



beinlich.pump
systems

VSE.flow

DST.magnetic
couplings

HBE.hydraulic
components

 **oleotec**
COMPONENTI OLEODINAMICI



上海柔肯液压科技有限公司

<http://www.roken.com.cn/>

Tel: 021-6180 8099 Fax: 021-6259 5096



Echterhage - holding

Industrial divisions

Development & production

beinlich pump
systems

- pump systems
- 0,1 cm³/rev – 2600 cm³/rev

Gevensberg /
Germany



VSE .flow

- flow measurement technology
- 0,002 cm³/min.....525 l/min

Neuenrade/
Germany



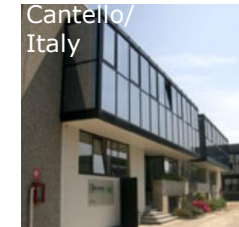
DST .magnetic
couplings

- magnetic coupling systems

HBE .hydraulic
components

- oil tanks
- hydraulic components
- drive couplings

Cantello/
Italy



oleotec
COMPONENTI OLEODINAMICI

- hydraulic components
- measurement instrumentation



Echterhage - Group

distribution & Service worldwide

Solutions for Fluid Technology

Argentinien

Australien

Belgien

Brasilien

China

Dänemark

Deutschland

Finnland

Frankreich

Großbritannien

Indien

Indonesien

Iran

Israel

Malaysia

Italien

Japan

Kanada

Korea

Kuweit

Malaysia

Mexiko

Niederlande

Norwegen

Österreich

Philippinen

Polen

Russland

Schweden

Schweiz

Slowakei

Spanien

Süd-Afrika

Tschechien

Türkei

Ungarn

USA

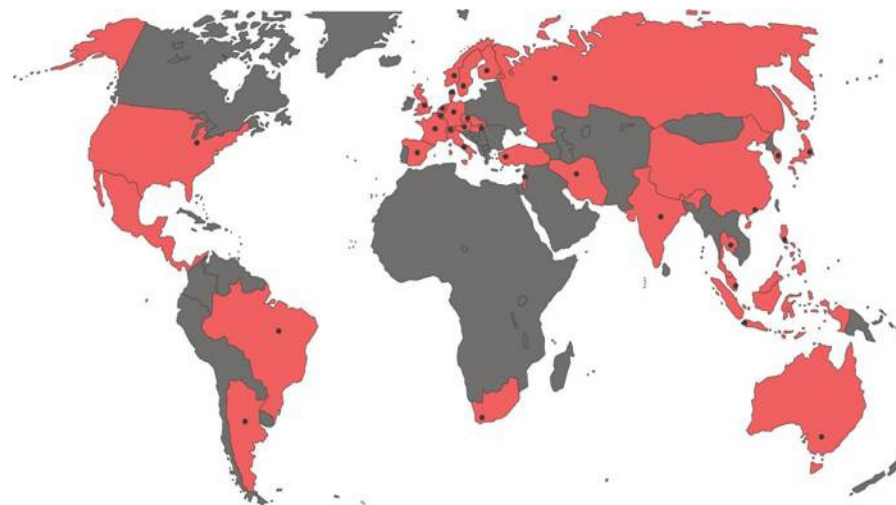
IC.flow

UK.flow

Suco
VSE.France

BEDA.flow

GFS.German Fluid
Systems
德国流体系统有限公司



beinlich.*pump
systems*



Beinlich Pumpen GmbH

Beinlich Pumpen GmbH

beinlich.*pump
systems*

上海柔肯液压科技有限公司

<http://www.roken.com.cn/>

Tel:021-6180 8099 Fax:021-6259 5096



Key markets

市场

- ✓ Electronic entertainment (Mobile Phone, Television)
电子产品(手机, 电视)
- ✓ Bonding (Glue) in automotive and glass industry
各种粘接 / 汽车 和 玻璃工业
- ✓ Hot melt in packaging industry
热熔胶 / 包装行业
- ✓ Heating and Cooling (thermal oil and cooling liquids)
- ✓ Test benches



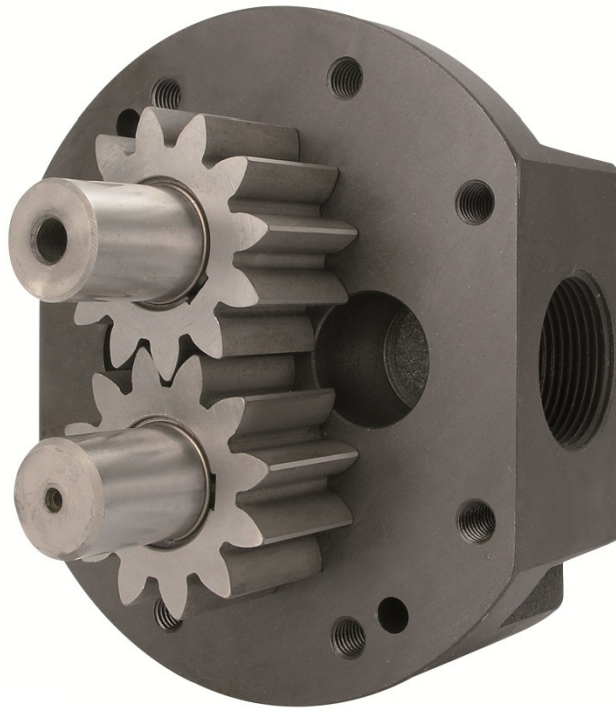
Target market

目标市场

- ✓ Hydraulic 液压
- ✓ Chemical and process industry 化工
- ✓ Dosing and Transfer 定量和输送
- ✓ Petrogas industry 液化气行业
- ✓ Food industry 食品行业



Gear pump with external gears





- ✓ Available in different material selections 可选不同材质
- ✓ Available in different sealant options 不同密封材料和形式
- ✓ Available for 0,1 – 2600cc/rev

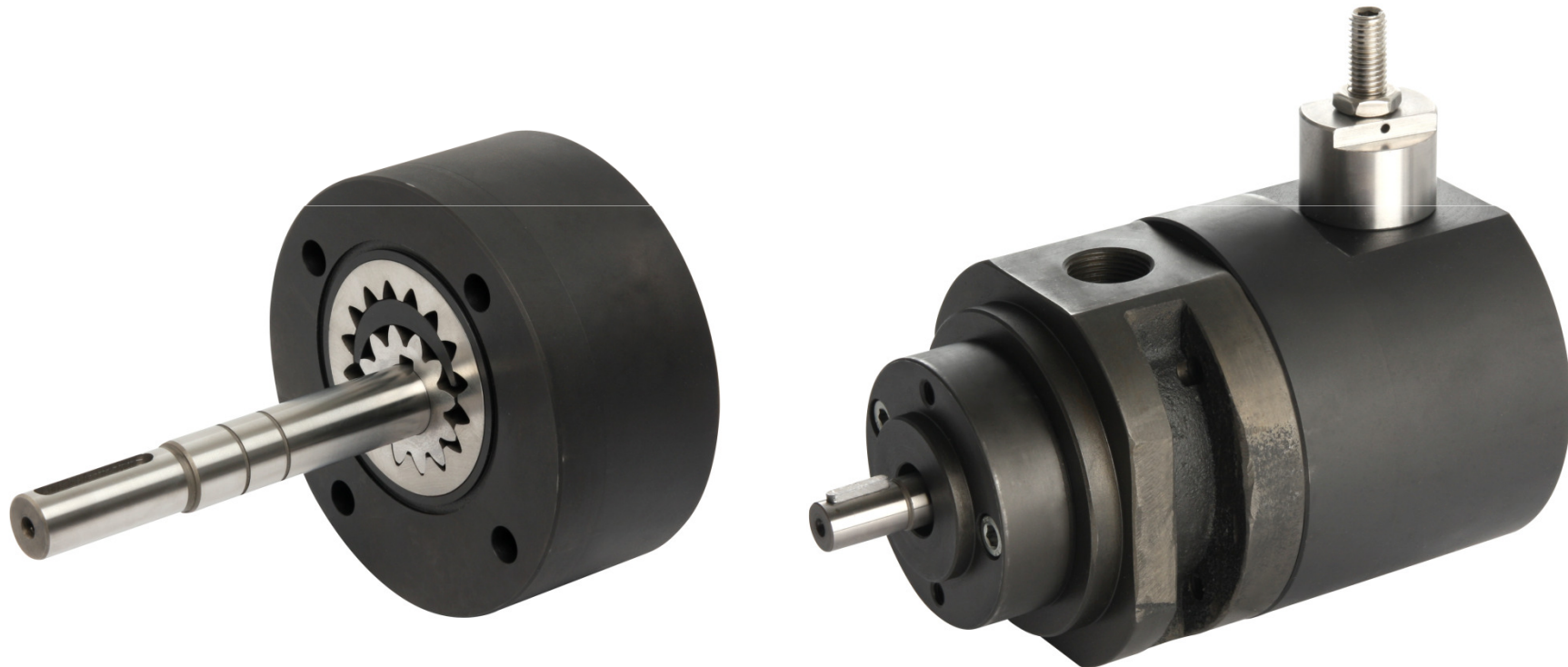


Use...

- ✓ ...any fluid application, no matter if lubricant or non lubricant, no matter if there are any fillers or not.
- ✓ ...for fluids with viscosities of 0,8 to 2.000.000mPa*s and sometimes even more or less.
最高可处理材料粘度可达 2百万mPa.s
- ✓ ...for pressure up to 200bar. In my family we have a few versions which can even work for higher pressures.



Gear pump with internal gears





- ✓ Available in different material selections
- ✓ Available in different sealant options
- ✓ Available for 1,0 – 207cc/rev



Use...

- ✓ ...any fluid application, no matter if lubricant or non lubricant.
- ✓ ...for fluids with viscosities of 0,8 to 1.000mPa*s and sometimes even more or less.
- ✓ ...for pressure up to 120bar. In my family we have a few versions which can even work for higher pressures.



Radial piston pump





- ✓ Available with/without housing or coating
- ✓ Available in different sealant options
- ✓ Available for 0,6 – 41,4cc/rev



Use...

- ✓ ...any fluid application, no matter if lubricant or non lubricant.
- ✓ ...for fluids with viscosities of 0,8 to 800mPa*s and sometimes even more or less.
- ✓ ...for pressure up to 700bar.



Complete family

External gear pumps

Internal gear pumps

Radial piston pumps





Transfer pumps

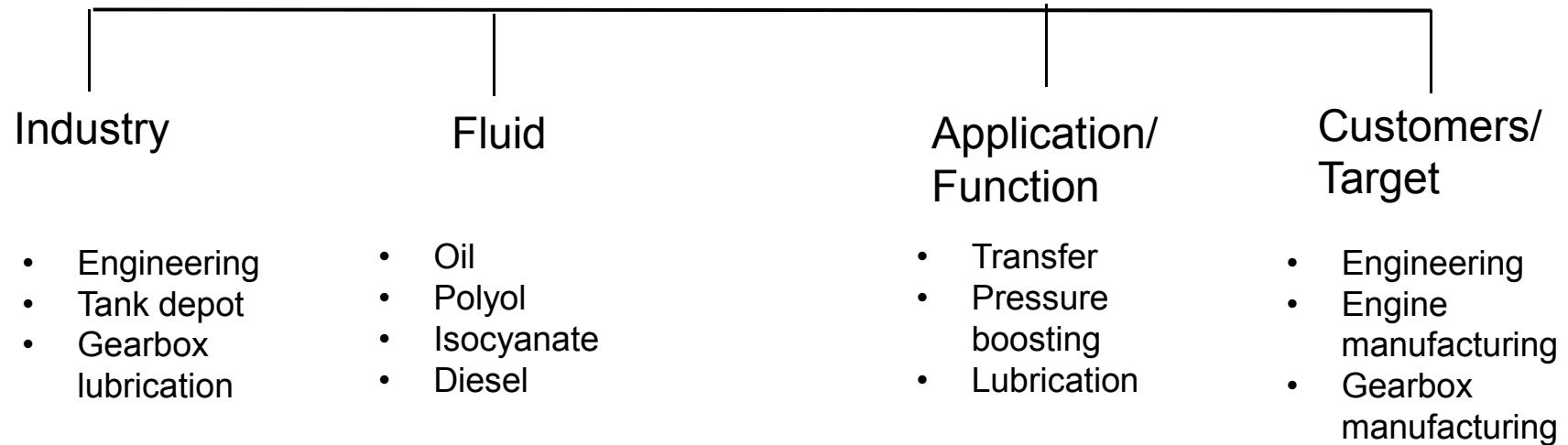
ZPA

ZPB

ZPI



Transfer pumps





Applications

- ✓ Engine test benches
- ✓ Gearbox Filling Station
- ✓ Booster applications



Competitive advantages

- ✓ Various material combinations
- ✓ Higher pressures
- ✓ Increased durability
- ✓ High efficiency
- ✓ Application related test
- ✓ Customized and innovated solutions



Customers 客户

✓ MAN



✓ Index

INDEX



✓ Kasto



✓ Neuman Esser





Dosing pumps 定量泵

ZPD

ZPBD

ZPDA

DARTec



Dosing pumps

Industry	Fluid	Application/ Function	Customers/ Target
<ul style="list-style-type: none">• Polyurethane industry• Tank storage• Painting machinery• Potting• Food industry	<ul style="list-style-type: none">• Polyol / Isocyanate• Additive• Peroxide• Epoxy• Hotmelt• Silicons• Paint	<ul style="list-style-type: none">• Dosing• Pressure increase	<ul style="list-style-type: none">• Engineering• Dosing technology• Painting machineries



Applications应用

- ✓ Potting machinery 灌封/封装
- ✓ 2-Component application / 3-Component application
2组分或3组分定量、混合应用
- ✓ Hotmelt application
热熔胶



Competitive advantages

- ✓ Various material combinations
- ✓ Higher pressures
- ✓ Increased durability
- ✓ High efficiency
- ✓ Application related test
- ✓ Customized and innovated solutions



Customers 客户

✓ Hilger & Kern



Hilger u. Kern

✓ Rosenbauer



✓ PVA





Radialpiston Pumps

TR

TRG

TRGD



Radialpiston Pumps

Industry	Fluid	Application/ Function	Customers/ Target
<ul style="list-style-type: none">• Hydraulic test benches• Engine test benches	<ul style="list-style-type: none">• Hydraulic oil• Kerosene	<ul style="list-style-type: none">• Pressure increase• Power transfer• Power press	<ul style="list-style-type: none">• Automotive industry• Aircraft industry



Applications

- ✓ Engine test benches
- ✓ Jet engine test benches
- ✓ Hydraulic test benches



Competitive advantages

- ✓ Coatings
- ✓ Increased durability
- ✓ High efficiency
- ✓ Application related test
- ✓ Customized and innovated solutions



Customers

- ✓ HPS
- ✓ Bürkle (SMG)
- ✓ Bosch
- ✓ Krauss Maffei
- ✓ Afros
- ✓ IAC



Krauss Maffei





Application examples



Hotmelt-sealing machine in the glass industry



Hotmelt-sealing machine in the glass industry





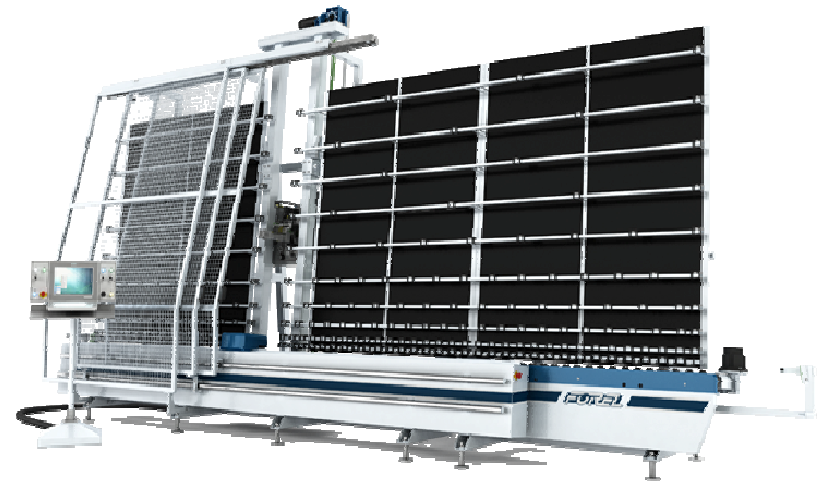
Common pump features

- ✓ plate assembling inlet in rear plate
- ✓ with heating supplied through us or direct on plate
- ✓ low speed from 10 to max. 100 rpm
- ✓ not more than 120 bar working pressure
- ✓ cast iron housing
- ✓ double lip seal or gland packing
- ✓ fluid temperature between 160 to 190 ° C
- ✓ not more than 3 l/min flow rate



Pump models

- ✓ ZPD Hotmelt
- ✓ ZPDA
- ✓ ZPDE

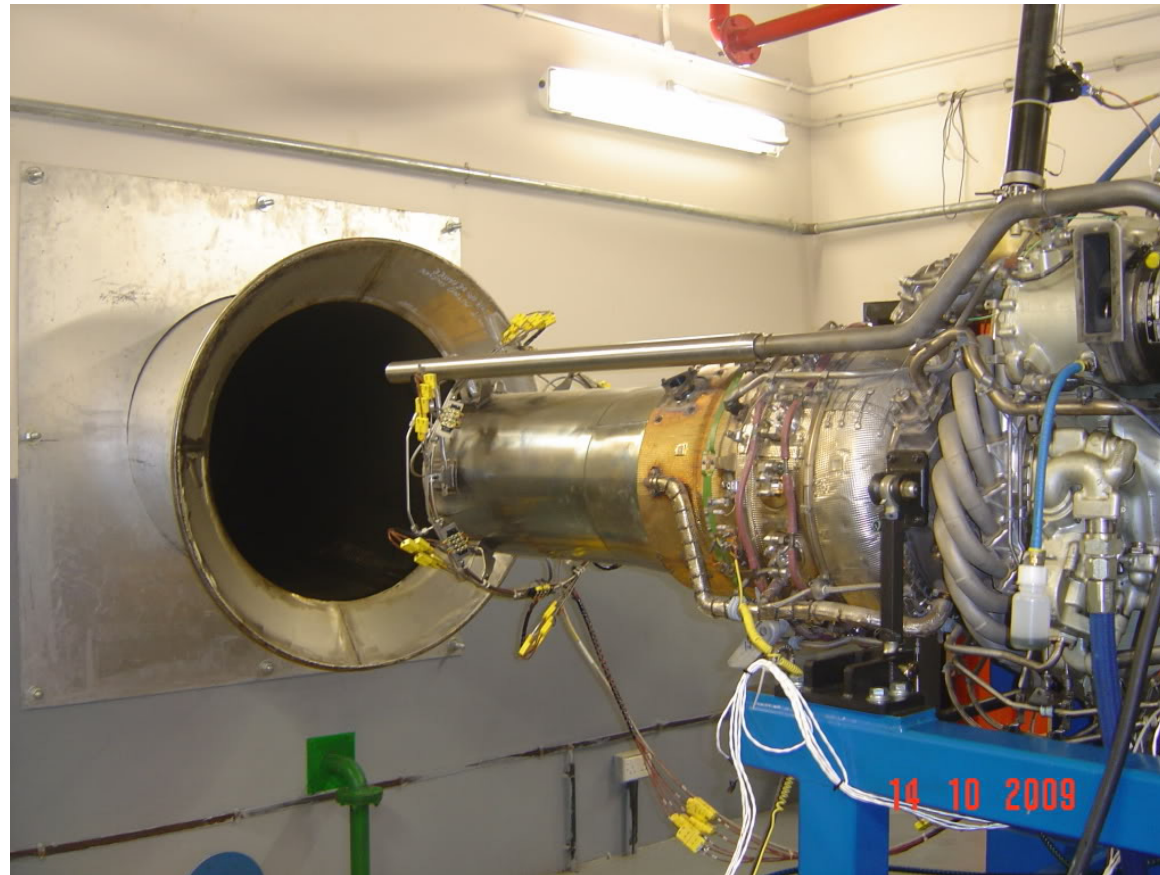




Hydraulic test bench



Aircraft test bench





Common pump features

- ✓ high speeds from 680 to max. 3000 rpm
- ✓ working pressure between 1 - 700bar
- ✓ cast iron housing
- ✓ magnetic coupling
- ✓ fluid temperature between 20 to 130 ° C
- ✓ wide range of flow rates



Pump models

- ✓ ZPD
- ✓ ZPA
- ✓ TR / TRG / TRGD





Rotor blade production



Rotor blade production





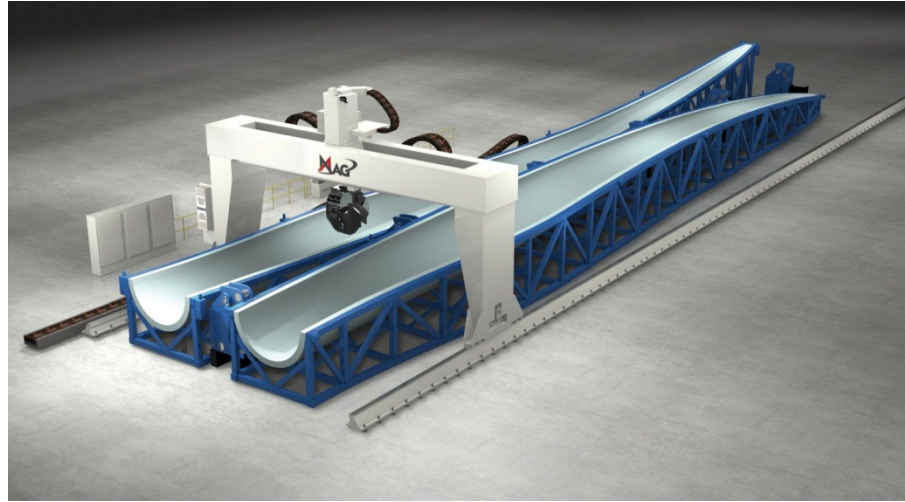
Common pump features

- ✓ low speeds from 100 to max. 680 rpm
- ✓ not more than 120 bar working pressure
- ✓ cast iron housing
- ✓ triple shaft seal
- ✓ fluid temperature between 20 to 130 ° C
- ✓ flow rates between 2 – 50l/min



Pump models

- ✓ ZPDA
- ✓ DARTec
- ✓ ZPD
- ✓ ZPA





Fire engine



Fire engine





Fire engine





Common pump features

- ✓ high speeds from 1000 to max. 3000 rpm
- ✓ not more than 50 bar working pressure
- ✓ stainless steel or bronze housing
- ✓ mechanical seal
- ✓ fluid temperature between 20 to 130 ° C
- ✓ wide range of flow rates



Pump models

✓ZPD

✓ZPA

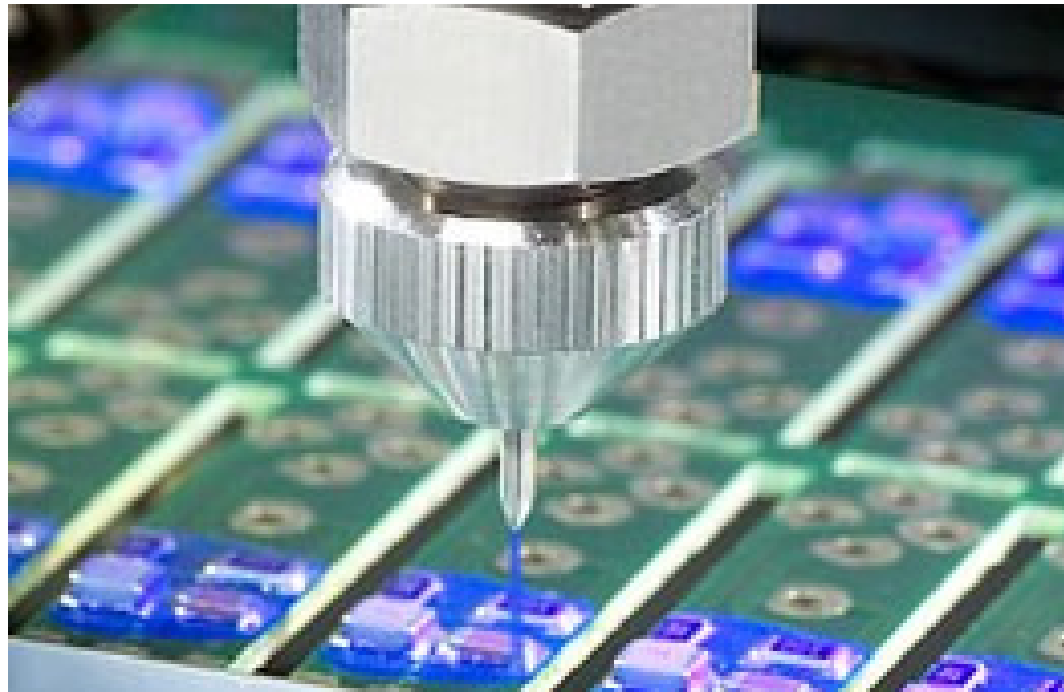




Dispensing System



Dispensing System





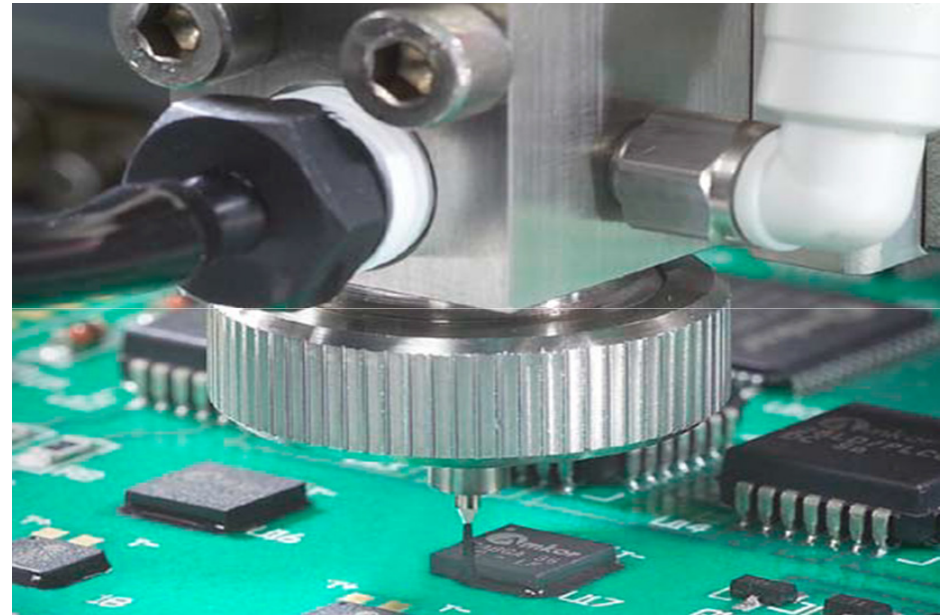
Common pump features

- ✓ low speeds from 1 to max. 400 rpm
- ✓ not more than 150 bar working pressure
- ✓ stainless steel housing
- ✓ mechanical seal
- ✓ fluid temperature between 20 to 130 ° C
- ✓ flow rates between 0,1 – 4,0l/min



Pump models

- ✓ ZPD
- ✓ ZPDA
- ✓ DARTec
- ✓ ZPA





Internal pipe coating



Internal pipe coating





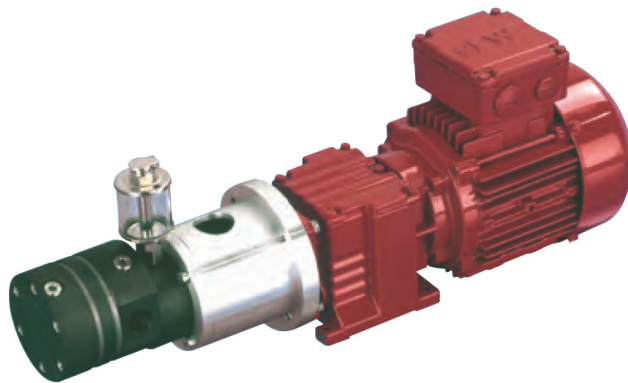
Common pump features

- ✓ low speeds from 250 to max. 600 rpm
- ✓ not more than 80 bar working pressure
- ✓ cast iron housing
- ✓ mechanical seal
- ✓ fluid temperature between 20 to 130 ° C
- ✓ flow rates between 5 – 40l/min



Pump models

- ✓ ZPD
- ✓ ZPDA
- ✓ DARTec





Propane gas compression



Propane gas compression





Common pump features

- ✓ high speeds from 1000 to max. 1800 rpm
- ✓ not more than 80 bar working pressure
- ✓ cast iron housing
- ✓ magnetic coupling
- ✓ fluid temperature between 20 to 130 ° C.
- ✓ high flow rates > 20l/min



Pump models

- ✓ ZPD
- ✓ ZPA





Shoe machinery

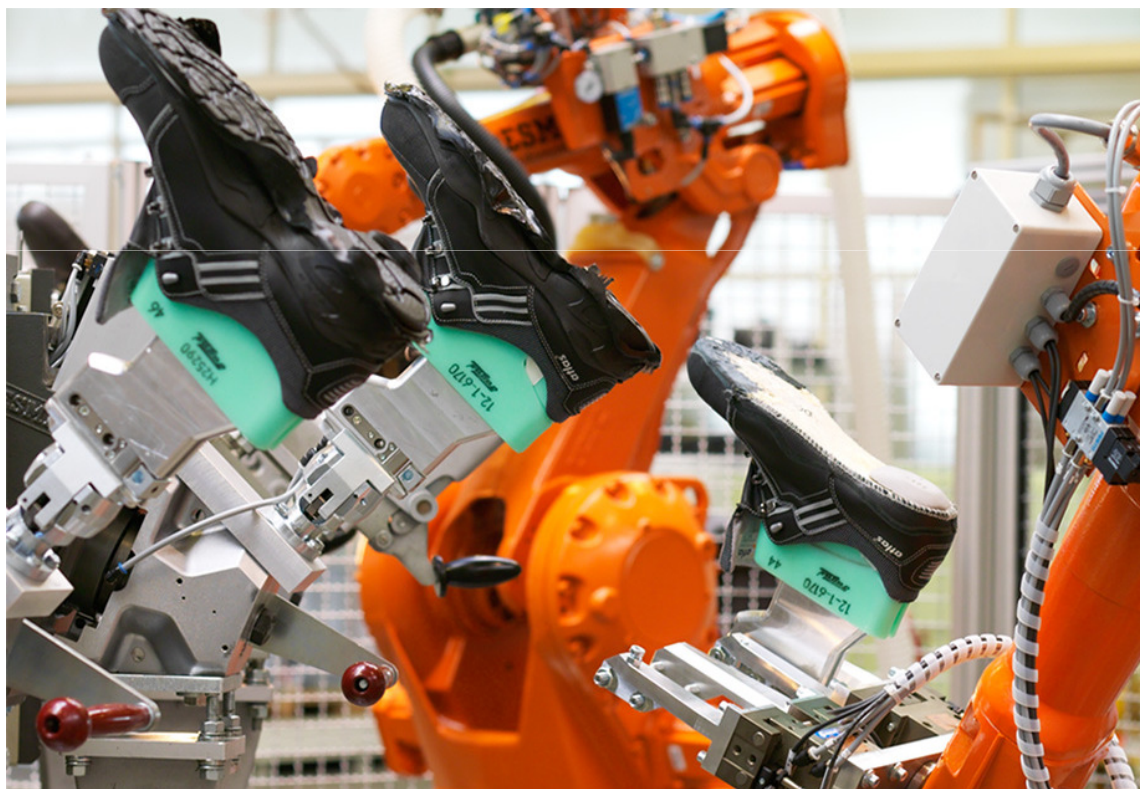


Shoe machinery



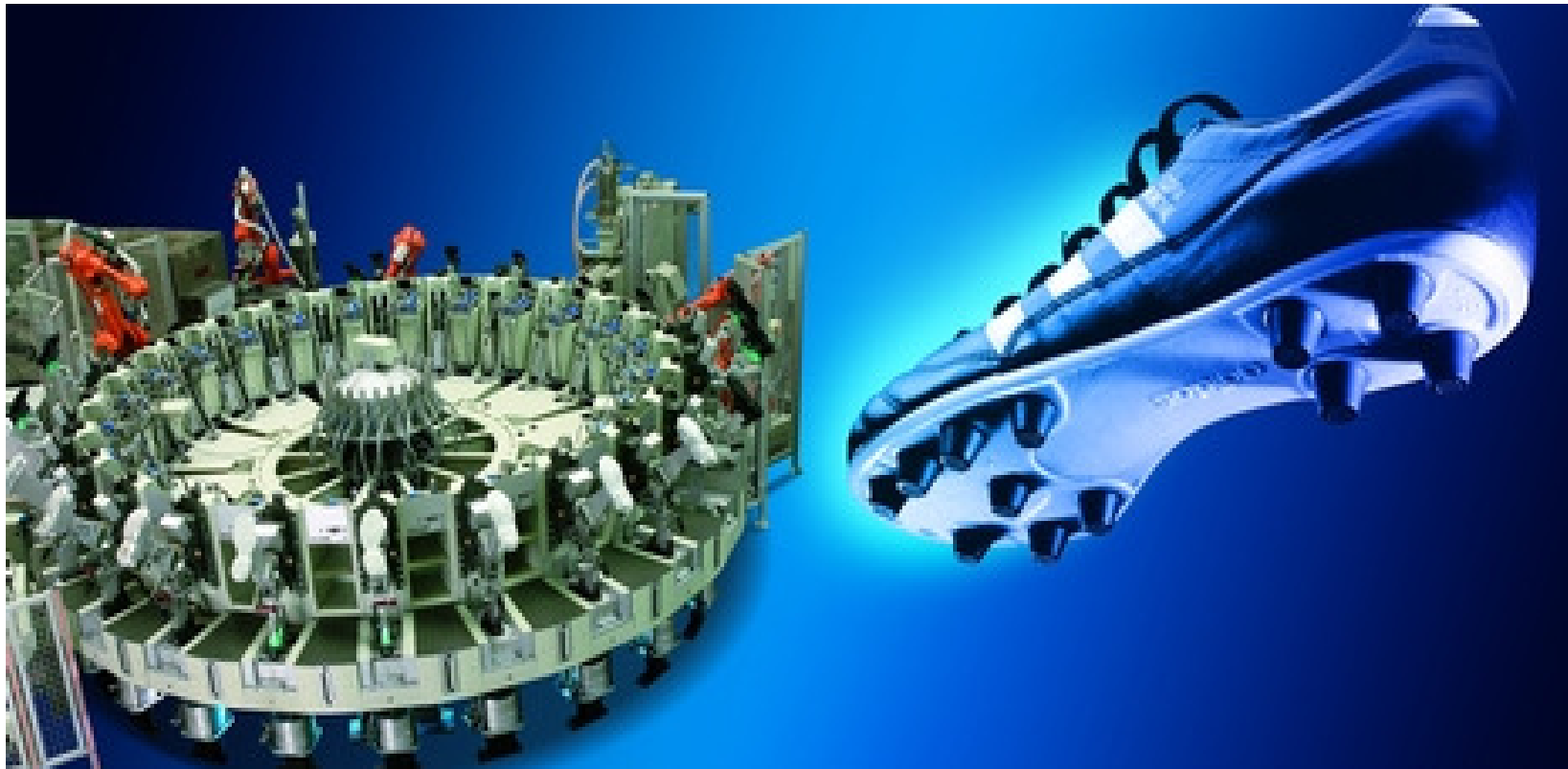


Shoe machinery





Shoe machinery





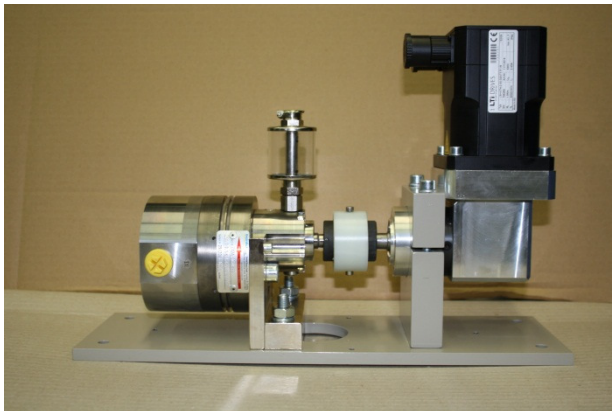
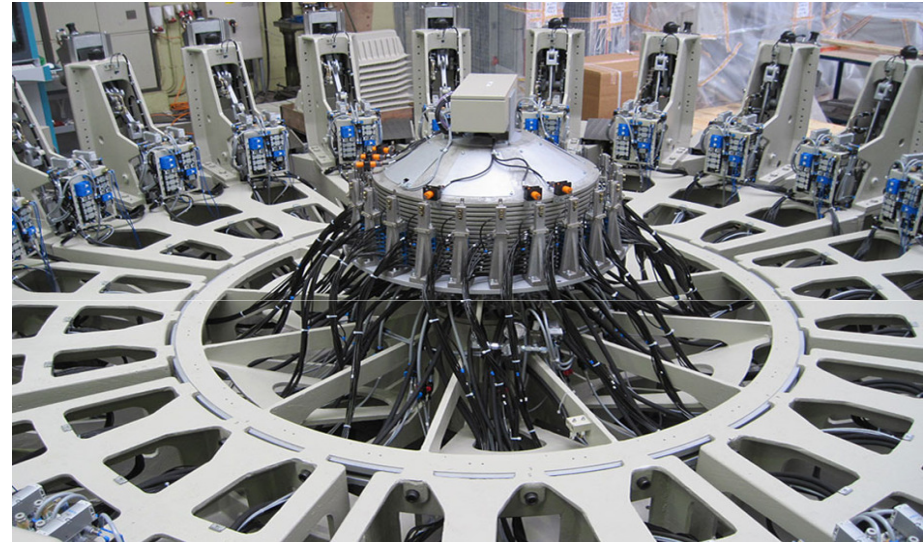
Common pump features

- ✓ low speeds from 50 to max. 250 rpm
- ✓ not more than 80 bar working pressure
- ✓ cast iron housing
- ✓ mechanical seal
- ✓ fluid temperature between 20 to 130 ° C
- ✓ low flow rates between 0,1 – 2,0l/min



Pump models

- ✓ ZPD
- ✓ ZPDA
- ✓ DARTec





Marine engines



Marine engines





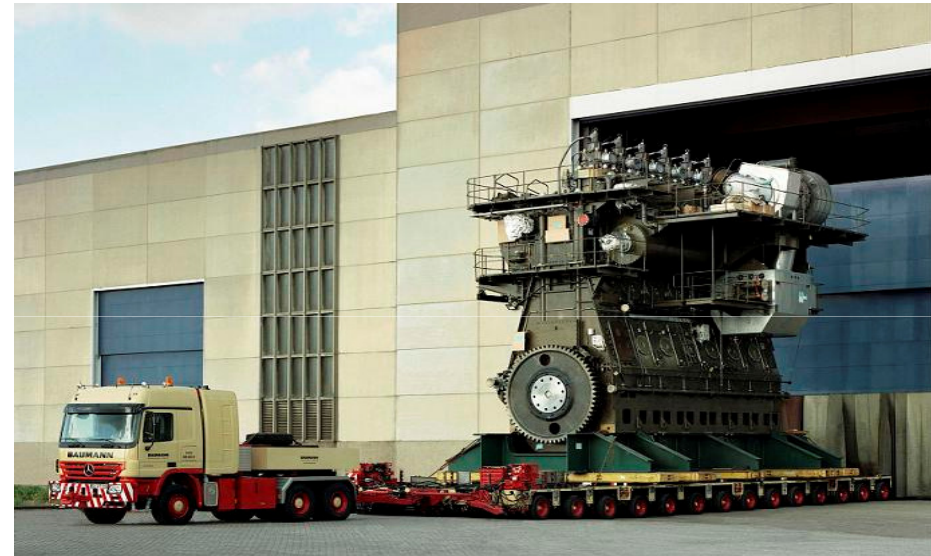
Common pump features

- ✓ high speeds from 680 to max. 1450 rpm
- ✓ not more than 80 bar working pressure
- ✓ cast iron housing
- ✓ mechanical seal
- ✓ fluid temperature between 20 to 130 ° C
- ✓ high flow rates between 50 – 300l/min



Pump models

✓ ZPA





Hot melt



Hot melt





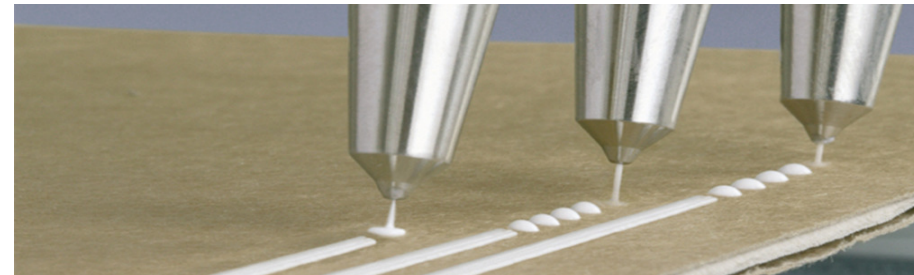
Common pump features

- ✓ low speeds from 100 to max. 600 rpm
- ✓ not more than 80 bar working pressure
- ✓ cast iron housing
- ✓ mechanical seal
- ✓ fluid temperature between 80 to 250 ° C
- ✓ low flow rates between 0,1 – 3,0l/min



Pump models

- ✓ ZPD
- ✓ ZPDA





Robotic dosing application



Robotic dosing application





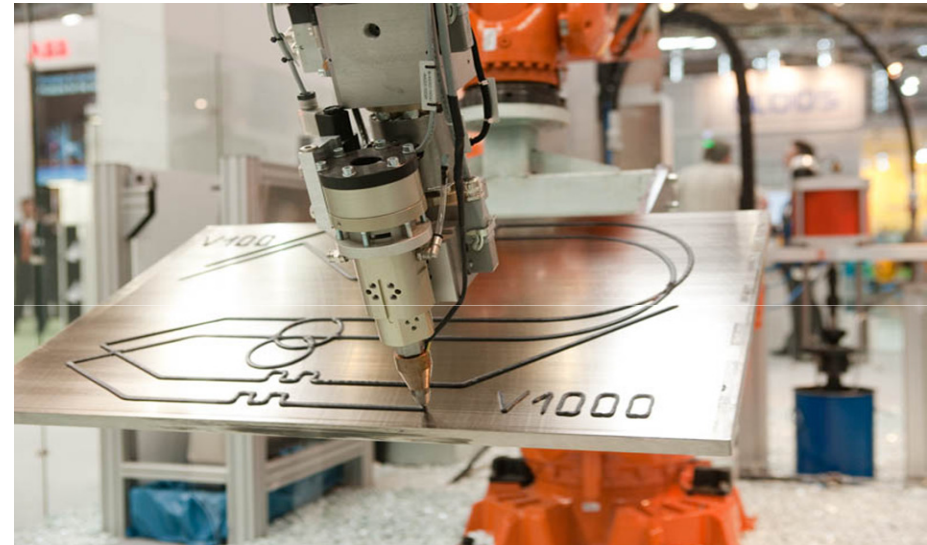
Common pump features

- ✓ low speeds from 100 to max. 600 rpm
- ✓ not more than 100 bar working pressure
- ✓ cast iron housing
- ✓ mechanical seal
- ✓ fluid temperature between 20 to 150 ° C
- ✓ low flow rates between 0,1 – 5,0l/min
- ✓ high inlet pressures > 80bar



Pump models

- ✓ ZPD
- ✓ ZPDA
- ✓ DARTec





Robotic gluing application



Robotic gluing application in automotive industrie





Robotic gluing application 汽车白车身涂胶/粘接





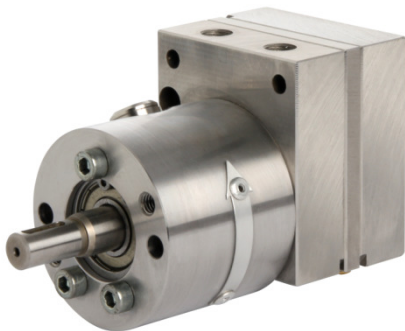
Common pump features

- ✓ low speeds from 10 to max. 400 rpm
- ✓ not more than 100 bar working pressure
- ✓ Stainless steel housing
- ✓ mechanical seal
- ✓ fluid temperature between 20 to 150 ° C
- ✓ low flow rates between 0,1 – 5,0l/min
- ✓ high inlet pressures > 80bar



Pump models

- ✓ ZPD
- ✓ ZPDA
- ✓ DARTec





Color coding - cables



Color coding - cables





Common pump features

- ✓ low speeds from 10 to max. 100 rpm
- ✓ not more than 100 bar working pressure
- ✓ Stainless steel housing
- ✓ mechanical seal
- ✓ fluid temperature between 20 to 50 ° C
- ✓ low flow rates between 0,01 – 0.5l/min
- ✓ low inlet pressures < 10bar



Pump models

- ✓ ZPD
- ✓ ZPDA
- ✓ DARTec





Heat transfer oil – solar heat



Heat transfer oil – solar heat





Heat transfer oil – solar heat





Common pump features

- ✓ high speeds from 680 to max. 1450 rpm
- ✓ not more than 20 bar working pressure
- ✓ Cast iron housing
- ✓ Gland packing
- ✓ high fluid temperature between 200 to 350 ° C
- ✓ flow rates between 1 – 20l/min
- ✓ low inlet pressures < 10bar



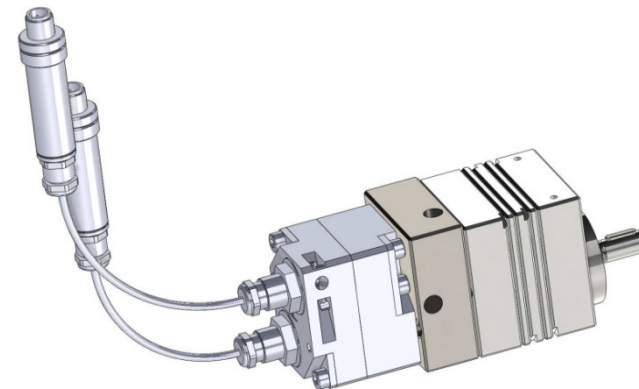
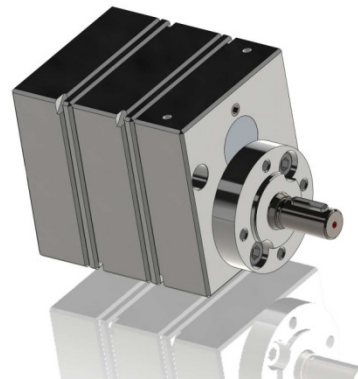
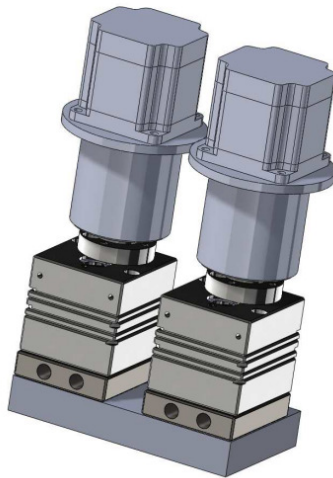
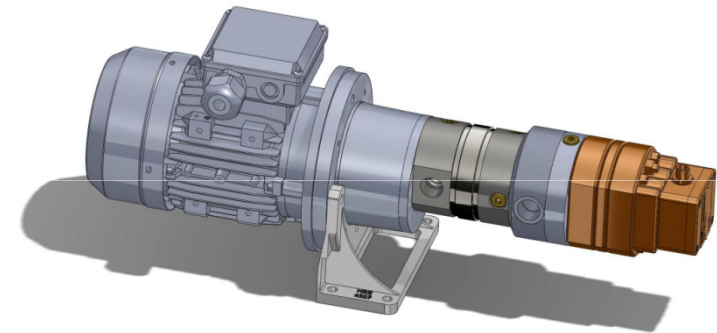
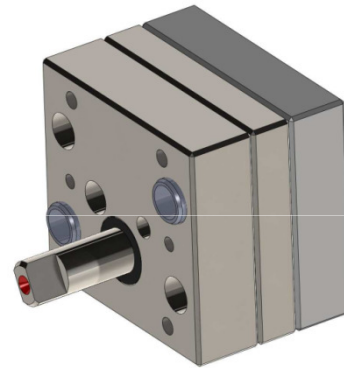
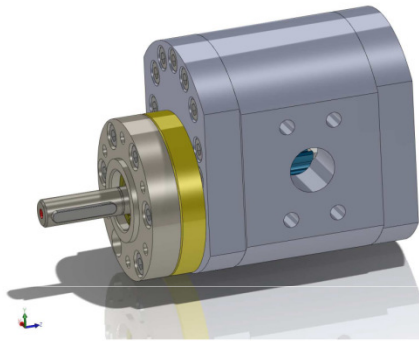
Pump models

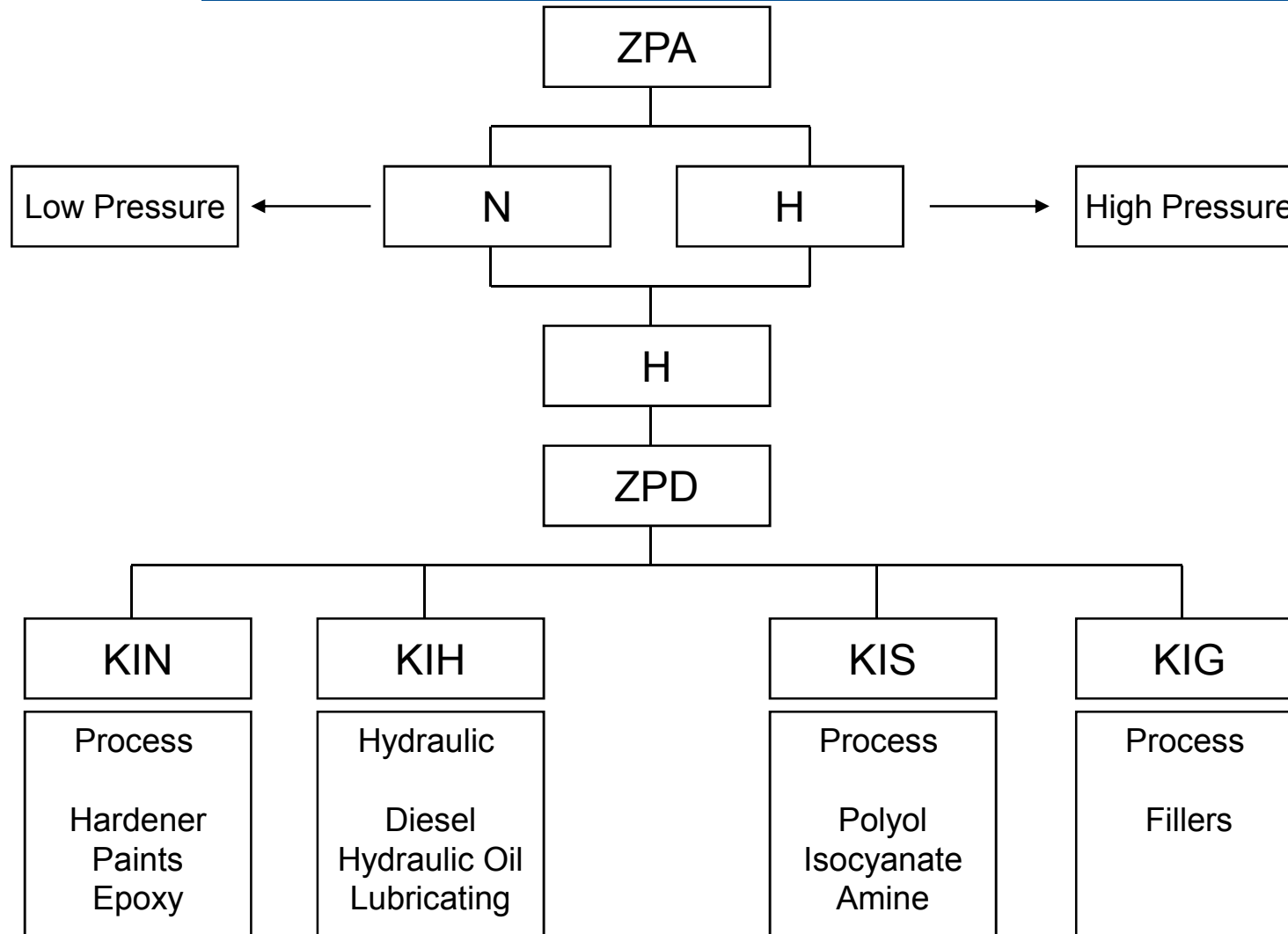
- ✓ ZPA
- ✓ ZPD

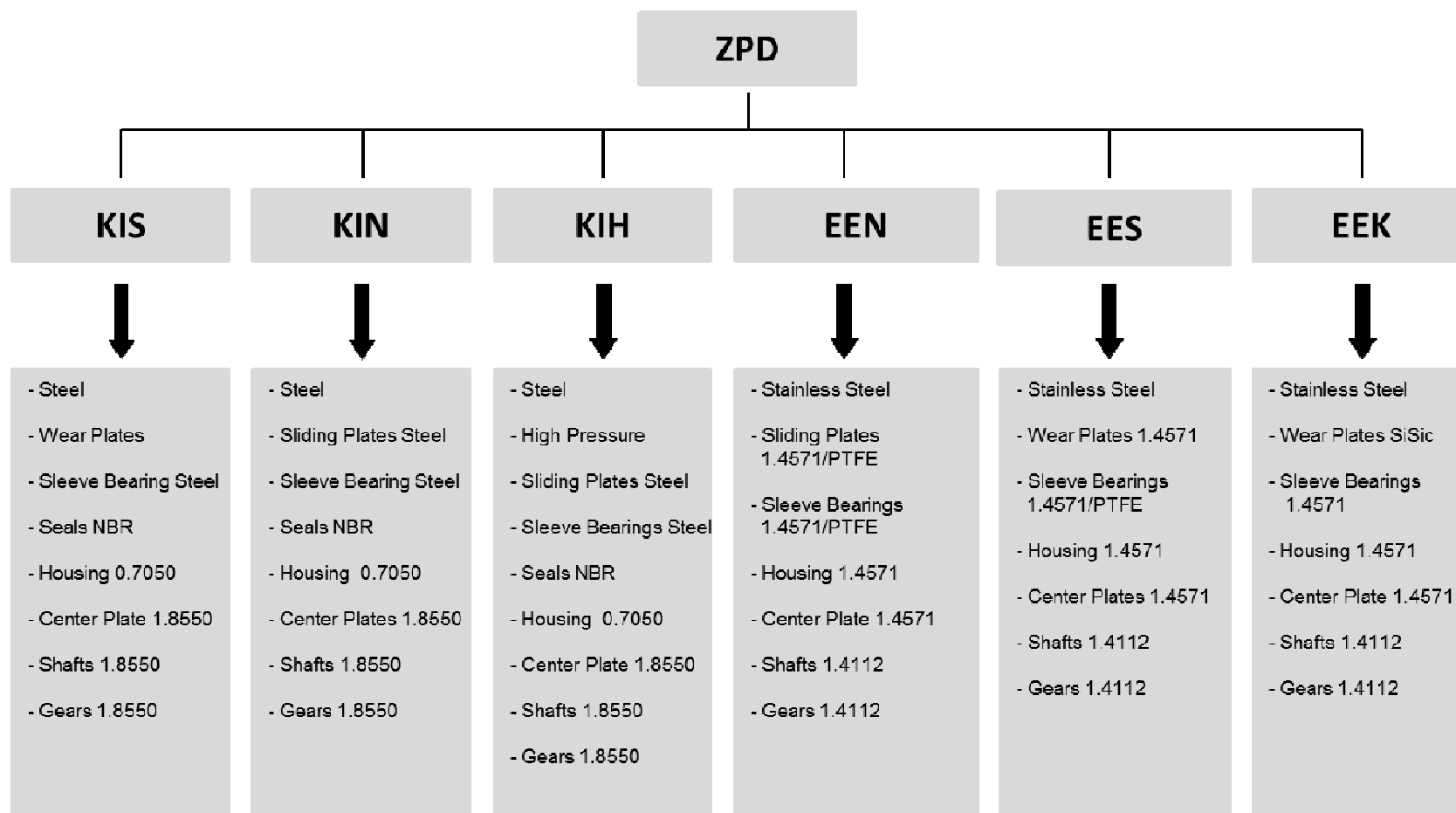


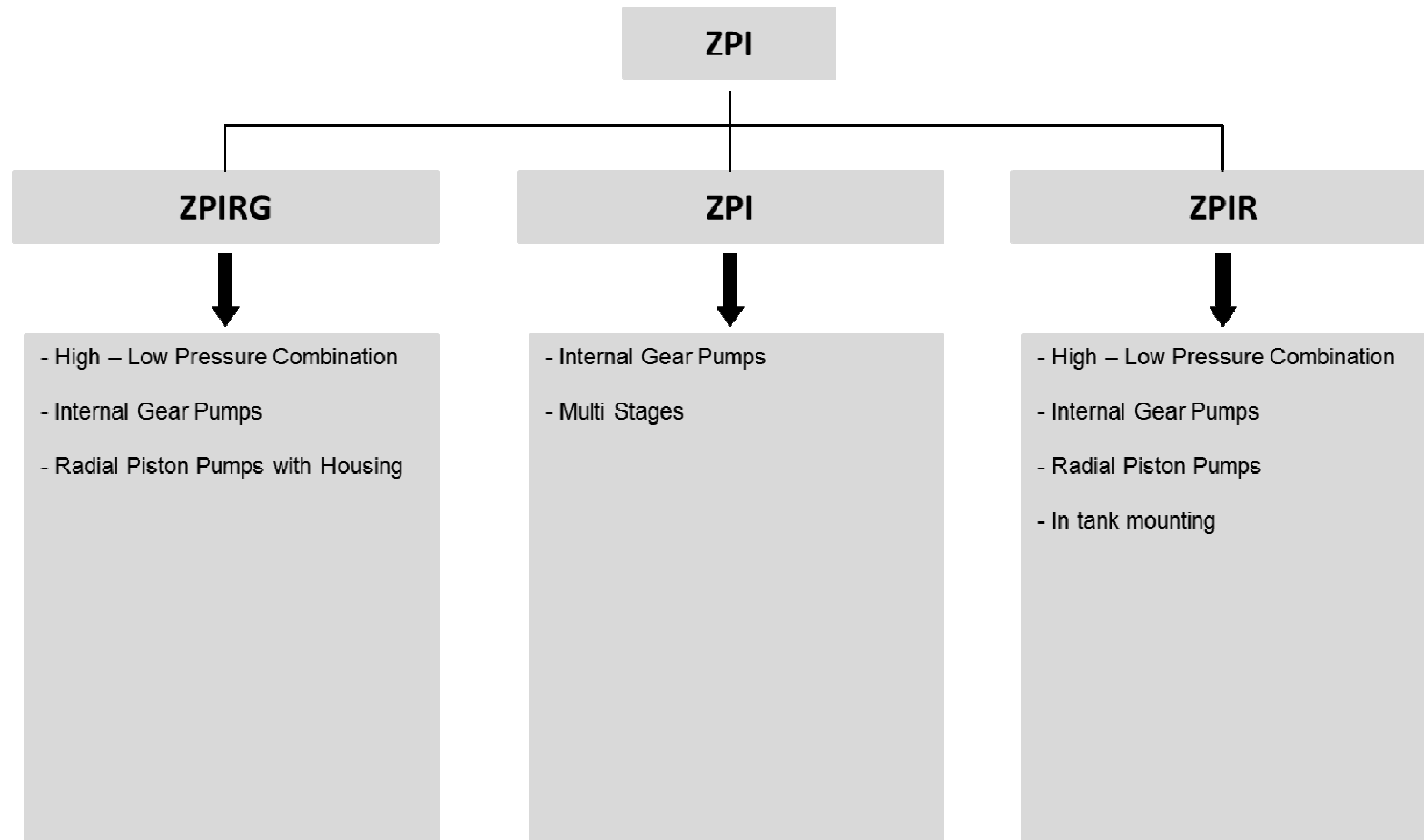


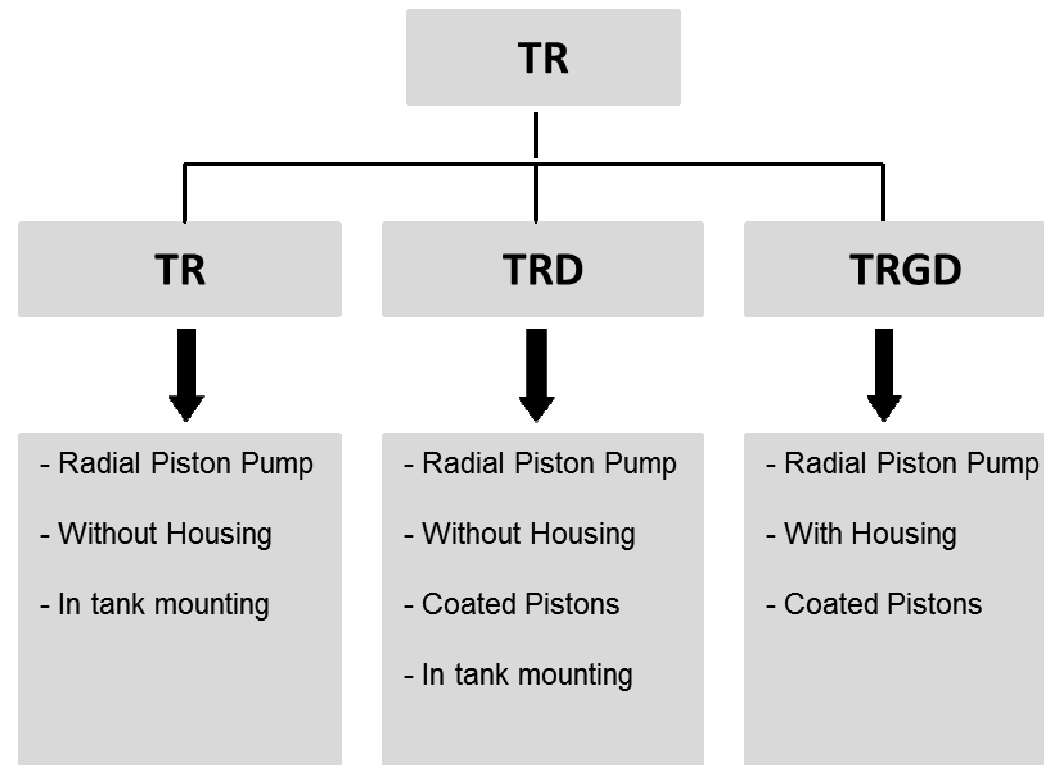
New products

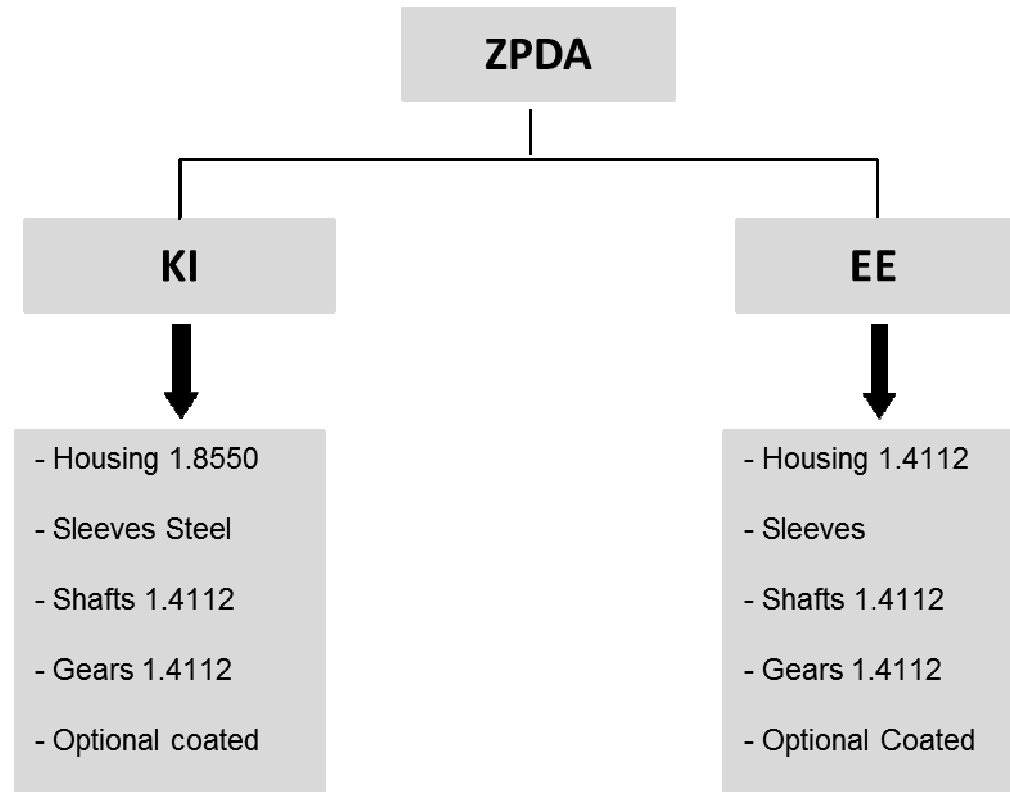














Product Family

