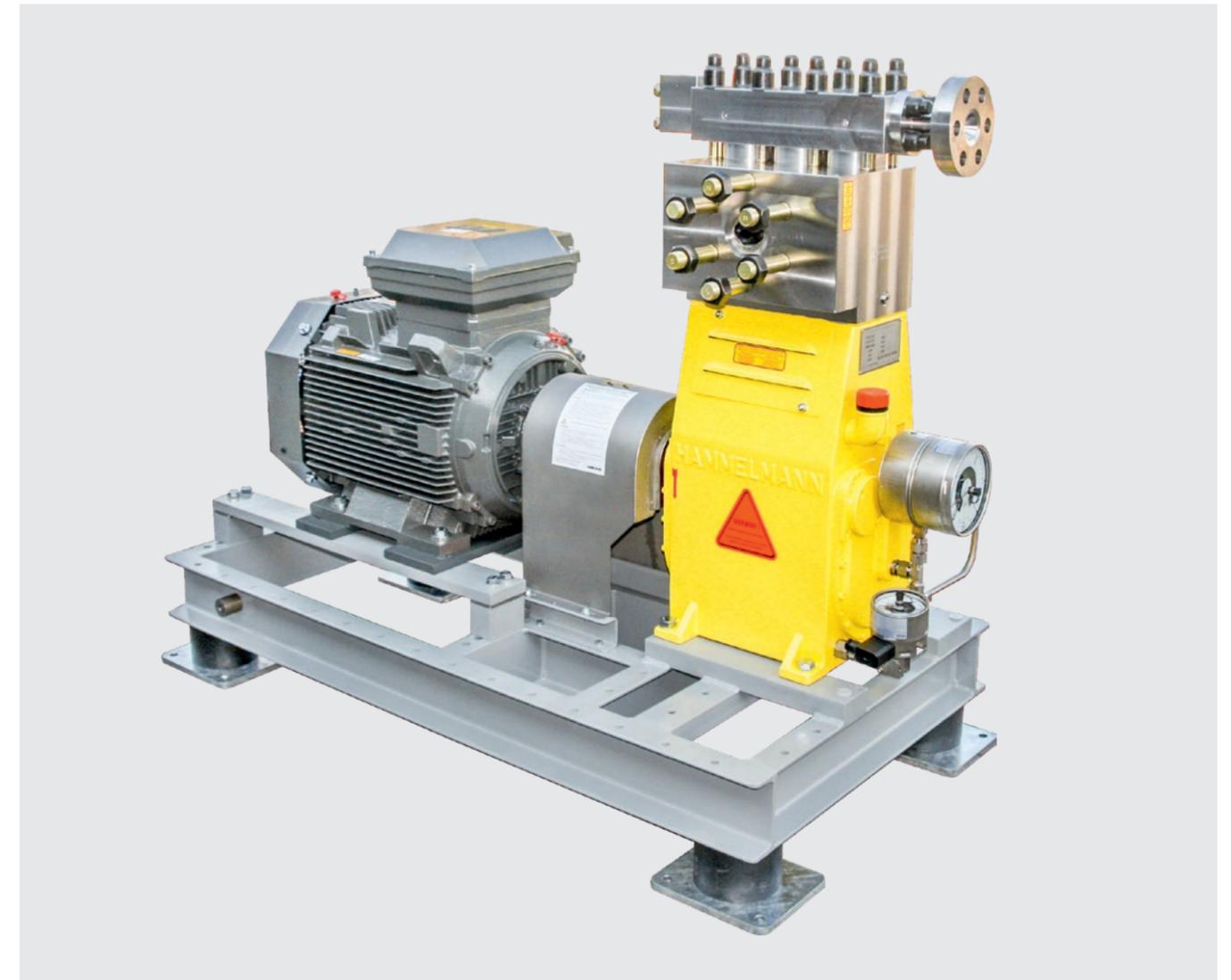
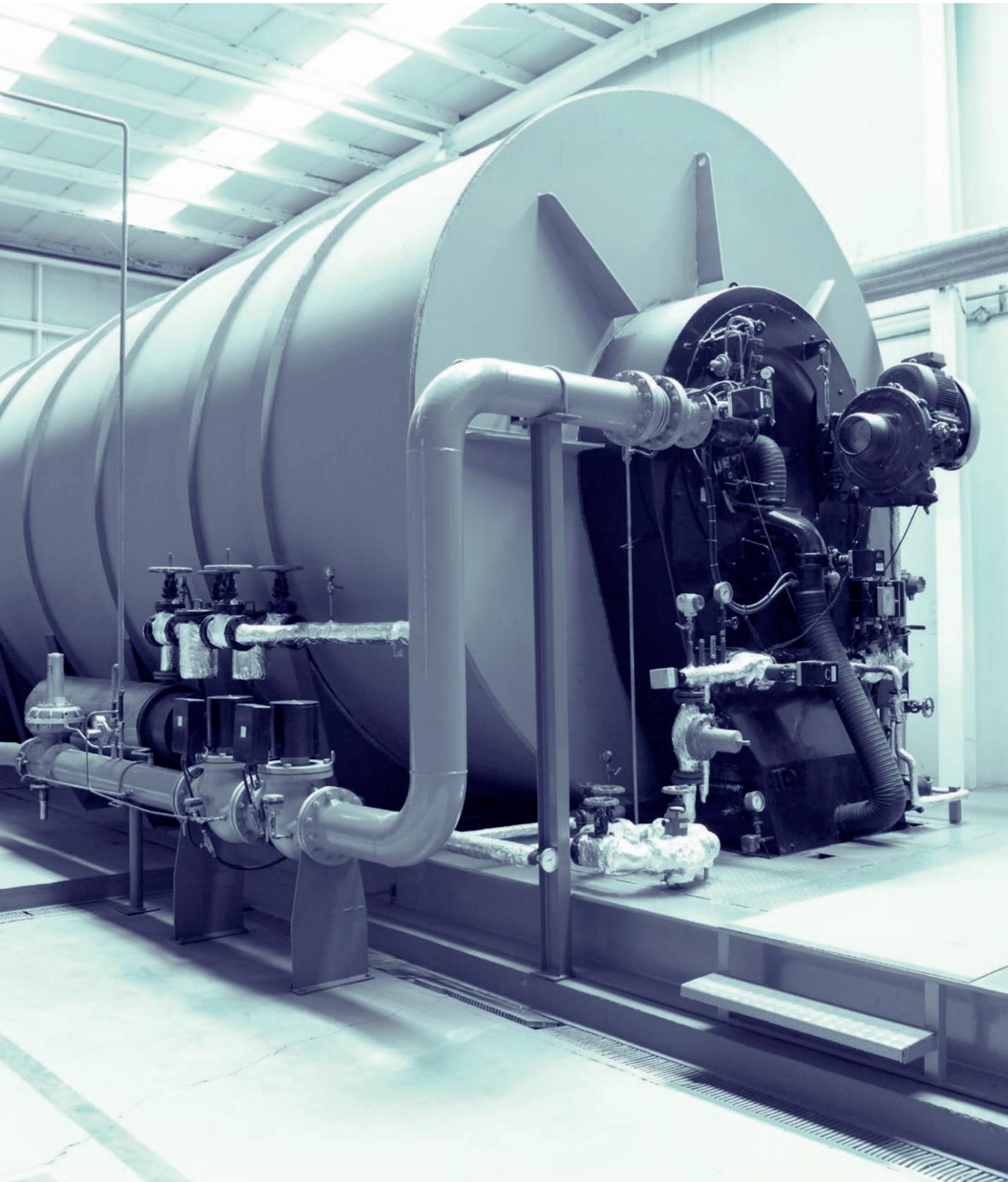
Performance data HAMPRO series

Type	max. bar	max. psi	max. m ³ /h	gpm	kW	hp
15	2320	33,600	4	18	11	15
25	3500	50,800	4	18	15	20
45	4000	58,000	6	26	30	40
75	4000	58,000	8	35	45	60
125	4000	58,000	14	62	90	120
175	4000	58,000	20	88	132	180
255	4000	58,000	33	145	200	270
385	3000	43,500	59	260	330	440
505	3000	43,500	75	330	430	580
805	3000	43,500	124	546	710	950
MC 5	3000	43,500	176	775	1000	1350

Fluid temperatures: -40 up to +200 °C

Viscosities: up to 2000 mPa s

Boiler feed water



Boiler feed water pump

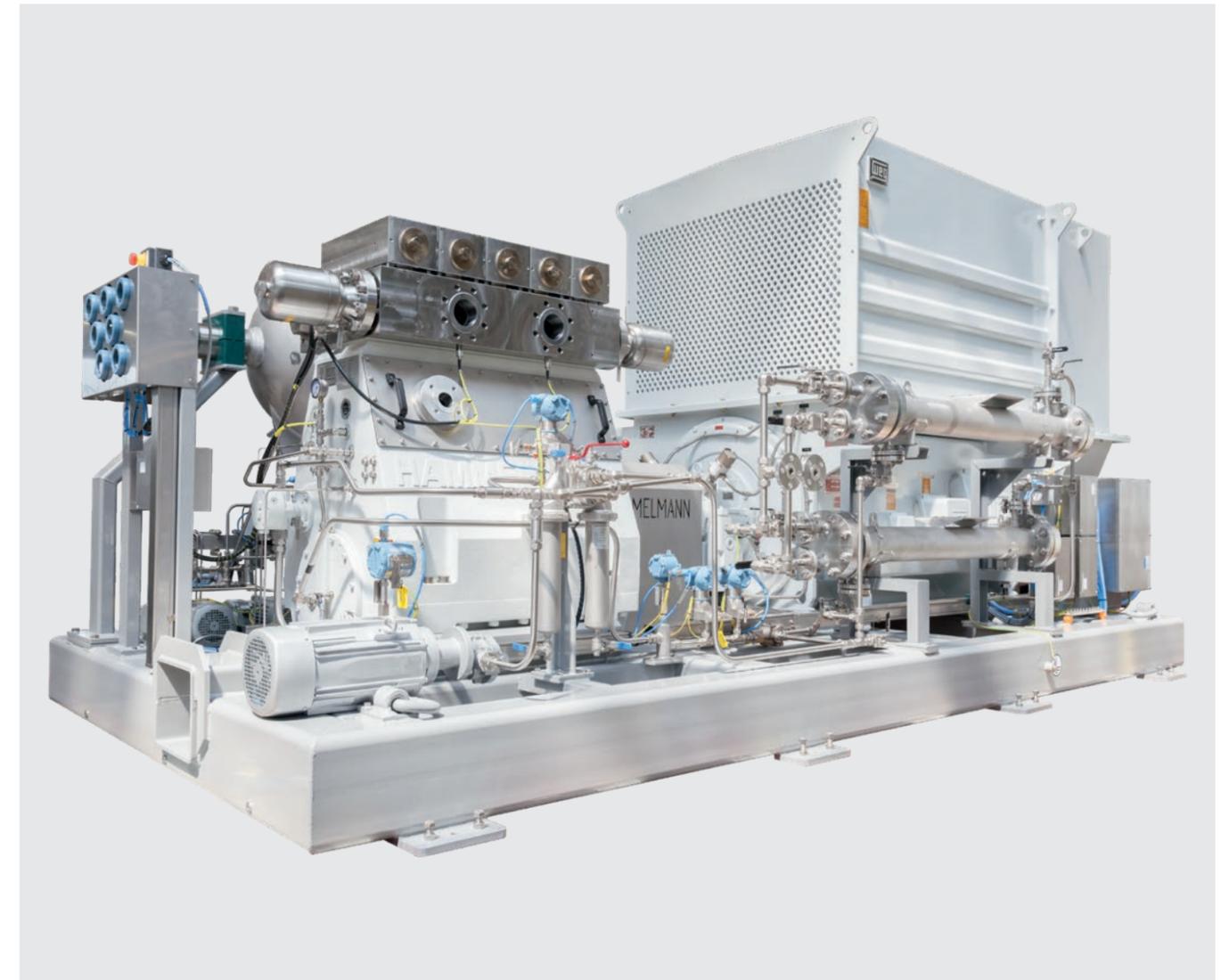
Reference project Belgium

Scope of supply:

- Pump on base frame with electric motor
- Safety relief valve
- Instrumentation
- Frequency converter

Type HAMPRO 125

Discharge pressure:	157 bar 2,300 psi
Flow rate:	6,6 m ³ /h 29 gpm
Fluid pumped:	Hot water
Fluid temperature:	105° C 220° F



Liquid ammonia pump

Reference project China

Scope of supply:

- Pump on base frame with medium voltage motor
- Suction side dampers
- Discharge side resonator
- Instrumentation
- Redundant lubricating oil system

Type HAMPRO 805

Discharge pressure: 387 bar
5,600 psi
Flow rate: 34,9 m³/h
154 gpm

Fluid pumped: Liquid ammonia
Fluid temperature: 50° C
120° F

Extraction with supercritical CO₂



Carbon dioxide pump

Reference project Austria

Scope of supply:

- Pump on base frame with electric motor
- Separate lubricating oil pump

Type HAMPRO 125

Discharge pressure: 500 bar
7,300 psi
Flow rate: 2000 kg/h
4,400 lbs/h

Fluid pumped: Wet CO₂
Fluid temperature: 20° C
70° F



HAMPRO PUMPS OIL & GAS INDUSTRY

Areas of application

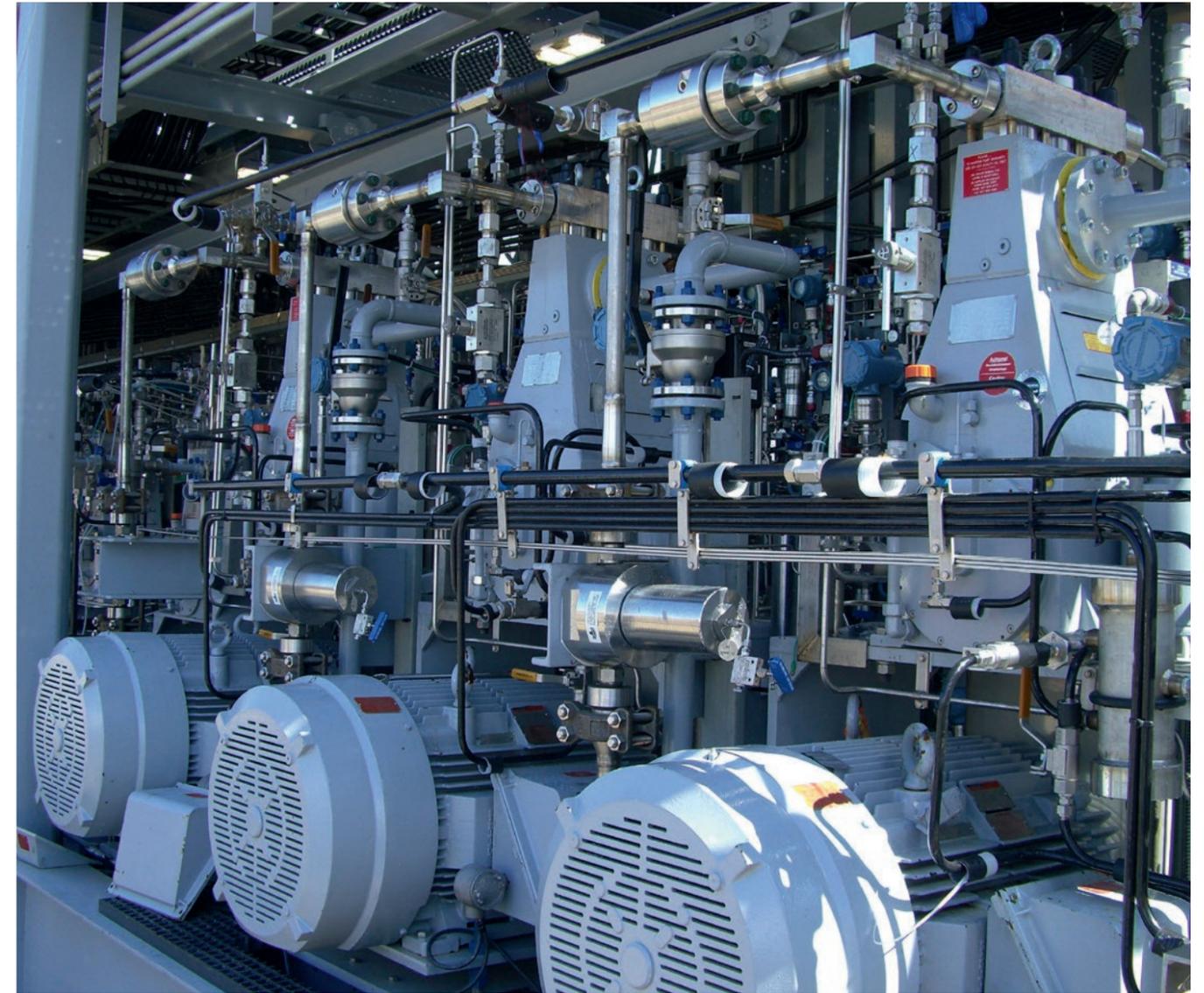
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Offshore injection



HAMPRO range

- Methanol injection pumps
- LDHI injection pumps
- Glycol injection pumps
- Inhibitor injection pumps
- Xylene injection pumps



Methanol injection pumps

Reference project Offshore USA

Scope of supply:
Pump on base frame with electric motor

Type HAMPRO 175

Discharge pressure: 1035 bar
15,000 psi
Flow rate: 2 m³/h
9 gpm
Fluid pumped: Methanol
Fluid temperature: 30° C
86° F



Hydraulic power unit

Reference project Offshore USA

Scope of supply: complete unit

Type HAMPRO 74

Discharge pressure: 1550 bar
22,500 psi
Flow rate: 1,2 m³/h
5 gpm

Fluid pumped: Water, Hydraulic oil, Glycol
Fluid temperature: 30° C
90° F

HAMPRO range for pumping

- Glycol
- MEG
- TEG
- Water based oils
- Hydraulic fluids
- Water

Produced water injection



Produced water pump

Reference project Germany

Scope of supply:

- Pump on base frame with electric motor
- Discharge side resonator
- Suction side damper
- Plunger lubrication system
- Drain water re-injection system

Type HAMPRO 805

Discharge pressure: 80 bar

1,200 psi

Flow rate: 100 m³/h

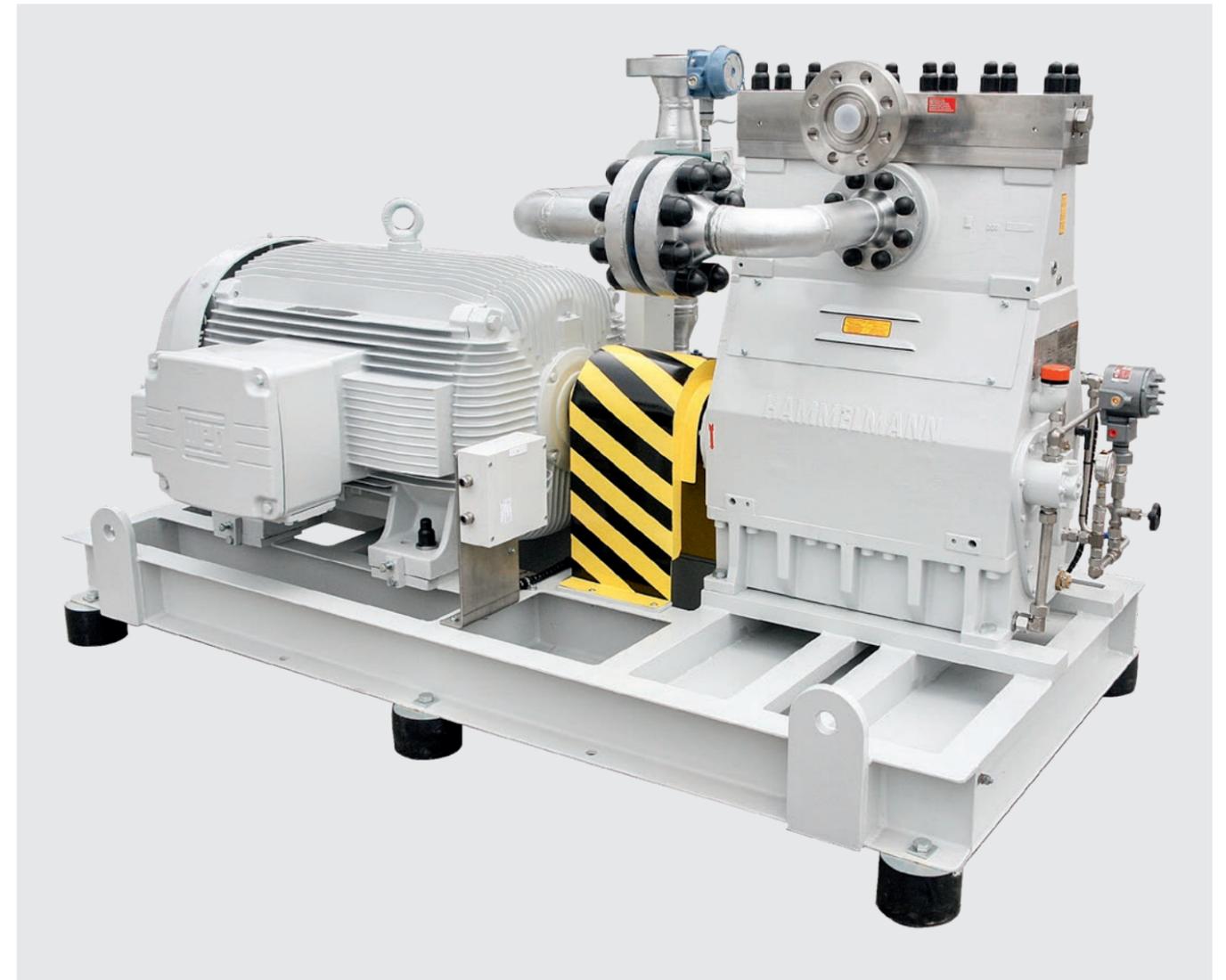
440 gpm

Fluid pumped: Produced water

Fluid temperature: 50° C

120° F

Condensate injection



Condensate pump

Reference project Brazil

Scope of supply:

- Pump on base frame with electric motor
- Boost pump with piping
- Instrumentation

Type HAMPRO 255

Discharge pressure: 170 bar
2,500 psi

Flow rate: 34 m³/h
150 gpm

Fluid pumped: Gas condensate

Fluid temperature: 40° C
100° F

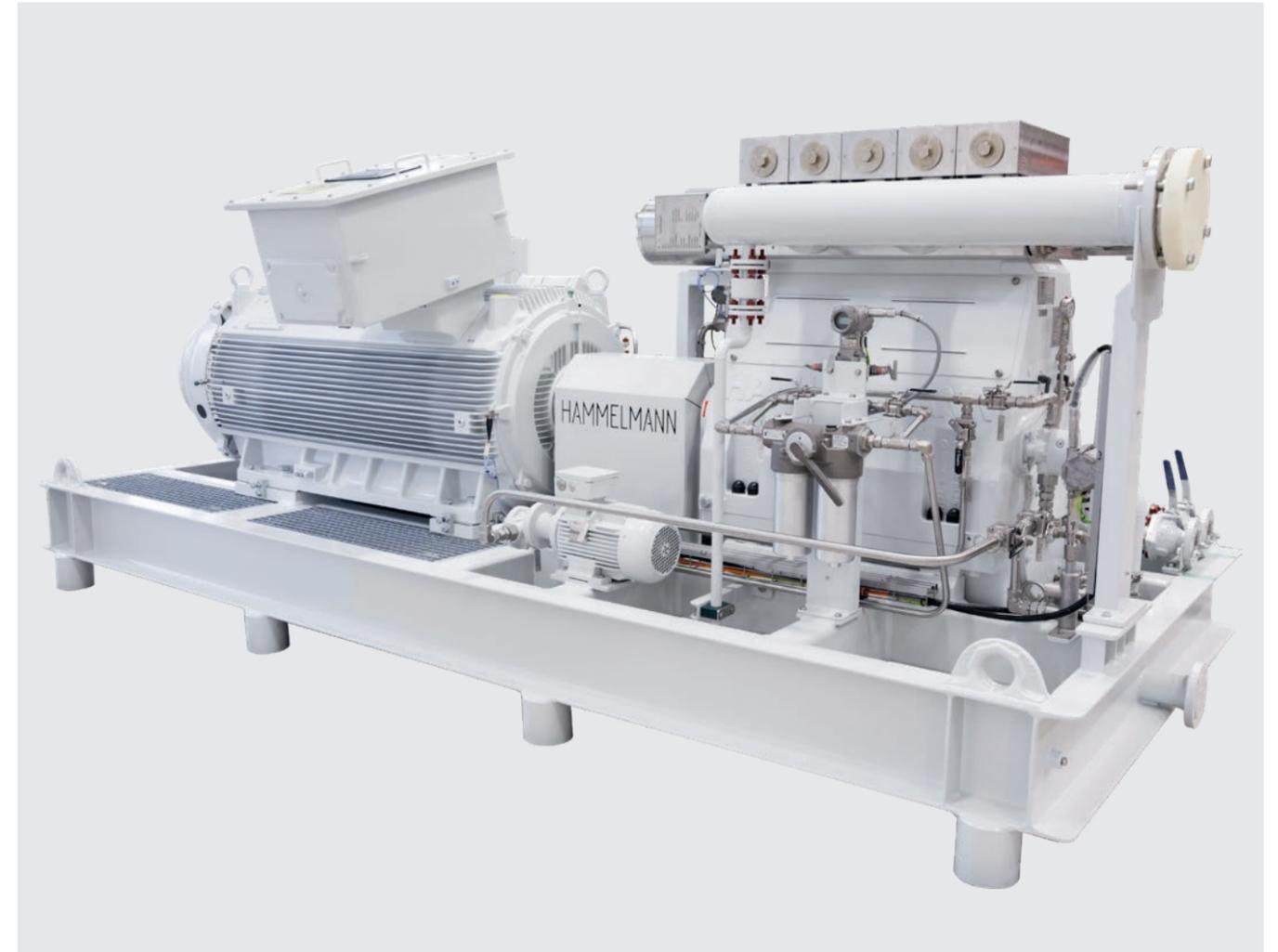


HAMPRO PUMPS FOR FPSOs

HAMPRO range

- Condensate pumps
- Diesel and Hot water pumps
- Flowline service pumps
- Glycol pumps
- Hot water pumps
- Inhibitor pumps
- Leak test pumps
- Methanol pumps
- Produced water injection pumps
- Pumps for hydraulic fluids
- Scale squeeze pumps
- Sea water injection pumps

Flowline circulation



Diesel and Hot water pump

Reference project Brazil

Scope of supply:

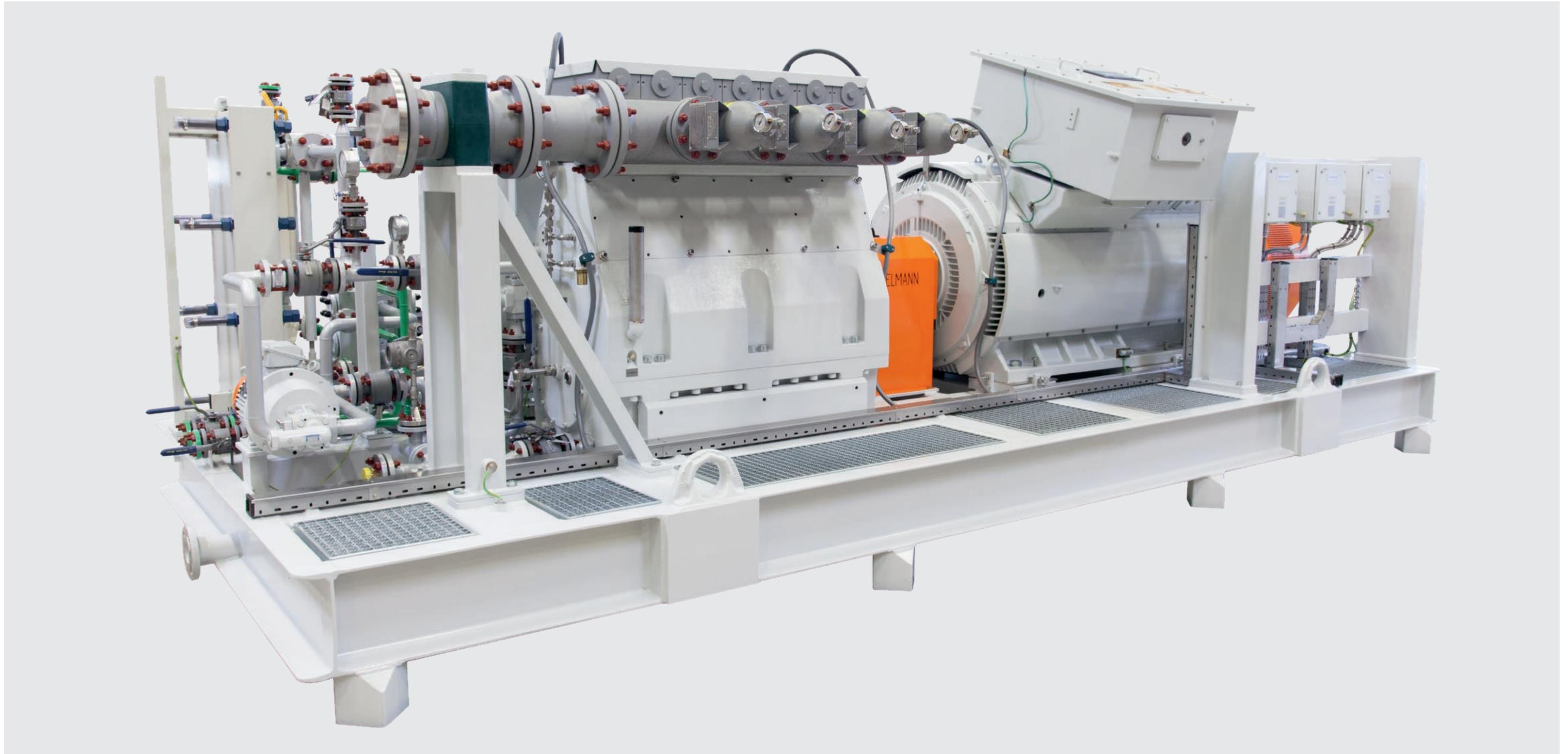
- High pressure pump with medium voltage motor
- Suction and discharge side dampers
- Instrumentation
- Redundant lubricating oil system

Type HAMPRO 805

Discharge pressure: 249 bar
3,600 psi
Flow rate: 61 m³/h
269 gpm

Fluid pumped: Hot water, Diesel
Fluid temperature: 90° C
190° F

Diesel and Hot water pump



Reference project Brazil

Scope of supply:

- High pressure pump with medium voltage motor
- Suction and discharge side dampers
- Instrumentation
- Redundant lubricating oil system

Type HAMPRO MC5

Discharge pressure: 250 bar
3,600 psi
Flow rate: 120 m³/h
530 gpm

Fluid pumped: Hot water, Diesel
Fluid temperature: 90° C
190° F



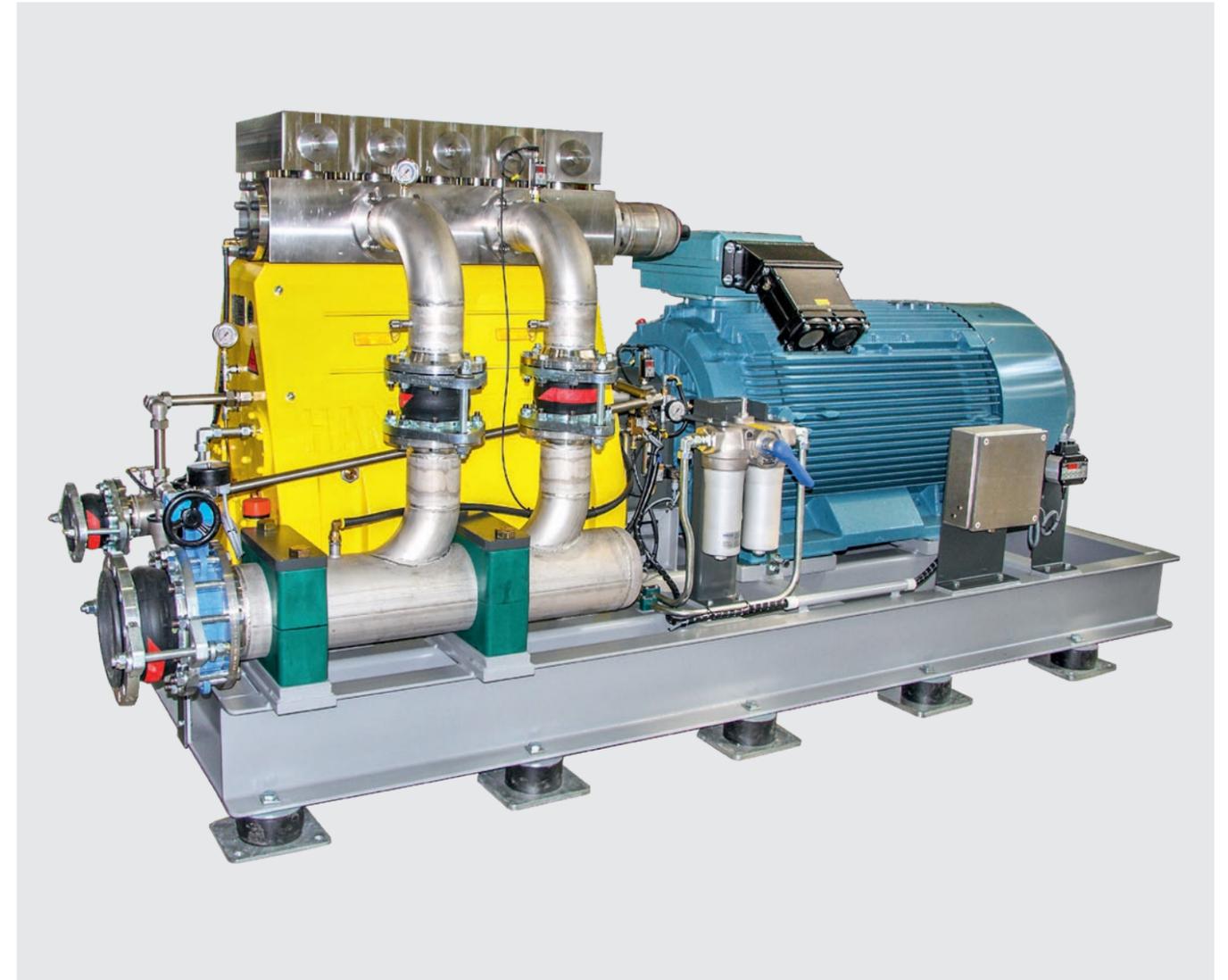
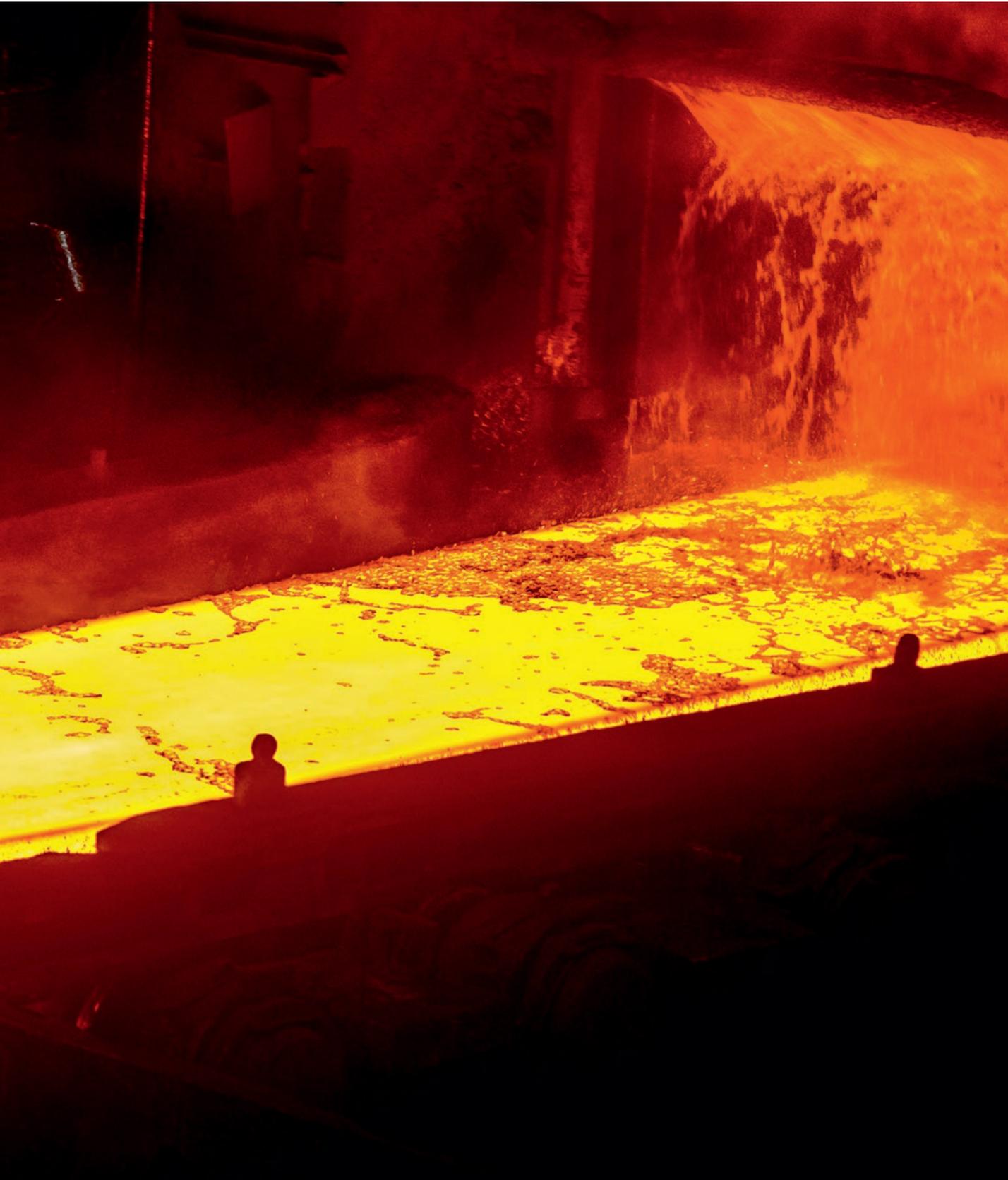
HAMPRO PUMPS STEEL INDUSTRY



Areas of application

Mill scale removal	40
Hydrostatic bearing lubrication	42

Mill scale removal



Descaling pump

Reference project Sweden

Scope of supply:

- Pump on base frame with electric motor
- Safety relief valve, bypass valve and on-skid piping
- Suction side damper
- Instrumentation

Type HAMPRO 801

Discharge pressure: 250 bar
3,600 psi

Flow rate: 87 m³/h
380 gpm

Fluid pumped: Descaling water

Fluid temperature: 30° C
90° F

Hydrostatic bearing lubrication



Mergoil® pump

Reference project Germany

- Scope of supply:
- Pump on base frame with electric motor
 - Instrumentation
 - Electric control unit
 - Frequency converter

Type HAMPRO 44

Discharge pressure: 1800 bar
26,000 psi
Flow rate: 2 l/min
0.5 gpm

Fluid pumped: Lubricating oil
Fluid temperature: 40° C
100° F

Company



Certifications

- DIN EN ISO 9001
- DIN EN ISO 14001
- DIN EN ISO 50001
- BS OHSAS 18001
- TÜV ATEX 2524 X
- ASME-U
- Achilles



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