Horizontal centrifugal pump to EN 733 (DIN 24255)

Features:

- Large hydraulic field of applications
- Radial, closed impeller
- Easy maintenance through the Back-Pull-Out principle

Horizontal centrifugal pump to ISO 2858 (DIN 24256) and ISO 5199

Features:

- Flanges according to ISO 7005 PN 16
- For stainless steel execution 150 lbs ANSI B 16.5 available
- Closed and half open impeller
- Easy maintenance through the Back-Pull-Out principle

Heavy duty horizontal process pump to API 610 – 8th edition, API 682

Features:

- Suitable for all common API 682 base plates and accessories
- Fully integrated design – pump, motor, base plate, and accessories
- All pumps with rigid base plates to API 610
- Outstanding hydraulic performance
- Centre-line mounted end-suction pump

E-Mail : office@fmld.net

Mag. drive horizontal centrifugal pump to DIN 24256 (ISO 2858)

Features:

- 100% leak free
- Long life cycle
- Radial impeller
- Interchangeable with existing ISO 2858 pumps

Multistage Centrifugal Pumps

Features:

- Rigid, reliable construction
- High pump efficiency
- Low maintenance cost
- Mechanical seal or gland packing

Self-priming centrifugal pumps

Features:

- Excellent self-priming ability
- No non-return valve required in the inlet
- Oil bath for mechanical seal
- Ideal for handling contaminated liquids
- Easy maintenance – Back-Pull-Out principle
- Mechanical seals to EN 12756 (DIN 24960)

E-Mail : office@fmld.net

Self-priming centrifugal pump to DIN 24255

Features:

- Large air displacement capacity, shortening suction times
- Self-priming
- Built-in vacuum pump
- Available in horizontal and vertical execution
- Sea water resistant version available
- Easy maintenance – Top-/Back-Pull-Out principles

A sump pump designed to EN 733 (DIN 24255) and EN 22858 (DIN 24256)/ ISO 2858

Features:

- Standardised and modular design
- Oil seal as standard shaft sealing Gas tightening option by mechanical se
- Discharge flange according to ISO 7005 PN or ANSI 16 B5 150 lbs
- Simple mounting and disassembly through the Top-Pull-Out design
- API 610 execution on request

Vertical centrifugal pump to DIN 24255

Features:

- Many mounting options (floor, bulkhead, wall mounting)
- Eight positions possible between suction and delivery connections
- Mechanical seal according to DIN 24960
- Spacer-coupling option for easy maintenance
- Easy mounting and disassembly through the Top-Pull-Out design
- Bearing bracket option allows a wide range of shaft seals

E-Mail : office@fmld.net

hygienic centrifugal pump

Features:

- AISI 316L - low carbon stainless steel at standard – other steels on request
- Electro-chemical polished surfaces as standard and on request smoother surfaces as RA 0,5 micron
- Easy to clean – CIP, SIP or manually
- Inlet and outlet connections according to all main standards
- Executions conforming to EHEDG and 3A standards
- Casings – strong, robust and engineered with a material thickness of minimum 6 mm, investment castings
- Open impeller designed for high performance and low NPSHreq.
- Wide range of mechanical seal options
- Clamp seal locking, easy to disassemble
- Modular designed pump range
- Mechanical seals according to DIN 24960, ISO 3069, BS 5257, NFE 29991

Self-priming liquid ring pump

Features:

- AISI 316L - low carbon stainless steel at standard – other steels on request
- Electro-chemical polished surfaces as standard and on request smoother surfaces as RA 0,5 micron
- Suitable as CIP-return pump
- Inlet and outlet connections according to all main standards

Trouble free operation and high performance

- Casings – strong, robust and engineered with a material thickness of minimum 6 mm, investment castings
- Star shape impeller – manufactured and balanced for efficient and reliable performance
- Wide range of mechanical seal options
- Clamp seal locking, easy to disassemble
- Modular designed pump range
- Mechanical seals according DIN 24960, ISO 3069, BS 5257, NFE 29991

E-Mail : office@fmld.net

Submersible pumps

Features:

- Different design Drainage-; Sludge-and Waste water pumps
- Built-in motor protection
- Built-in capacitor, single phase operation
- Pumps sizes from 0,1 – 220 kW

High pressure plunger pumps and units

Features:

- up to 3000 bar
- motor ratings up to 1500 kW.
- Different of design for any application

vacuum pumps and units (systems)

Features:

- Explosion proof according to directive 94/9/EG II G EExc T6
- Compression - proof
- single stage with flexible discharge port
- systems with integrated separator
- seal less
- driven by permanent magnetic coupling
- for pumping gases and vapours
- contact less rotating impeller
- single stage
- valve less
- pulsation-free
- 100% oil free nearly isothermic compression
- sealing by means of liquid ring

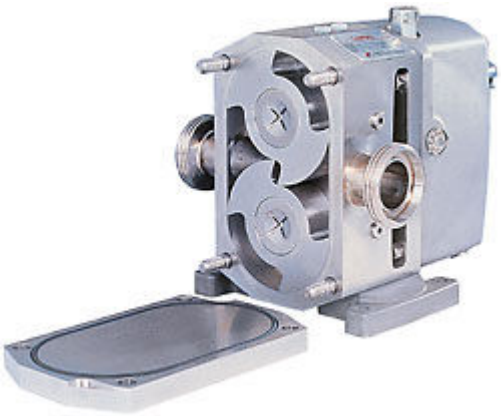
E-Mail : office@fmld.net

Tri-lobe Rotary Lobe Pump

Features:

- Simple, clean and robust construction
- Easy maintenance
- Gentle product handling
- Large selection of shaft seals
- Shim-free, oil lubricated gearbox

Bi-Wing Rotary Lobe Pumps



Features:

- Superior hygiene
- Easy maintenance
- Gentle product handling
- Large selection of shaft seals
- Integrated shaft and gear design

Flexible impeller pumps - five different sizes

Typical applications :

- Food
- Cosmetics / toiletries
- Pharmaceutical
- Water and Waste water
- General industry
- Beverage
- OEM (Original Equipment Manufacturers)
- Marine Industry

E-Mail : office@fmld.net

Gear pumps for high demanding applications

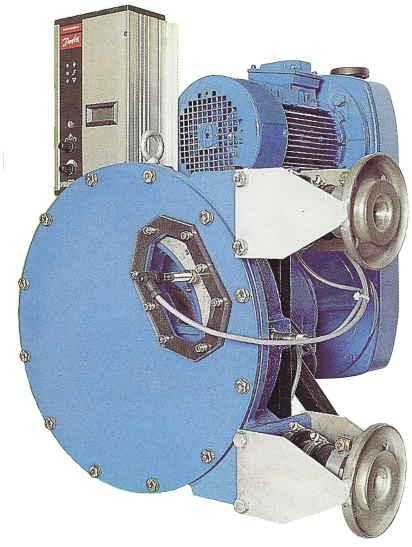
Features:

- Adjustable clearances
- Flange connection options (DIN, AISI)
- Hard metal bearings and shafts available
- Front and back pull-out design
- Relief channel and cartridge seals
- Large ports
- Several inspection plugs
- Conforms to API 676
- Smooth flow

Air Operated Double Diaphragm pump

Features:

- High performance - long life diaphragm
- Able to pump solid particles
- Wide range of material combinations
- Dry start - self-priming
- Flexible installation
- Air drive – spark less conditions
- Variable Flow control
- High capacity
- Reliable operation - no-stalling air valve
- Simpel design



Low and heavy duty hose pump

Features:

- Up to 9 m self priming
- Try running possible
- Valve less
- Easy cleaning
- Very well for corrosive, shear sensitive, abrasive, or viscous media

E-Mail : office@fmld.net

Screw Spindle Pumps

.						
Series	N	K	M	CK	CL	CG
Delivery (l/min) max	420	1500	420	1300	1300	2200
Pressure (bar)	6	16	40	70	100	100
Temperature (^{o}C)	-40 to 130	-40 to 150	-40 to 180	-40 to 80	-40 to 150	-40 to 180
Viscosity* (mm^2/s) max	5000	3000	7000	5000	5000	7000

Oil burner-supply station:

Ready to connect unit according to your specifications

fmld supply stations contain all components required for supplying furnace systems with fuel oil. They include different functions depending on the burner type to be supplied:

- Pressure regulation
- Degassing
- Flow metering (KRAL Volumeter)
- Filter
- Gas-/Air-separator
-

fmld delivers the supply station as a ready-to-connect unit according to your specifications. Consequently, you only have one contact for all questions and the processing of your order is much more efficient. Please ask us.

KRAL- double stations

in block execution are applied to deliver fuel oil especially in oil burning applications, as circular pipeline-transfer pumps and burner pumps for industrial furnaces, in boiler houses, public buildings, in the ship building industry and wherever a continuous oil supply must be guaranteed.

Special features of these fmld-block aggregates are the compact execution and the readiness for installation. The KRAL screw pumps installed are self-priming, feed with low pulsation and operate with favorably low noise. The switching to either operating or spare pump can be carried out on the device both electrically and manually. Pump maintenance and filter cleaning are possible without interrupting the operation.

E-Mail : office@fmld.net

Diaphragm and piston dosing pumps

Features:

- Capacity from 0.4 cc/min up to 50,000 l/h
- Pressures of up to 500 bar.
- Different of materials
- Wide range of accessories
- A range of systems for flow rate automation
- Complete dosing units and station

Pinch valves

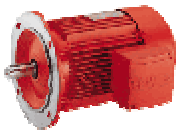
Features:

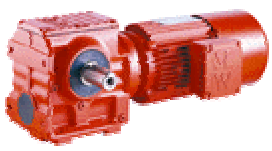
- Negligible pressure drop at opening.
- Closes tightly even on dry flowables, powders and slurries.
- Manual or automatic without packing, tight seal with all liquids, suspensions, granules or pulp.

Motors and gear motors

Features:

- AC- motors
- DC-motors
- Gears
- Industrial gears
- Explosion - proof motors
- Frequency converter





E-Mail : office@fmld.net

Dispenser pumps

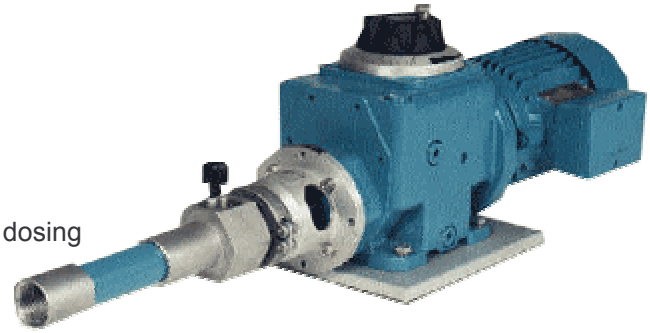
Features:

- For gentle dosing and conveying of liquids of different viscosities up to pasty materials
- Also with an extreme percentage of solids
- The rotation direction is reversible, therefore a draft back at the end of the dosing is possible
- Flow rate is proportional to the speed (no further manipulated variables)
- Simple construction and simple easy cleaning and ease of maintenance
- No joints, the pump uses a flexible shaft and is suitable for critical applications
- A considerable advantage of this principle is the large independence of the dosing quantity vs. viscosity (e.g. depending on temperature or shots)
- The dosing quantity can be programmed exactly and with utmost repeating accuracy. Therefore, these dispenser pumps can be incorporated in fully automated assembly lines.

Range of applications

- Application of adhesive and sealing lines in the car industry, sub-contractor industry and electrical industry.
- Dosing of soldering paste
- Paint systems
- Dosing and filling of pharmaceutical products

Small dosing eccentric screw pump



Features:

- Variable speed drive with manual variator
- Variable Frequency Drive
- Program controlled quantity regulation for shot dosing or continuous dosing processes
- Valve less
- For low and high viscosity liquids
- Very well for corrosive, shear sensitive, abrasive, or viscous media

E-Mail : office@fmld.net

Industrial eccentric screw pumps

Features:

- pulsation free flow rate
- self - priming
- pressure - invariant conveying
- reversible flow rates (re-pumping is therefore possible)
- very gentle conveying
- pressures up to 24 bar, special versions up to 64 bar
- speed proportional quantity, therefore easy to adjust

Food and pharmaceutical eccentric screw pumps

Features:

- Gentle product flow
- Pulsation - free flow
- High dosing precision
- Speed proportional flow quantity
- Reversible flow direction
- Flow quantity almost independent of pressure and viscosity variations
- Self - priming
- Viscosities up to 1 Mio mPs

Hygienic eccentric screw pumps

Features:

- EHEDG Certificate
- No death spaces inside the pump
- Instead of joints inside the pump, there is a hermetic cased flexible shaft without a gap
- Totally closed hygienic mechanical seal
- Optimal arrangement of the process and cleaning connection piece
- CIP-/SIP cleaning
- Any connections are mounted gap-free by inside O-rings (DIN 11864-1)
- Quench: dry run is possible (sterile barrier can be implemented by steam)
- Completely hermetically covered
- Absolutely smooth surfaces
- No wear and tear (important if there are very short start and stop cycles)
- No gap or hidden edge
- Safe rotation moment transference by flexible shaft which has been proved more than a thousand times

E-Mail : office@fmld.net

Hobbock (pail) emptying systems

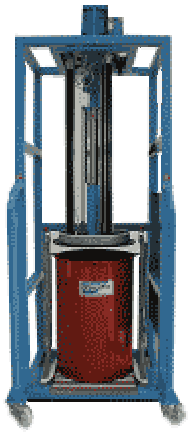
Features:

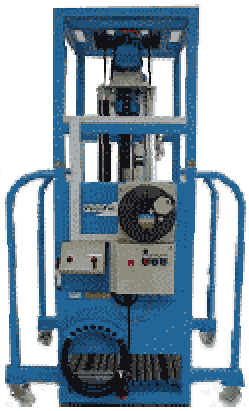
- Hobbock dimension Inside diameter ca. 280 mm / height approx. 360 mm
- Viscosity approx. 50,000 - 1,000,000 mPas
- Pressure up to approx. 16 bar
- Optionally the complete system can be supplied also in heat able execution with 160 C.

Barrel emptying systems

Features:

- Viscosity approx. 50,000 - 1,000,000 mPas
- Pressure up to approx. 16 bar
- Different of design
- Flexible in pump size





E-Mail : office@fmld.net

Flow meters

KRAL Volumeters are classified in series. The classification indicates the flowmeter's material or its application range.
All models start with OM, which stands for Oil Meter, from our initial applications of the meters.

The following table gives an overview of our Volumeter product line:

Series	OMG	OMH	OMK	OMS	OME	OMX
Classification	Universal	High pressure	Chemically resistant	Stainless	Economy	Custom design
Flow range (l/min)	0,1 to 7500	0,1 to 3000	0,2 to 150	3,5 to 1050	0,1 to 150	0,1 to 7500
Max. pressure (bar)	250	420	40	40	40	1035
Temperature range (°C)	-20 to +200	-20 to +200	-20 to +100	-20 to +100	-20 to +100	-40 to +200

The Volumeter product line is complemented by the **BEM 4U** flow management unit. The BEM 4U is not only suited for KRAL Volumeters, but for all flow measuring devices with pulse output.

OMG Series - Universal

The OMG series used for a wide spectrum of applications (G=general). They are manufactured of grey cast iron. The multiple possibilities become obvious from the wide flow range of 0,1 to 7500 l/min, the allowable system pressures up to 250 bar and the temperature range of -20 to +200 °C.

The OME series is the economy variation. This product line meets the requirements of a cost-effective flow meter. With a flow range of 0,1 to 150 l/min, a permissible pressure of up to 40 bar and a temperature range of -20 to +100 °C we concentrated on the operating parameters required most frequently.

OME Series - Economy

OME has an aluminum housing. The measuring signal is measured directly at the spindles. The housing design is optimized for production. Like all our flowmeter series, the high measuring precision is retained.

E-Mail : office@fmld.net

OMH Series - High Pressure

The OMH series is for the high-pressure range. In its standard configuration, it is specified for a system pressure of up to 420 bar. For special applications on oil rigs we have already designed a meter for up to 1035 bar. The specific task of a high-precision flowmeter for high-pressure applications is that the measuring chamber must not be changed under pressure in such a way that the precision is affected. The KRAL Volumeter is an in-line meter, the fluid flows through the device without redirection. This allows for a small housing design. Amongst the high-pressure meters available on the market, the OMH is one of the most compact.

OMK Series - Chemically Resistant

The OMK series has plastic spindles made of PTFE and a stainless steel housing. These Volumeters are chemically resistant to a large number of fluids and is used particularly with aggressive and non-lubricating fluids.

OMS Series

OMS (stainless steel) is manufactured completely from stainless steel (14301 or 14401).

OMX Series - Custom Design

For specific customer requirements we can provide special designs and materials. These meters carry the designation OMX.

Flow Management Unit BEM 2U / 4U

In order to easily evaluate the measuring signals of the KRAL Volumeters, KRAL developed the BEM 4U.

The BEM 4U is especially designed for flow measuring tasks. It provides an understandable display and operating concept and is suitable for all flow meters with pulse output.

E-Mail : office@fmld.net