



**RHEINHÜTTE
PUMPEN**

METAL PUMPS RMKN

Magnetic Drive Metal Pumps – for the toughest applications.

■ THE RIGHT SOLUTION. FOR ANY FLUID.

RMKN FOR THE TOUGHEST APPLICATIONS

If you want to solve demanding pumping tasks in the chemical industry efficiently, permanently and economically, you need more than just a coherent technical concept. Experience of application, material knowledge and dialogue with you ultimately lead to the optimum solution. A way which Rheinhütte Pumpen has been following for over 150 years.

SAFE SOLUTIONS FOR DEMANDING PUMPING TASKS

Magnetic drive Rheinhütte pumps are used to pump high-grade aggressive, corrosive as well as toxic, generally hazardous or environmentally polluting media safely at all times. This means safe solutions for all demanding pumping tasks.

WIDE RANGE OF MATERIALS

Depending on the size and design, Rheinhütte pumps RMKN are available in more than 20 different alloys and pure metals.

HEATED VERSION FOR ADDITIONAL APPLICATIONS

Areas of application in which the medium needs to be kept at a constant temperature do not present any problem for the RMKN. The use of heating chamber systems means that the RMKN is also ideally suited to difficult situations, e.g. the pumping of molten sulphur, pitch and tar.

ALWAYS THE RIGHT CHOICE

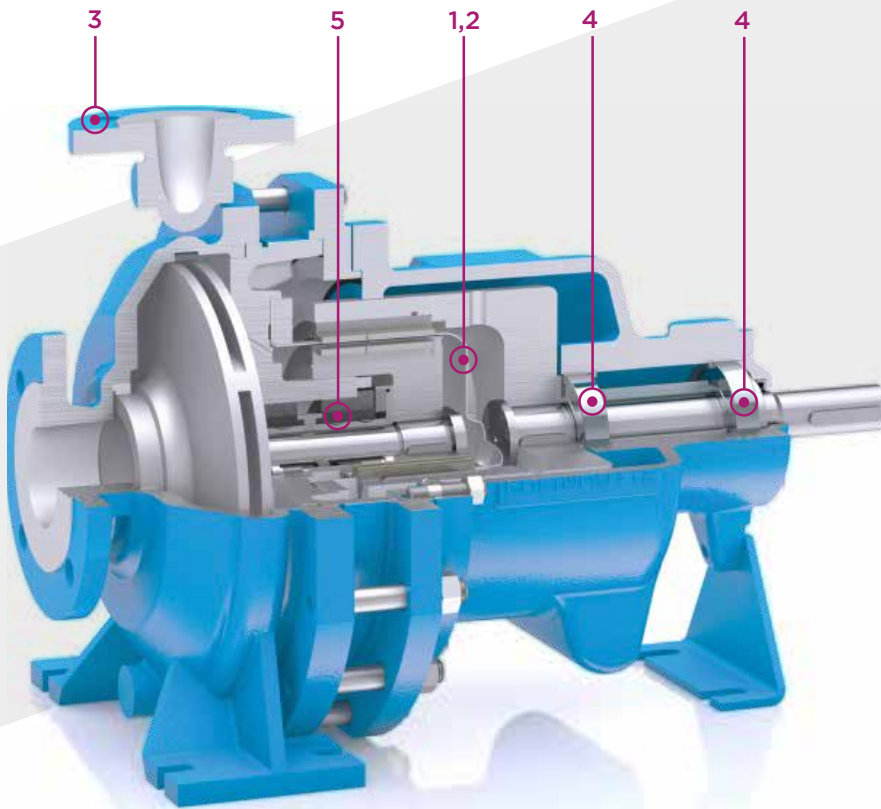
With its variable material selection and the high level of standardisation of the drive components, the revised modular principle of the RMKN range offers considerable potential for savings to be made. In addition, flow-optimised impellers and volute casings allow cost-neutral adjustments and thus also increase the efficiency of the unit.

Options

- Heating jacket for all parts which come into contact with media
- Close-coupled design (type RMKNF)
- Leakage sensor
- Temperature transmitter
- External flushing

RMKN – YOUR ADVANTAGES AT A GLANCE

DIN EN 22858
ISO 2858
ISO 5199
94/9/EG (ATEX)



1 SAFE

No leakage thanks to the magnetic coupling and consequently **hermetic sealing**, proven its worth over many decades.

2 EXTREMELY DURABLE

The spacer can is made of one single piece of material and shaped by deep-drawing. This prevents rotation of the medium and provides a long service life.

3 EFFICIENT

Service and maintenance-friendly machine concept with simple dismantling and inspection options. Cost-efficient operation and, overall, low life cycle costs.

4 ADVANCED

A modern and robust bearing concept with high-quality radial ball bearings which are lubricated for their whole life-span ensures **smooth running** and operational reliability. **High-performance magnets** deliver traction even at temperatures ranging from **-40 to 250°C**.

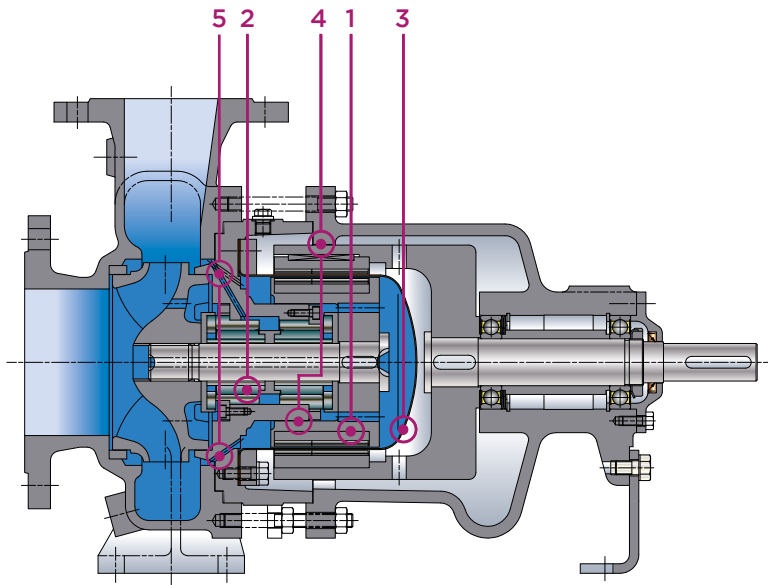
5 INNOVATIVE

A solid, large-scale slide bearing made from high-purity silicon carbide (SiC) tolerates rough operating conditions and guarantees **ease of handling** at all times when carrying out maintenance work. Friction-optimized surfaces ensure **maximum operational reliability** in the event of dry running or a lack of lubrication. The special design of sleeve bearings prevents stress caused by axial thermal expansion.

RMKN IN DETAIL

DESIGN FEATURES

Standard design



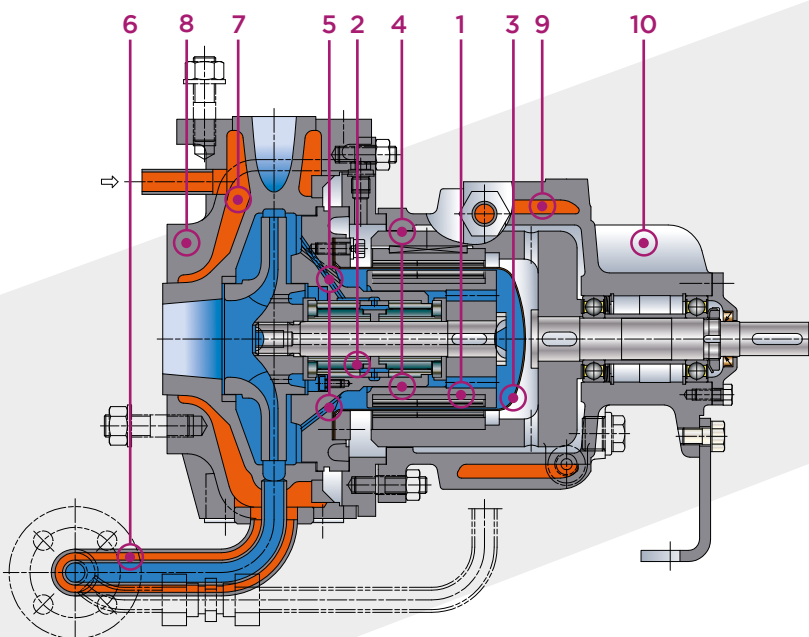
RMKN

- 1 Internal rotor with SmKo magnets, metal enclosed. For higher performance iron-neodym magnets available
- 2 Anti-twist and low-friction slide bearings made from pure, silicon-free SiC
- 3 One piece metallic spacer can with groove in base area
- 4 Safe, contact free design of spacer can due to large antifriction bearing span and clearly defined safe contact areas
- 5 Separate lubrication and cooling circulation system

Technical Data

DN	25 to 150
PN	16 bar
Q	max. 400 m ³ /h
H	max. 150 m
T	-40 to 250° C
P (shaft)	max. 45 kW

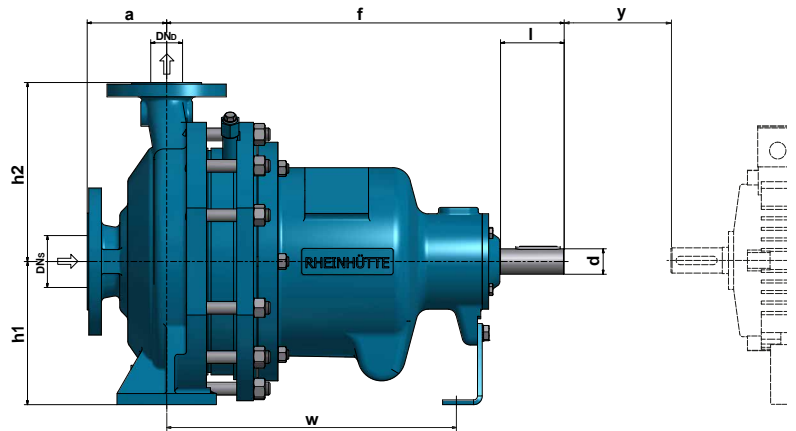
Heated design



- 6 Fully heated drainage
- 7 Heated hydraulic unit with
- 8 Cast armour
- 9 Heated bearing bracket with
- 10 Cooling fans

The sectional drawings essentially correspond to the design. Subject to design changes.

RMKN IN DETAIL DIMENSIONS



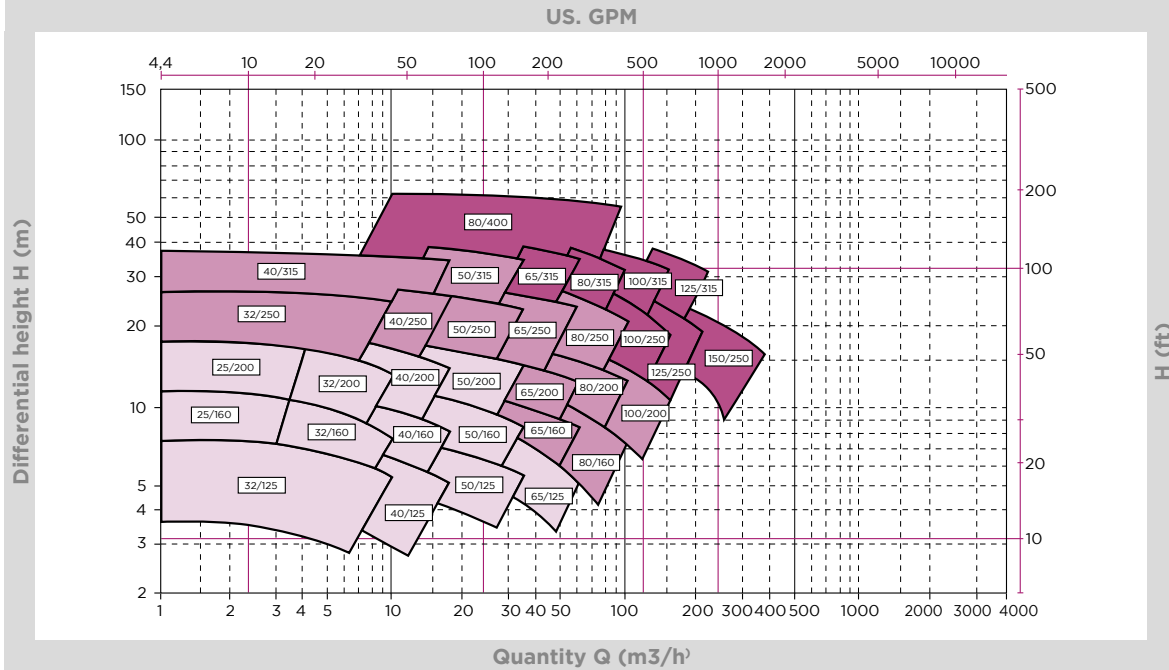
Size	BB ¹⁾	Pump Dimensions				Base Dimension	Spacer length	Shaft end		Flange Dimensions	
		a	f	h ₁	h ₂			w	y	d	l
25-160	I	80	385	132	160	285	100	24	50	25	40
25-200	I	80	385	160	180	285	100	24	50	25	40
32-125	I	80	385	112	140	285	100	24	50	32	50
32-160	I	80	385	132	160	285	100	24	50	32	50
32-200	I	80	385	160	180	285	100	24	50	32	50
32-250	II	100	500	180	225	370	100	32	80	32	50
40-125	I	80	385	112	140	285	100	24	50	40	65
40-160	I	80	385	132	160	285	100	24	50	40	65
40-200	I	100	385	160	180	285	100	24	50	40	65
40-250	II	100	500	180	225	370	100	32	80	40	65
40-315	II	125	500	200	250	370	100	32	80	40	65
50-125	I	100	385	132	160	285	100	24	50	50	80
50-160	I	100	385	160	180	285	100	24	50	50	80
50-200	I	100	385	160	200	285	100	24	50	50	80
50-250	II	125	500	180	225	370	100	32	80	50	80
50-315	II	125	500	225	280	370	100	32	80	50	80
65-125	I	100	385	160	180	285	100	24	50	65	100
65-160	II	100	500	160	200	370	100	32	80	65	100
65-200	II	100	500	180	225	370	140	32	80	65	100
65-250	II	125	500	200	250	370	140	32	80	65	100
65-315	III	125	530	225	280	370	140	42	110	65	100
80-160	II	125	500	180	225	370	140	32	80	80	125
80-200	II	125	500	180	250	370	140	32	80	80	125
80-250	II	125	500	225	280	370	140	32	80	80	125
80-315	III	125	530	250	315	370	140	42	110	80	125
80-400	III	125	530	280	355	370	140	42	110	80	125
100-200	II	125	500	200	280	370	140	32	80	100	125
100-250	III	140	530	225	280	370	140	42	110	100	125
100-315	III	140	530	250	315	370	140	42	110	100	125
125-250	III	140	530	250	355	370	140	42	110	125	150
125-315	III	140	530	280	355	370	140	42	110	125	150
150-250	III	160	530	280	375	370	180	42	110	150	200

¹⁾ BB = Bearing bracket ²⁾ DN_D = Pressure flange ³⁾ DN_S = Suction flange

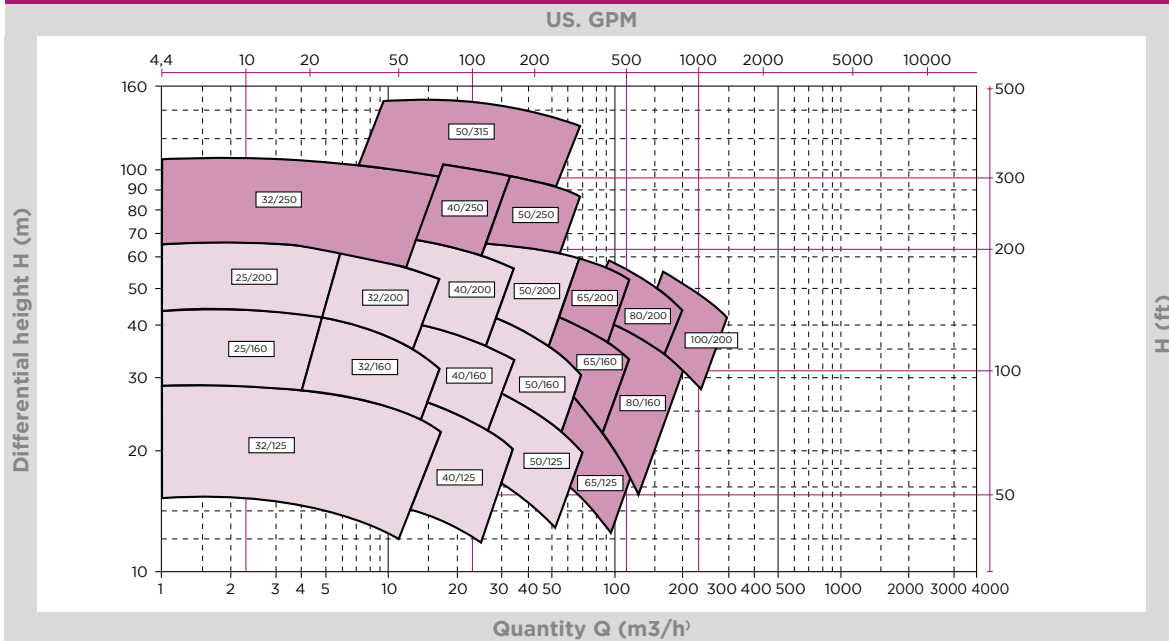
RMKN IN DETAIL

RANGE CHART

50 Hz n = 1450/min



50 Hz n = 2900/min

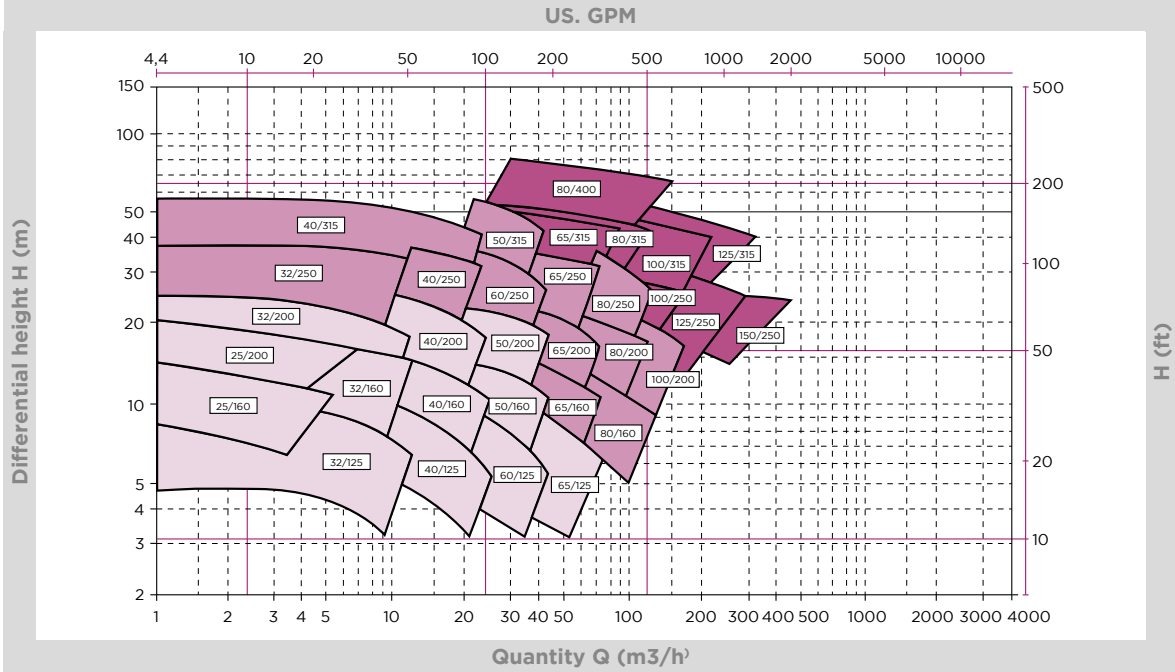


Bearing bracket

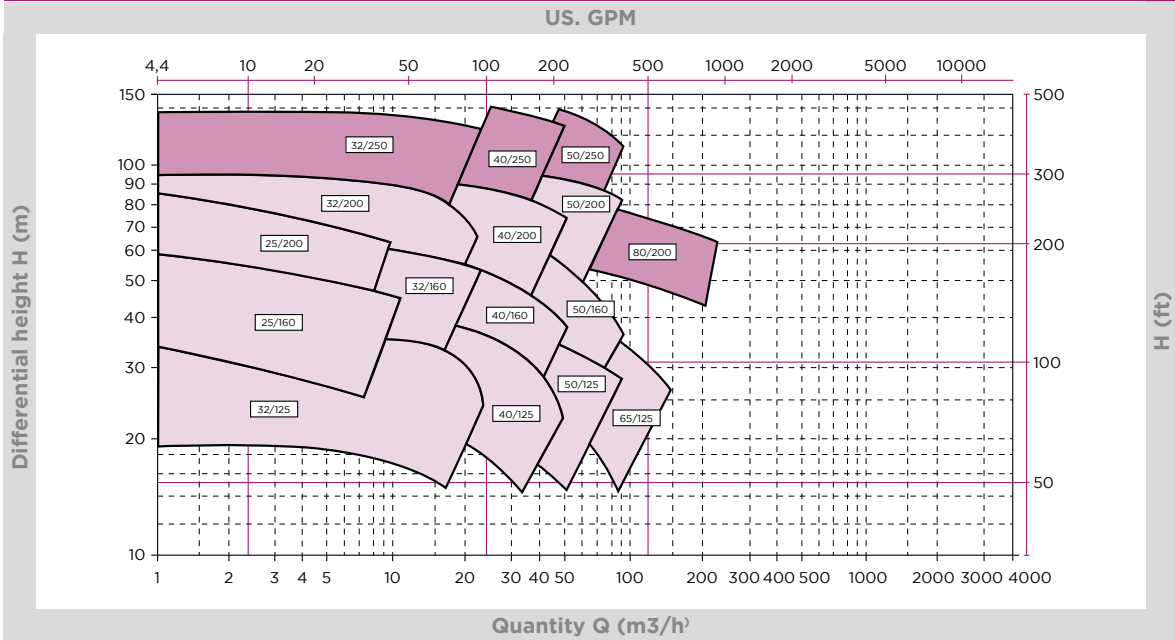


The performance data of the RMKN range correspond to the chemical standard EN 22858. Special sizes and speeds on request.

60 Hz n = 1750/min



60 Hz n = 3500/min



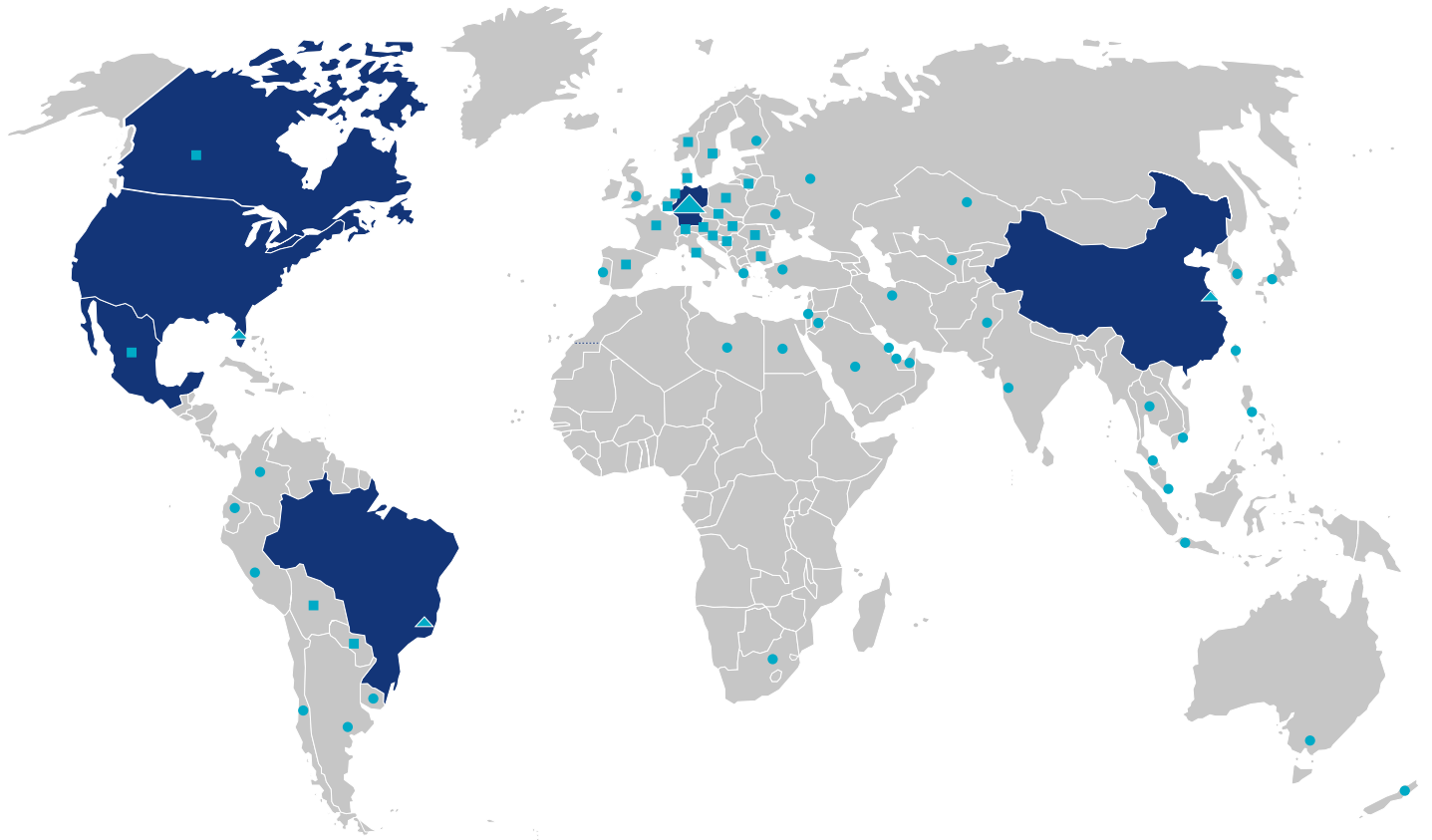
Bearing bracket



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Special sizes and speeds on request.

RHEINHÜTTE PUMPEN

GLOBAL EXPERTISE



- ▲ Rheinhütte Pumpen sites
- Group-affiliated-companies
- Sales companies

Aliaxis
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