

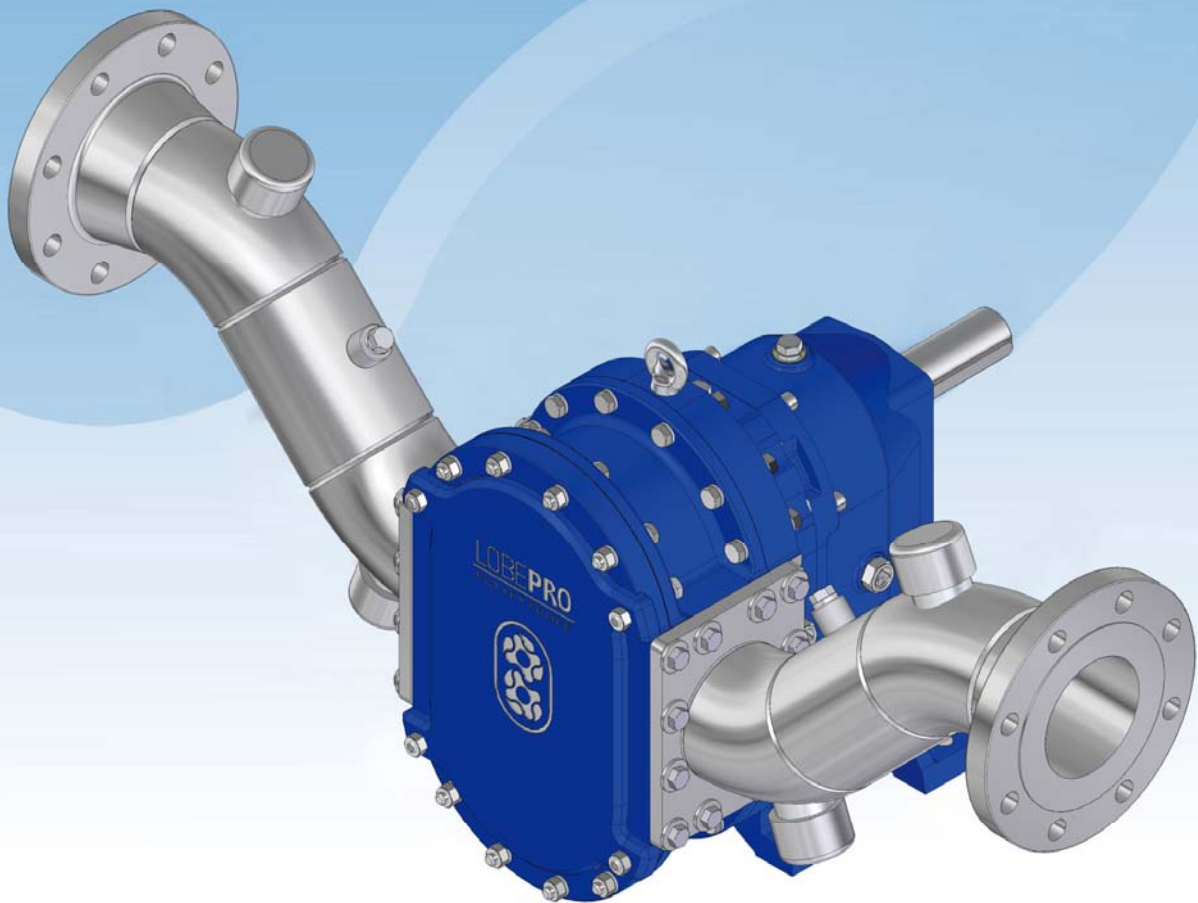
Positive Displacement Rotary Lobe Pumps

Three Great Lines

G Series: General Use

S Series: Sludge, Mud & Slurries

C Series: Chemicals & Corrosives



罗博思达转子泵及系统



公司介绍 Company Profile

Lobepro (罗博思达) 是美国Holland Pump (好莱德泵业) 集团旗下的世界著名转子泵品牌, 专业从事转子泵研发、设计、制造和系统集成。

Lobepro by Holland Pump, a famous brands of Rotary Lobe Pumps, specialized in Rotary Lobe Pump invention, design, manufacturing and system integration.



选择罗博思达的理由很多, 但您或许只需要一个理由就足够

There are many reasons for selecting Lobepro pumps, but one of them may encourage your decision

1 超长服务寿命和流量稳定 Long life and steady flow

- 泵转速低, 磨损很小, 寿命长;
- 螺旋 4 翼转子设计, 运行平稳, 无脉动。
- Our pumps have long life because they run slowly, reduce wear.
- Our helix shape 4 wing lobes give them a steady, pulse less flow.

2 维护特别简便 Ease of maintenance

- 可在线检修或更换部件, 无需拆卸管路。
- Mechanical seals, lobes, and wear plates can be changed on site without disconnecting suction and discharge fittings.

3 特殊设计机械密封, 寿命更持久, 无泄漏

Long lasting, leak free seals

- 平衡式机械密封设计, 无需人工压力补偿装置, 以免轴封在泵腔压力达到3公斤以上时产生泄漏;
- 机械密封为强震或极端恶劣工矿设计。
- Our seals do not require manual compensating pressure to prevent seal leaks resulting from wet end pressure up to 50PSI.
- Mechanical seals are designed for extreme shock and vibration.

4 泵体积小, 不怕干运行 Small size and run dry ability

- 同等流量的Lobepro 泵只有单螺杆泵1/3长度, 减少土建投资;
- 机械密封油冷却, 允许泵干运行。
- Lobepro pumps are typically 1/3 the size of an equal flow progressive cavity pump, reduce construction investment.
- Our seals are oil cooled permitting limited dry running.

5 高素质、经验丰富的员工队伍 High experienced staff

- 高素质、经验丰富的员工时刻准备提供各种可能的需要。
- We have experienced engineers and mechanics in the USA and China, who are here to answer your questions or trouble shoot problems.

6 备件交货快捷 Ship spares in two days

- 购买我们泵后5年之内, 保证在收到定单后2个工作日发货。
- Wear parts shipped within 2 working days of order receipt .This guarantee applies for 5 years after the purchase of a LobeStar pump

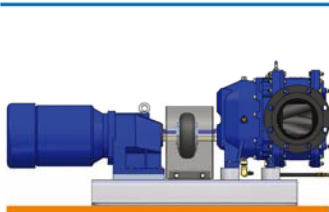
7 现代化工厂设施 Modern Facility

- 总部工厂拥有各种现代化的机械加工、焊接、切割、冲压、喷漆及性能测试设备或装置, 为客户量身订做各种要求的产品或系统。
- We have the most modern machining, welding, metal cutting and forming, painting and testing facilities available at our headquarters of Georgia in USA to cater to any custom requirements you may have.

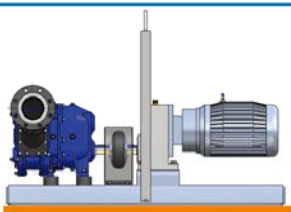
8 纯正美国产品, 质量可靠

Lobepro Pumps are 100% made in the USA

- Lobepro 所有泵及系统均在美国总部制造, 高标准的质量体系, 快速服务, 确保客户满意。
- Lobepro Pumps are 100% made in the USA which helps us maintain high quality, fast delivery, and good communications.



马达泵同轴心线安装
In-Line Assembly



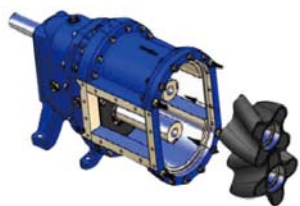
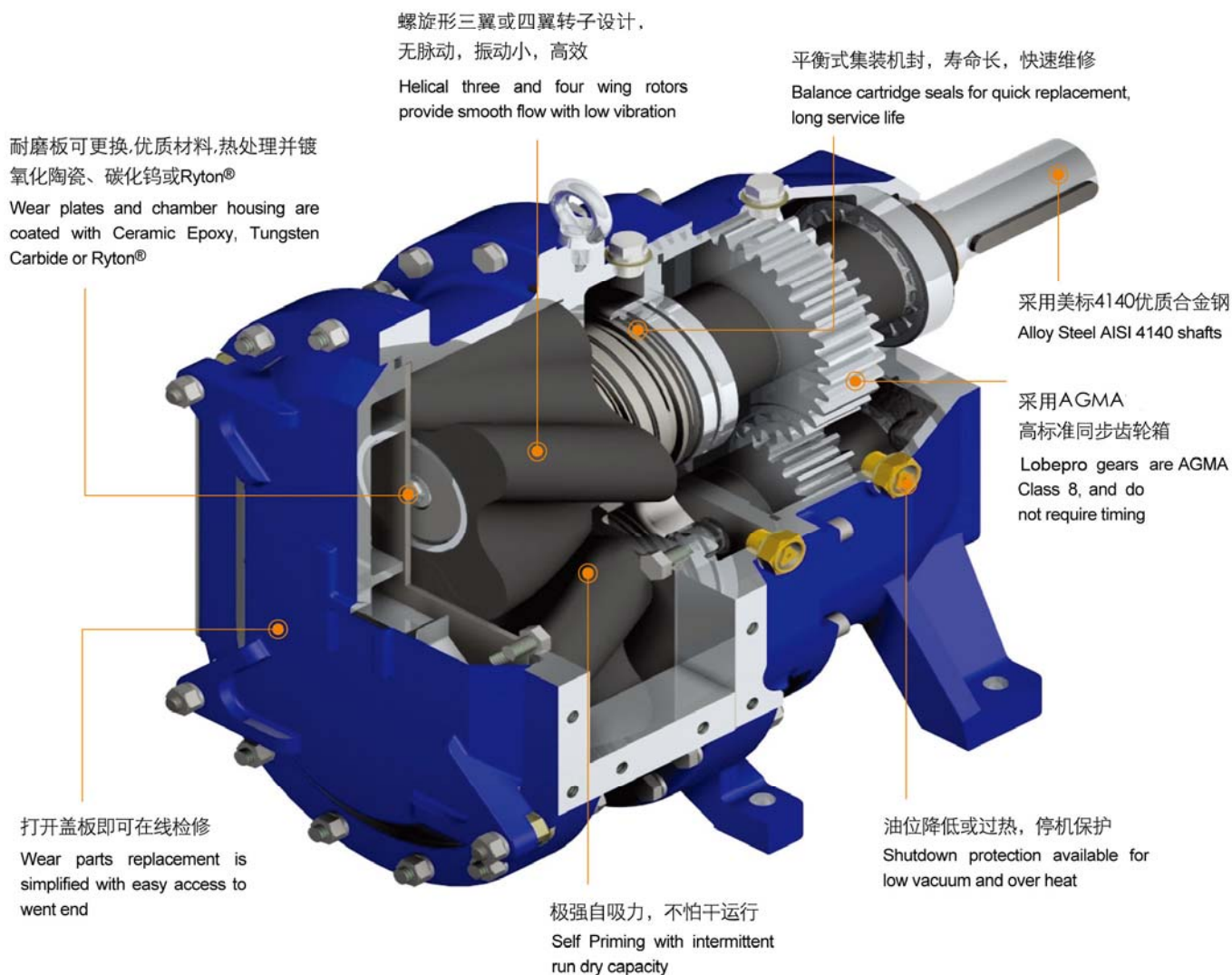
马达泵同轴心线安装 (马达分体结构)
In-line Assembly /C-Face Reducer



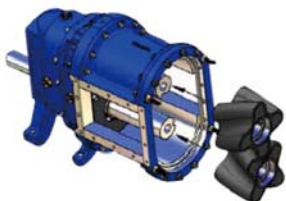
液压驱动
Hydraulic Motor Drive



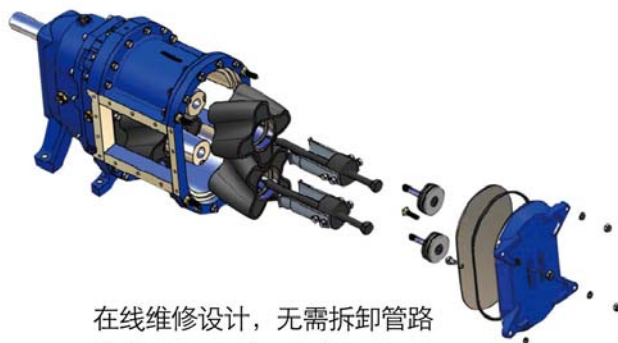
系统集成
Sound Attenuate Unit



上轴驱动设计
Up shaft driven



下轴驱动设计
Down shaft driven



在线维修设计，无需拆卸管路
Maintenance on line design



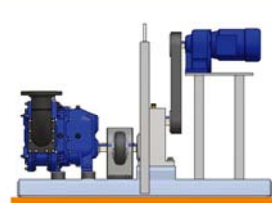
拖车安装
Trailer Mounted Motor



马达立式安装
Vertical Motor



上下背负式安装
Overhead V- Belt Drive



马达提升安装
Gear Reducer / Lifting Frame



罗博思达转子泵与离心泵比较

Lobepro versus centrifugal pumps

相比离心泵而言，Lobepro 泵在输送粘性或含固体介质时，效率高，可通过大尺寸物料，不气蚀；离心泵一旦有气体进入泵腔、气蚀余量不足、或实际运行工况偏离最佳工况点10%范围时，就会对泵造成不利影响；

因此，离心泵工况须在最佳工况点10%范围内；否则会出现泵轴扭曲变形，泵体振动，更严重的是发生气蚀，会损坏工作部件，降低泵使用寿命；

转子泵能很好的实现气体、液体和固体混合输送，不会出现有效气蚀余量NPSH_a不足；介质粘性对转子泵运行影响很小，不会出现离心泵那样一旦温度变化，介质变粘稠，流量或压力就急剧下降的情况；

对于磨损性强的介质，转子泵转速在200-300转/分；一般介质可在500-600转/分。而离心泵转速一般在1500转/分甚至更高，对泵部件磨损很快。高速运转，就如同一个高速搅拌机，剪切性很大，会严重破坏化学品分子链结构；转子泵转速慢，温和传输，加上流线型叶片设计，确保没有脉冲和振动，实现无剪切输送。

Lobepro Pumps are effective replacements for centrifugal pumps in sludge and slurry applications because they are more forgiving. Centrifugal pumps are adversely affected by entrained air, by inadequate Net Positive Suction Head (NPSH) or if not operated within 10% of their best efficiency point.

Operating centrifugal pumps in excess of 10% their best efficiency point causes shaft deflection, vibration and cavitation, which damages internal parts and reduces the effective life of the pump.

Rotary Lobe Pumps will happily pump air and water, will not cavitate as a result of inadequate NPSH and are equally efficient at all points within their operating range. Unlike centrifugal pumps, the output of positive displacement pumps are largely unaffected by head or viscosity.

Wear rates in abrasive applications are greatly affected by pump RPM's. LobeStar engineers will specify the proper pump and speed requirement for your application ranging from 200-300 RPM's for abrasive applications to 500-600 RPM's in non abrasive applications. Contrast this for wear rate to centrifugal pumps which commonly operate at 1500 RPM's. This difference in pump speed has the added result that centrifugal pumps mix and agitate the fluids pumped whereas rotary pumps operated at low RPM and gently transfer the fluid with low shear flow.

罗博思达转子泵与单螺杆泵比较

Lobepro versus progressive cavity pumps

Lobepro 泵用途非常广泛，无论是粘性或稀薄介质，无论是粘稠的泥浆、污泥、泥土以及各种浆料都很轻松的输送；相比单螺杆泵有以下几大优点：

- 1 泵能干运行，在突然断料或操作失误时尤其重要，避免事故发生；
- 2 转子泵的非挤压工作原理，需维护部件少，大大节省备件费用；
- 3 安装面积是单螺杆泵1/3，此外单螺杆泵还需要额外的定转子检修空间；
- 4 可在线维修，更换备件无需拆卸任何管路，快捷方便，减少劳动强度。

Lobepro pumps can be used in most transfer processes involving thick or thin sludge, mud and slurries.

They have the following advantages over progressive cavity pumps:

- 1 Ability to run dry for a period of time
- 2 Sharply lower maintenance and repair cost.
- 3 Require approximately 1/3 their physical space. In addition, progressive cavity pumps need additional space for removing the rotor and stator.
4. As an added benefit, LobeStar rotary lobe pumps, seals and wear plates can be replaced without removing attached piping.

转子泵的特点:

What are the properties of rotary lobe pumps?

- 适合剪切敏感介质如液体炸药
- 可以正反转
- 紧凑设计, 节省空间
- Shear sensitive operation
- Forward and reverse pumping operation
- Space-saving compact design
- 适合输送含固体介质
- 极低维护工作量
- 在线维护设计
- Fluids with solids
- Low maintenance
- Maintenance on line
- 适合输送高粘度介质
- 最大自吸高度9米
- 备件成本低
- Ideal for pumping highly viscous fluids
- Max. self priming to 9m
- Low spares cost
- 调节速度即可调节流量
- 超长服务寿命设计
- 泵对干运转不敏感
- Capacity varied by speed
- Long operational lifespan
- With run dry capability

罗博思达泵理想的应用领域

What applications are Lobepro pumps ideal for?

- 污水处理厂
- 肉类工厂
- 牛奶、乳品厂
- Sewage Treatment Plants
- Construction Dewatering
- Fruit and Vegetables
- Fish Processing
- 土豆/淀粉厂
- 沼气
- 钻井
- Potato/Starch Factories
- Meat Processing
- Recycling
- Ship Fluid Transfers
- 石油化工、化妆品
- 造纸、纸浆
- 计量输送
- Chemical Industry
- Biogas
- Milk Processing
- 粪便和废水收集站
- 制糖厂
- 鱼类深加工
- Waste Disposal Tankers
- Paper
- Well Drilling
- 饮料生产行业
- 蔬菜和水果加工厂
- 船舶上各种流体传输
- Beverage Industry
- Sugar Mills
- Metered Quantities
- 建筑施工排水
- 废物回收



罗博思达泵参数表

GM/GL适合常规流体介质,SM/SL为磨损性介质设计,CM/CL适合腐蚀性介质,三种系列泵性能参数一样

型号	每100转流量 (美加仑)	额定流量 (m ³ /h)	工作压力 (bar)	允许粒径 (mm)	额定转速 (rpm)
M34	34	46	10	40	0-600
M50	50	68	10	40	0-600
M68	68	92	8	40	0-600
M100	100	136	5	40	0-600
L133	133	150	10	60	0-500
L133d	133	150	12	60	0-500
L266	266	300	5	60	0-500
L266d	266	300	10	60	0-500
L399	399	450	3	60	0-500
L399d	399	450	8	60	0-500
L531d	531	600	6	60	0-500
L655d	655	755	3.5	60	0-500



水处理领域 Water Treatment Application

罗博思达泵计量和输送絮凝剂、活性炭、石灰浆、初污泥、浓缩污泥、消化污泥、脱水污泥、沉淀污泥、脱水泥饼及浮渣等。

Lobepro pumps are used for polymer dosing, transporting active carbon, lime slurry, primary sludge, dewatering sludge, clarification slurry, digester slurry, dewatered sludge cake and scum.

造纸与纸浆、纺织和印染领域 Pulp & Paper, Fiber, Printing and Dyeing Application

输送纸浆、悬浮液、青料、黑料、白液、涂料及污水污泥；纤维、粘胶液、染料、油墨、尼龙粉液及废水处理等。

Lobepro pumps are used to transport cobalt blue pigment floating liquid, back lye and white liquor, painting and waste water, waste water from printing and dyeing application, fibers, glue, and ink and so on.

食品和饮料领域 Food and Beverage Industry

罗博思达泵适合输送初端物料，包括食品原料、原液、果酱、乳品、含纤维的糖浆、糖蜜、硅藻土、废料及滤泥等。

Lobepro pumps transport primary stage liquid including raw liquid, juice, milk, molasses, diatomite, waste and filter cake.

建筑和基础建设领域 Building and Foundation Construction Application

井点法排水工艺常用于降低地下水便于施工；采用离心泵抽地下水有两大缺点：不能干运行和需要附加真空装置。LobeStar泵可直接抽真空自吸地下水，无须附加真空装置，又可干运行，并且机组效率提高50%。

注：A图为2套移动式的罗博思达真空抽水系统在工作。

Wellpoint dewatering is used to lower the water table for construction purposes. Using centrifugal pumps for well pointing has two major drawbacks. Centrifugal pumps cannot run dry and they require an additional priming mechanism. Unlike centrifugals, positive displacement rotary lobe pumps have the added benefit of being self priming and they have the ability to run dry, with 50 % power lower than centrifugal pumps.

石油和化工行业 Petrochemical & Chemical Industry

罗博思达泵在石油领域输送原油、稠油、重油、油泥、燃油、聚合物、汽水固多相混合物、悬浮液、乳胶等。

在化工领域常用来输送香波、化工原料、粘合剂、酸、碱性介质、涂料、乳胶等半成品或成品。

B图为全封闭的柴油马达驱动，绝对静音、防振动和防爆的移动式输送系统。

Lobepro pumps are good solution to transport raw oil, thick oil, heavy oil and oil slurry, fuel, polymer, and mixture of water, solid and gas; emulsion and dewatering processing in petrochemical industry.

In Chemical, Lobepro pumps are ideal pumps for shampoo, chemical raw material, paste, acid, alkali, painting, emulsion, etc.



船舶及海港领域 Ships and Harbor Application

罗博思达泵体积小、流量大、自吸能力强、不怕干运行、无堵塞设计，很适合油轮和货轮及港口码头输送生活污水、仓底污泥、润滑油、原油、化工原料和海上溢油等。

Lobepro Pumps with impact, large capacity, self-priming, dry run ability, no-clogging design are the ideal pumps for loading and unloading application, waste water, lubrication oil, raw oil, chemical, oil spill removal, vacuum toilets in liners or Cargo ships.

游艇及码头应用 Yacht and Docks

在码头安装由罗博思达泵组成的真空吸污装置，该装置为盘绕式结构，吸污管自由拉伸，作业完成后吸污管自由收回，可以把游艇上的污泥及废水抽吸上来，输送到地下污水管道集中处理。

The vacuum sewage receiving unit consists of Lobepro pumps and coiling structure, the tube spreading freely during sewage collection, and coiling again after operation.

This system can suck the sewage from the yacht and discharge it into under ground sewage collection pipeline.

车载领域 Vehicle Application

罗博思达泵具有很强的抽真空能力、无堵塞设计（最大允许60毫米物料通过）和体积小等优点，被广泛应用于动车组、火车站、地铁站及地下商场的真空排污系统。

Lobepro Pumps with high vacuum ability and no blocking (solids passing: To 60mm incompressible solids), are widely used in MU, railway stations, subway stations, underground shopping malls and others.

农业领域 Agriculture

罗博思达泵非常适合输送液态有机肥料和动物饲料，以及养殖场排泄物、废水、废液等。在沼气工业中，Lobestar泵是沼气发酵载体的最理想输送方式；

Lobepro pumps transport the liquid organic fertilizer and animal forage; excrement and urine of cattle and piggery, ideal transportation method for the fermentation material in bio-gas application.

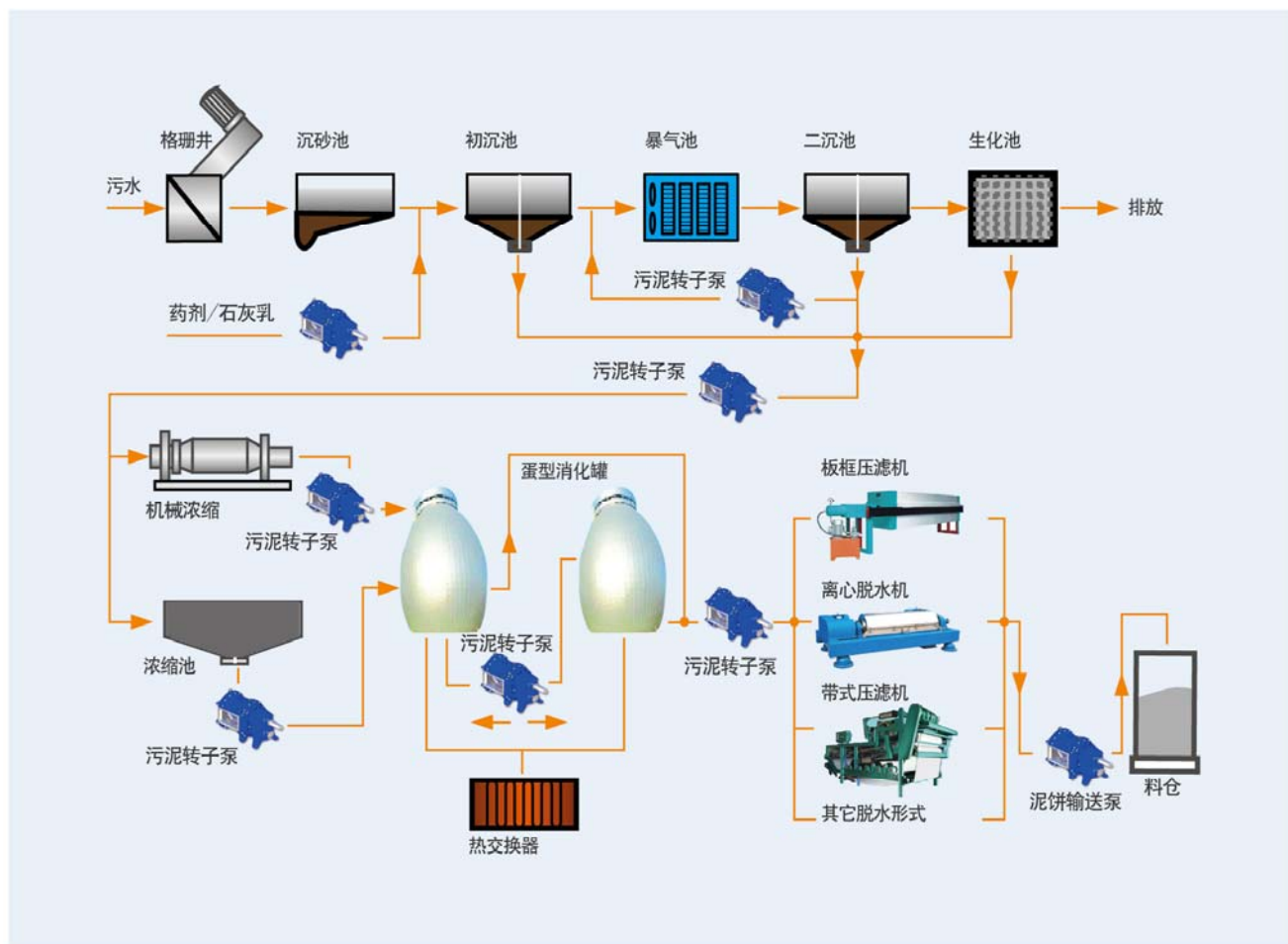
采矿及重工业 Mining & Heavy Industry

罗博思达泵常被用来输送矿浆、泥浆、絮凝剂、液体炸药、高岭土、陶瓷、钛白粉等。

Lobepro pumps are used in mining & heavy industry for mining slurry, sewage, polymer, liquid explosive chemical, clay and Titanium oxide.

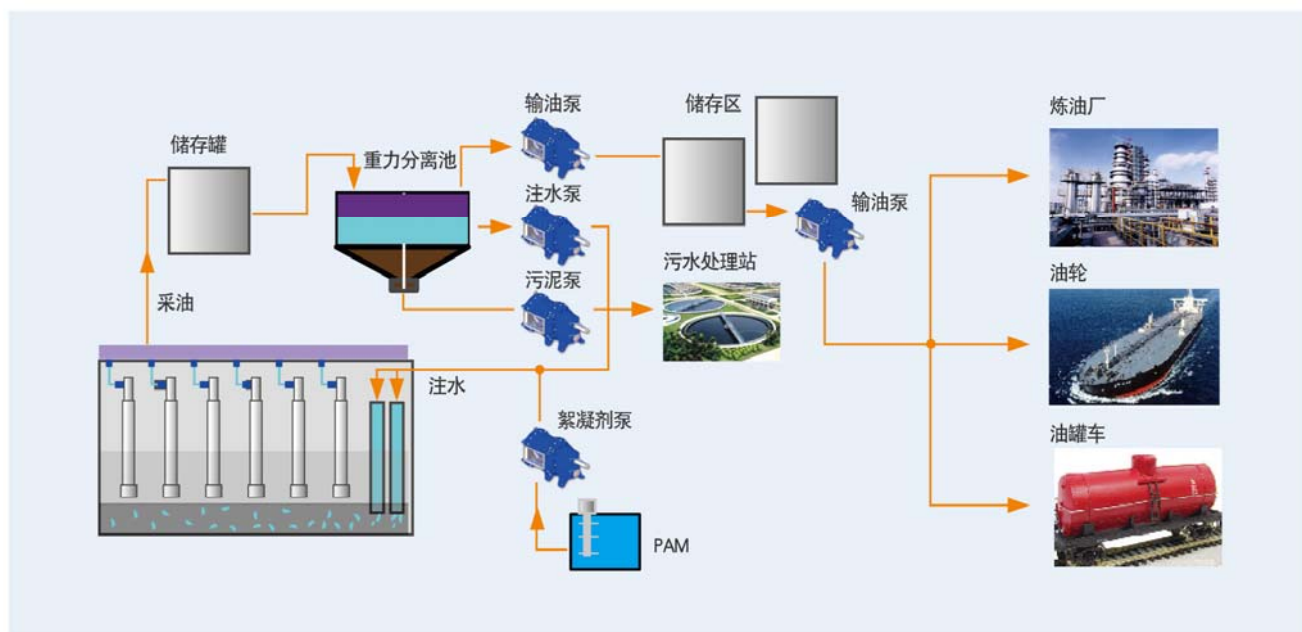
罗博思达转子泵在污水处理领域应用流程

Lobepro Pumps in Water Treatment Process



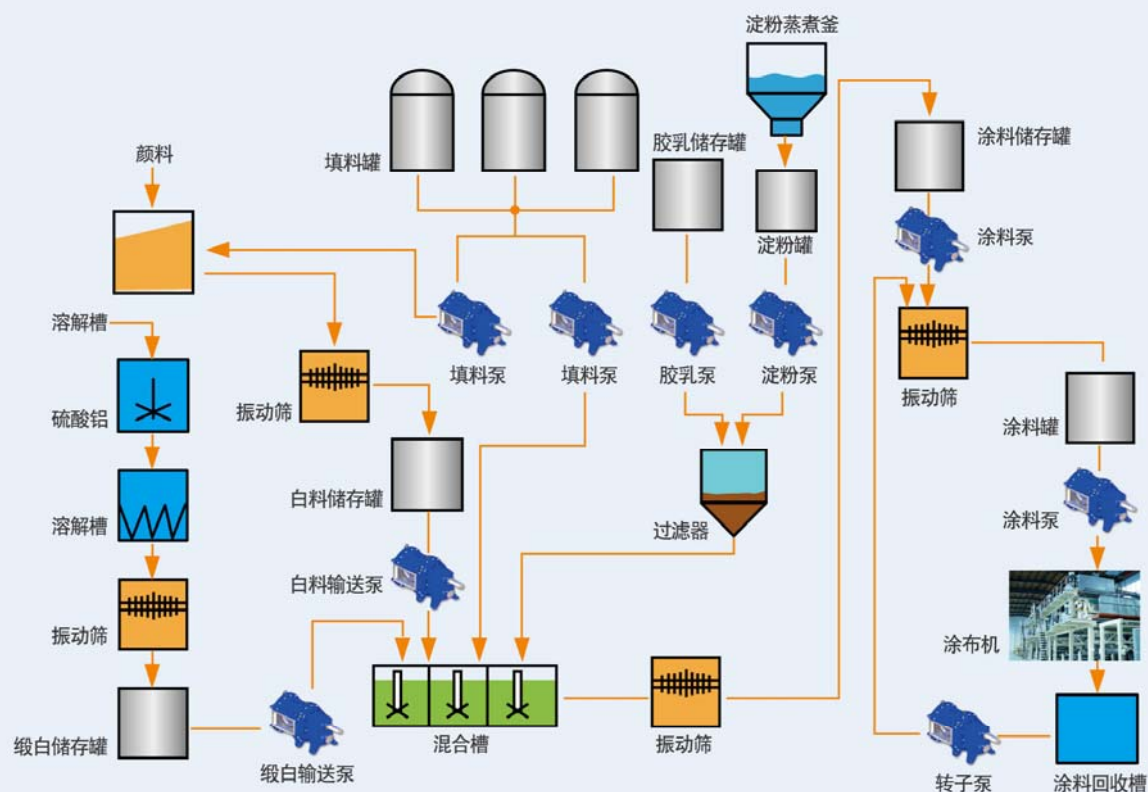
罗博思达转子泵在油田采油应用流程

Lobepro Pumps in Oilfield Process



罗博思达转子泵在造纸工业应用流程（以下为部分工艺段）

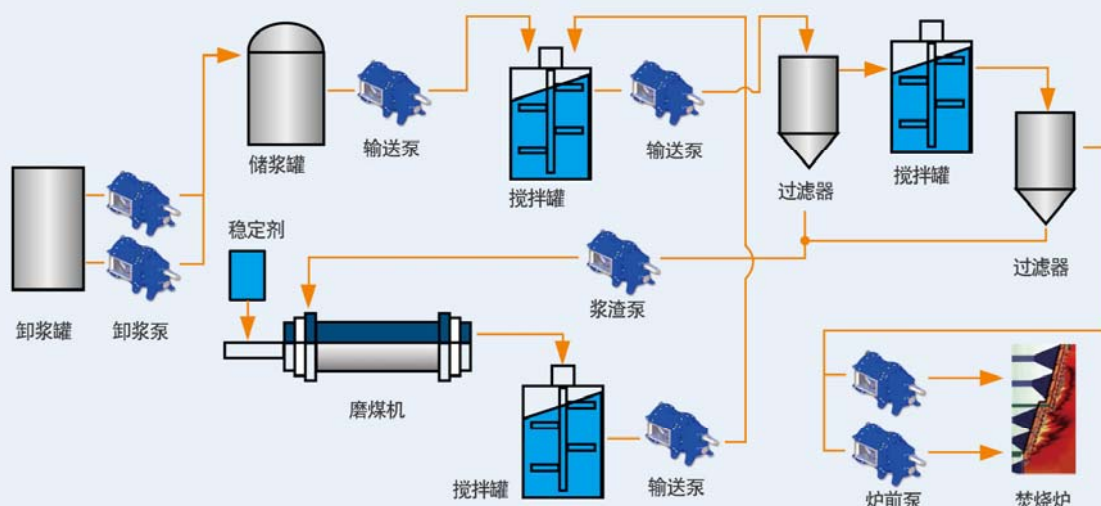
Lobepro Pumps in Paper & Pulp Industry Process



注：工艺中产生的污水、污泥均可用转子泵输送，不再标注

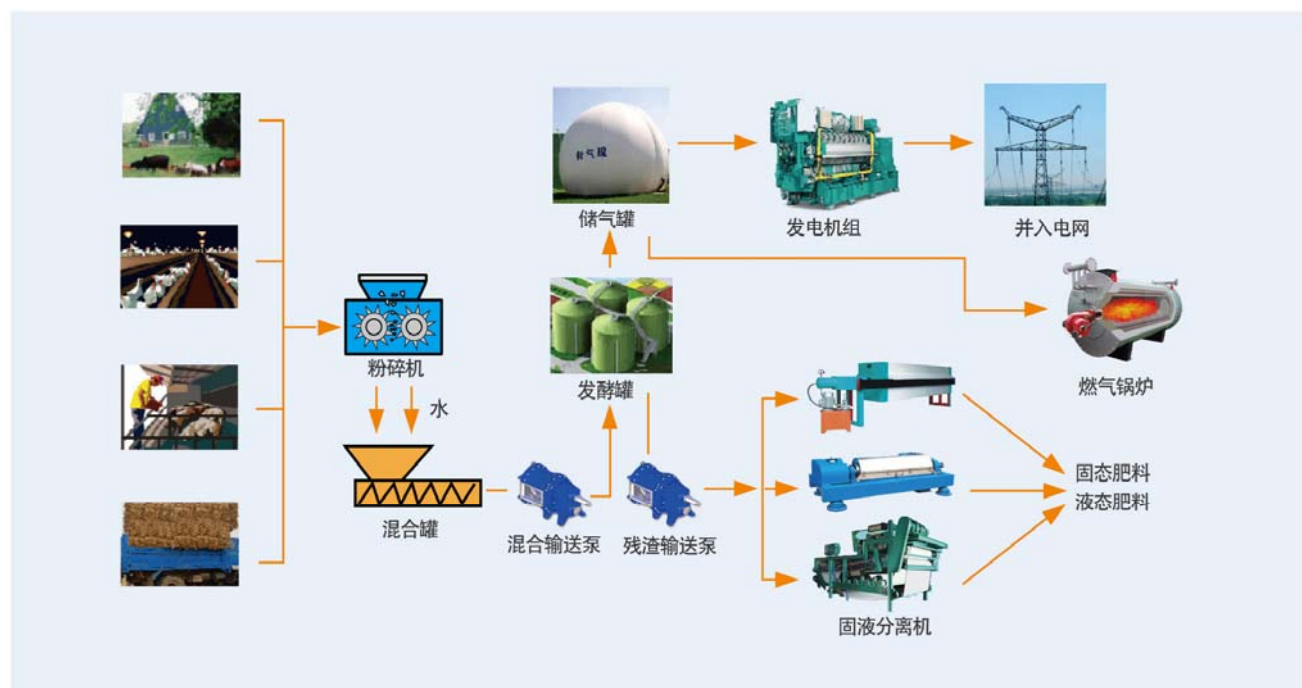
罗博思达转子泵在电厂水煤浆发电应用流程

Lobepro Pumps in Power Plant Water Coal Slurry Process



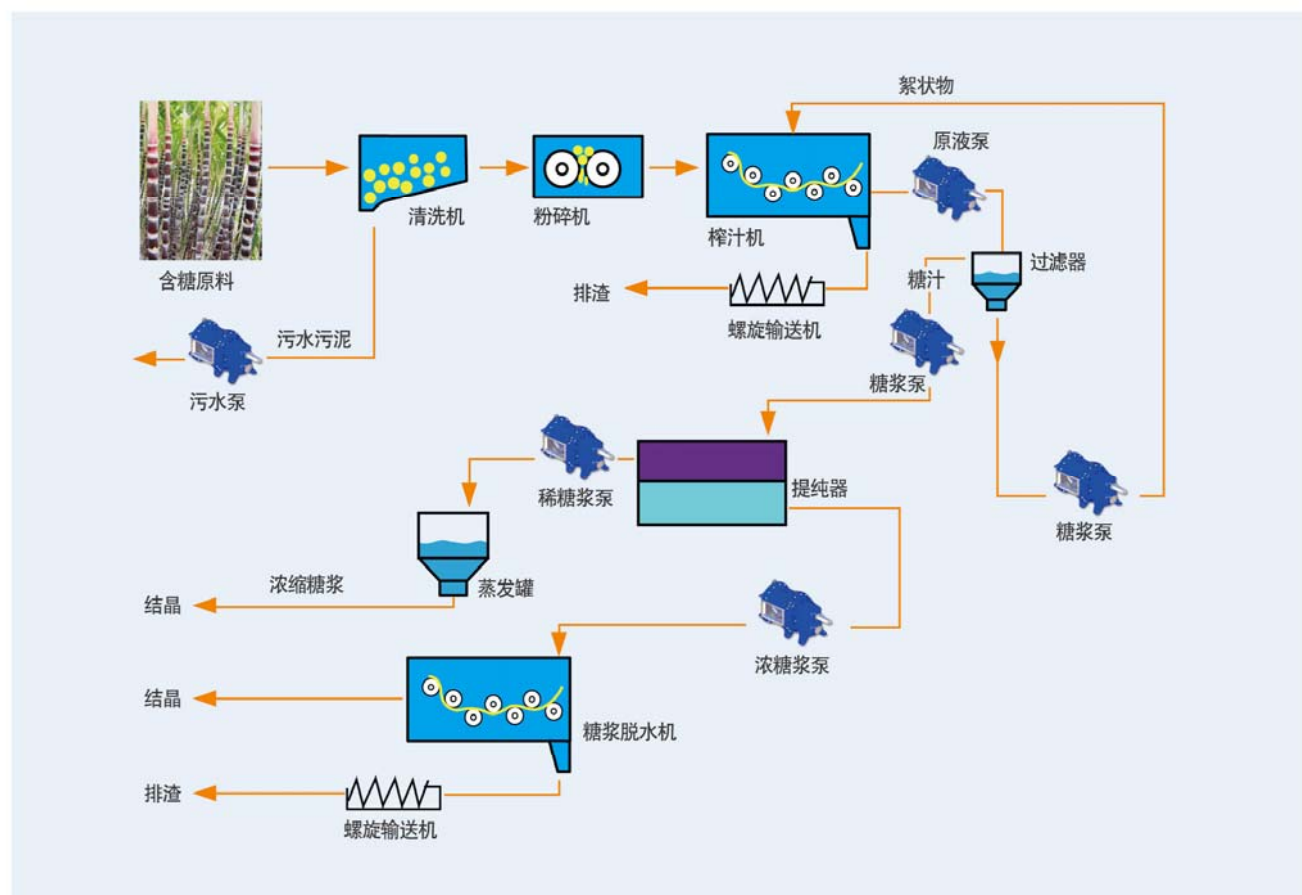
罗博思达转子泵在沼气领域应用流程

Lobepro Pumps in Biogas Process



罗博思达转子泵在制糖工业应用流程

Lobepro Pumps in Sugar Industry Process



罗博思达转子泵在真空排污领域应用流程

Lobepro Pumps In Vacuum Drainage Process



罗博思达转子泵在建筑、基础建设领域应用流程

Lobepro Pumps In Wellpoint Dewatering Process



罗博思达转子泵及系统

罗博思达产品代理商
lobepro Product Partner



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