

#### 大连宏亚泵业有限公司 Dalian Hongya pump industry Co., Ltd

大连宏亚泵业有限公司成立于 2000 年,是一家集研发、设计、生产制造为一体的专业纸浆泵生产企业,公司拥有国际一流的纸浆泵生产工艺,引进国际一流的水力模型结构,产品广泛的应用于:造纸业、制糖业、城市排污以及其他流体介质输送领域。

我公司生产的纸浆泵技术成熟,安全可靠,易于维护,同型号部件具备可互换性,大大减少用户备件库存成本压力。近年来,我公司积极的服务于知名造纸企业: **效龙纸业(国内生产基地,东莞、太仓、唐山、天津、重庆、沈阳、泉州、乐山,以及美国、越南生产基地)、亚太森博纸业、金光APP、山东太阳纸业、广东造纸厂等**,为客户提供工艺流程中关键泵及备件的解决方案,深受客户青睐,客户由原来的唯一采购来源变为可选择性采购,降低客户采购成本的同时避免了单一供货渠道供应不足导致的停机风险。与此同时,我们也大力发展国外市场,产品先后出口美国、加拿大、南非、葡萄牙及东南亚国家,客户的反馈证实我们的产品完全与国际一流品牌纸浆泵媲美。

完善的质量体系认证及先进的制造设备是我们产品质量的基础,丰富的纸浆选型经验是我们服务客户的保障。在高效、创新、采购成本、使用寿命方面,我们将竭诚为广大客户提供纸浆流体的整体解决方案。

欢迎五湖四海的朋友前来我公司参观、考察。

Dalian Hongya pump industry Co., Ltd, established in 2000, is a comprehensive company integrated with development & research, design and full facilities, the company has the international first-class pulp and paper pump technology, and introduced synchronously excellent hydraulic model from european, the products have been widely applied in pulp and paper, sugar and other fluid condition.

Our paper & pulp pump is mature, safe and reliable, easy to maintain, the same model parts have the interchangeability, greatly reduce the regular spare parts inventory. In recent years, our company actively serve the well-known papermaking enterprise, China nine dragons paper, Asia symbol, APP group, Shandong Sun Paper, Guangdong paper etc., to provide clients with the technological process of key pump and spare parts solution, favored by customers, all our customers are from the single source of procurement into alternative procurement scheme, which reins cost of purchasing and avoid the off-time risk caused by lacks of replacement parts.

The excellent quality assurance and advanced facilities are available to provide users with safe, efficient, environmentally-friendly and energy-efficient solutions to fluid delivery. We will offer our best pump and service to our clients in respect of efficient, innovation, procurement scheme and pump life-cycle cost.

Welcome all friends all over world to visit our company.

#### 埃尔泰特 AK系列纸浆泵 HONG AIRTIGHT AK Series



埃尔泰特, 造纸工业用泵一站式解决方案 Airtight, one step pump solutions for pulp & paper industry

具备为造纸整体工艺流程提供泵选方案能力 Complete pumps program for the entire pulp and paper processing

> 泵效率最高可达90% Efficiencies of up to 90%

#### 适用于纸浆浓度最大至18% Consistency of up to 18%

如果您是造纸厂的设备运行主管或者是正在建设中的造纸厂的项目负责人,在大连宏亚泵业有限公司,您将会找到整体的纸浆泵选型解决方案,我们的埃尔泰特造纸系列泵,将根据您的造纸工况流程为您提供一站式的解决方案。

If you are from designing institute or take responsible for operation or maintenance of pulp and paper mill, or in charge of project for construction of a greenfield pulp and paper mill, here you can find a full line-up of our most powerful and most reliable pulp and paper pumps. Airtight will provide one-step solution for various pump selection according to your application.

# 埃尔泰特纸浆及造纸行业泵概述

AIRTIGHT Pump overview for Pulp & Paper Industry

#### AK 系列 端吸单级离心泵 AK series end suction single stage centrifugal pumps

可以作为常规的纸浆提取泵,适用于含有含有较大随机污染物,纸浆浓度 8% 以下的液体。同时也是白液和黑液提取的理想选择。

A conventional pump for transferring pulp in which contains bigger solids and long fibers, stock up to 8% consistency. It is also a best solutions for white liquor and black liquor application.



#### 主要参数/Key parameters

ASTM 耐磨材料

流量: 9000m³/h

扬程: 160 m

设计压力: 25bar

效率可达: 90%

温度: 260°C

ASTM Highly wear-resistant material

Flow rate: up to 9000 m<sup>3</sup>/h

Head: up to 160 m

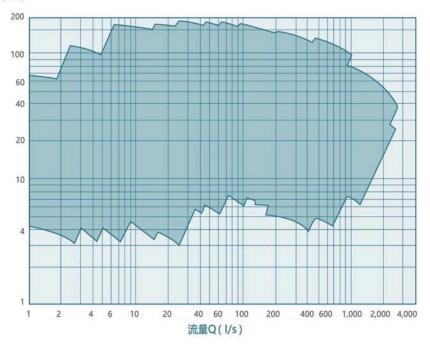
Delivery pressure: up to 25 bar

Efficiency: up to 90% Temperature up to 260° C 根据介质的不同,叶轮可以选择闭式叶轮,特殊开式叶轮,开式叶轮,低脉冲叶轮及无堵塞漩涡式叶轮,材料执行 ASTM 标准,超耐磨材料的选择,在不同工业中体现出可观的经济效益。

Single-stage centrifugal pumps with closed, special open, open impeller, low pulse impeller, or vortex impeller, also available in highly wear-resistant design. Various material combinations are according to ASTM and outstanding economic efficiency in many different applications.

#### AK型 性能范围 AK type performance range

#### 扬程H(m)



## AKN 系列端吸单级离心漩涡泵 / 粗筛工段用泵 AKN series end suction single stage centrifugal pumps/coarse screening pumps

该泵所选配的"高效无堵塞涡流式叶轮",应用于含有较长,大固体颗粒的液体。 Non-clogging vortex impeller is suitable for liquids containing long and large solids.



#### 主要参数/Key parameters

流量: 2000 m³/h

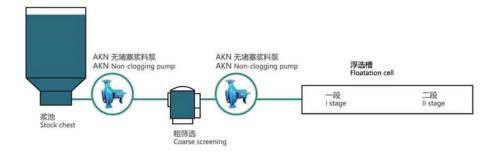
Flow rate: up to 2000m3/h

扬程: 90m

Head: up to 90 m

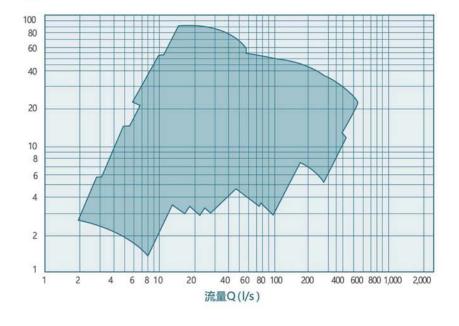
压力: 16bar

Pressure: up to 16bar



#### AKN型性能范围 AKN type performance range

#### 扬程H(m)



#### AKW 系列端吸单级离心渣浆泵 / 卸料工段泵 AKW series end suction single stage centrifugal pumps/unloading pumps

该泵所选配的"耐腐耐磨特殊开式叶轮",可以应用于浓度小于 70% 的含有较大随机污物的非纤维浆料。ASTM 标准高材质的选择可以有效的延长过流部件的使用周期,减少停机维护次数,提高经济效益。该泵是"碎浆机"下第一选择。

Wear-resistant open impeller is suitable for this pump, and it make pump capable for non-fibrous slurries up to 70% consistency containing large particles.ASTM high material can extend life cycle of fluid parts which resulting in reduce shut down and maintenance time, According improve economic returns. It is the priority selection for a pump application running under crushing equipment.



#### 主要参数/Key parameters

流量: 7000 m³/h

扬程: 110m

压力: 16bar

悬浮纤维浓度: 最大 8%

温度: 180°C

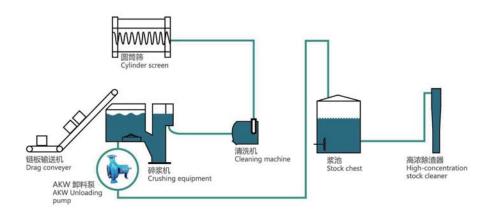
Flow rate: up to 7000m3/h

Head: up to 110 m

Pressure: up to 16bar

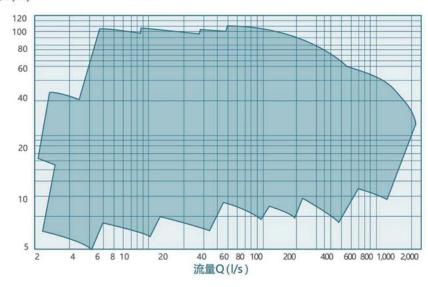
Stock up to 8% consistency

Temperature up to 180° C



#### AKW型性能范围 AKW type performance range

#### 扬程H(m)



#### DSM 系列轴向剖分双吸低脉冲泵 / 冲浆泵 DSM series double-flow pumps/Fan pumps

该泵已被优化用于纸浆和造纸工业作为头箱送料泵或清洁泵。为造纸行业应用所特殊设计的叶片,使其效率可达 90% 以上及低脉冲特性。

It have been optimized for using in the pulp and paper industry as headbox or cleaner pumps. They feature efficiency of over 90% and low pulsation due to the special rotor blades developed especially for the pulp and paper industry.



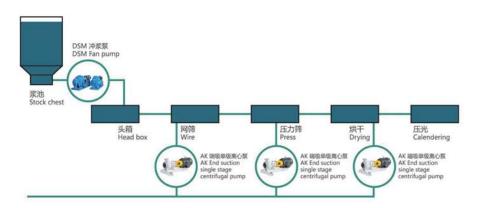
#### 主要参数/Key parameters

流量: 10000 m³/h | Flow rate: up to 10000 m³/h

扬程:180 m Head: up to 180 m 介质浓度:2% Consistencies: up to 2%

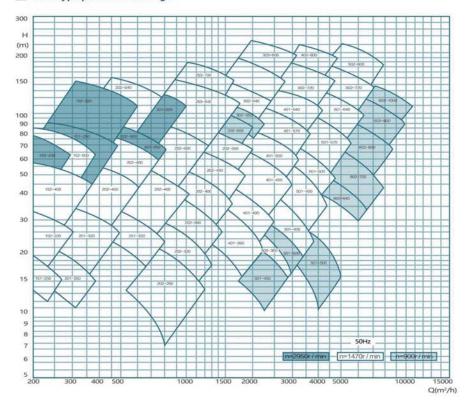
效率:90% Efficiency:90%

温度:-20°C~160°C Temperature:-20°C~160°C



#### DSM型性能范围

#### DSM type performance range



#### AKM 系列中浓泵 AKM series Medium-consistency pumps

适用于化学纸浆或机械纸浆以及 18% 浓度的二次纤维,效率高达 74%。在大多数应用中,它们可以在没有内部或外部真空泵的情况下运行。

Pumps convey the following media: chemical and mechanical pulp as well as secondary fibers with consistencies of up to 16%. and efficiency of up to 74%. In most applications, they can be operated without an internal or external vacuum pump.



#### 主要参数/Key parameters

流量: 2000 m³/h | Flow rate: up to 2000 m³/h

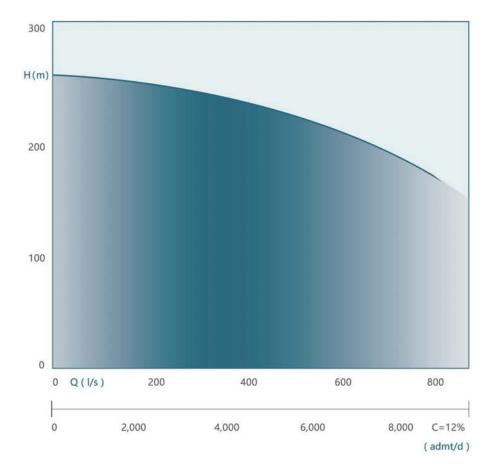
扬程: 250m Head: up to 250 m 压力: 25bar Pressure: up to 25bar

悬浮纤维浓度: 8%~18% Suspension is from 8% to 18%

温度: 180° Temperature up to 180°

单级中浓泵可应用于纤维悬浮液的含量高达 18%, 无纤维损耗。

Single-stage medium-consistency pump with fluidizer for fibrous suspensions up to 18% Due to the degassing system, there are no fiber losses.



#### AKS 系列排气自吸离心泵 / 污水提升泵 AKS degassing and self-priming centrifugal pumps/pit

同样有不同形式叶轮的可供选择,AKS 系列为介质中含有气体的工况设计了排气和自吸单元,因为常规的离心泵无法在输入管路已排空或泵送含有较高气体含量的液体时进行工作,所以我们专门设计了可靠的排气和自吸单元解决以上工况中的问题。

Convey media with a high gas content. Thanks to the impeller tailored to each liquid, they are also well suited to convey viscous media and media containing solids. AKS series designed the degassing and self-priming units for the gas contained in the medium. Since conventional centrifugal pumps cannot work when the input pipeline has been emptied or the liquid with high gas content is pumped, we specially designed reliable degassing and self-priming units to solve the problems in the above conditions.



#### 主要参数/Key parameters

单级离心泵配备排气单元 AKS series equipped with degassing unit

流量:9000 m³/h Flow rate: up to 9000 m³/h

扬程: 160 m Head: up to 160 m

压力: 25 bar Delivery pressure up to 25 bar

温度: 260° C Temperature up to 260°C

#### 自吸工况的可靠解决方案

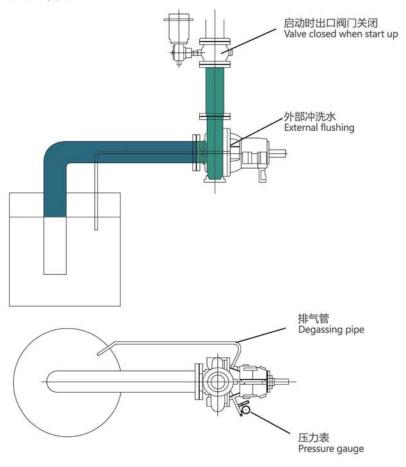
#### The best solution for Self - priming pump applications

对于泵在入口管路已排空始时的启动,AIRTIGHT AKS 泵自带排气和自吸单元,可以提供快速可靠的泵启动和持续运行。

注: 单端面机械密封配自冲洗方案应用于清洁液体工况时,需要鹅颈形式的入口管路。

AIRTIGHT AKS pump integrated degassing unit Ensure fast, reliable pump start up and constant operation when starting with an empty inlet pipe.

Note: if Single mechanical seal equipped with re-circulation flushing for clean liquids, requires goose-neck inlet pipe.



#### 宏亚泵业创新的轴封解决方案运行可靠并且降低成本

Hongya pump's innovation shaft seals offering reliable solution with low cost

#### 可信赖的宏亚泵业动力密封 Trusted Airtight dynamic seal

动力密封是专门针对于纤维浆料设计的,同时也适用于清洁的,粘性的,非纤维 浆料或含有大固体颗粒的液体。动力密封不需要外部密封水并且无泄漏。宏亚泵 业动力密封适用于泵吸入扬程是正压并且温度低于在大气压力下沸点的工况。

Custom - designed for fibrous slurries, but also suitable for clean, viscous or non - fibrous slurries and liquids containing large solids. No external sealing water required, and it does not leak. Suitable for applications with positive pump inlet head and a temperature below boiling point in atmospheric pressure.



#### 优化的宏亚泵业单端面机械密封腔 Optimal bore Hongya optimized single mechanical seal

单端面机械密封以及优化的密封腔是专门针对于浓度 8% 以下的纤维浆料设计的, 当泵吸入端液位压力高于大气压,输送浓度8%以下的纤维浆料不需要外接冲洗水。 宏亚泵业单端面机械密封同时也适用于清洁的,粘性的,以及含有大固体颗粒的液 体。单端面机械密封适用于液体温度比大气压力下的沸点低 10 ℃的工况。

Custom - designed for fibrous slurries up to 8% consistency without flushing water, with positive pump suction head and specially designed airtight impeller balancing holes. Suitable for clean or viscous liquids and liquids containing large solids. Liquids temperature of 10 °C below boiling point in atmospheric pressure.



#### 优化的宏亚泵业双端面机械密封腔

#### Hongya optimized double mechanical seal

双端面机械密封及优化的密封腔设计,用于各种浓度和粘稠度的清洁的,粘性的,纤 维浆料,非纤维浆料以及含有大固体颗粒的液体。泵吸入口液位可以是正压或者负压, 叶轮可以开设或不开设平衡孔。当泵送磨蚀性的非纤维浆料或含有大固体颗粒的液体 时,叶轮通常不会开设平衡孔。双端面机械密封适用于温度 180°C以下的工况。 Designed for all consistencies and concentrations of clean, viscous or fibrous slurries, non fibrous slurries and liquids containing lager solids. Negative or positive pump suction head The impeller can be equipped with or without balancing holes In applications where abrasive non - fibrous and large solids containing liquids are pumped, the impeller typically does not have balancing holes Temperatures of up to 180 °C



#### 传统道料密封 Classic gland packing

填料密封不带密封液设计,用于泵吸入扬程为正压的清洁液体工况。叶轮需要开设 平衡孔。密封保持一定的泄漏量来确保运行正常,这就意味着较高的运行和环保成本。 填料密封还可以安装从泵出口管路引出的泵送液体自循环冲洗,应用于泵吸入扬程 是负压或者温度高于沸点到 140 ℃以下的工况。对于粘性、纤维浆料或者非纤维浆 料以及含有大固体颗粒的液体,填料密封需要外部密封液防止泵送液体进入密封区。 Designed in accordance with ISO dimension standards. Classic standard stuffing box cases cover.Requires a sleeve to protect the shaft from corrosion and wear.Reliable operation, but small (50 drops/minute) leakage required by seal/sleeve lubrication. Requires regular supervision and maintenance. Suitable only for light - duty application, e.g. clean liquids, low pressure, low temperature. Easy maintenance, without having to open the pump, due to a split aland design.

# DMC 系列卧式多级泵 (节段泵)

#### DMC series horizontal multistage centrifugal pump

DMC 系列泵是模块化设计的径向剖分、节段式、卧式多级泵。适合输送纯净的或稍有污染的,热 的和冷的,化学中性的和腐蚀性的介质。

DMC pumps are horizontal, radially split ring section pumps of modular design. DMC pumps are suitable for pumping clean or slightly polluted, hot or cold, chemically neutral or aggressive liquids.



#### 主要性能参数 /key Operating Date

口径:40-200

流量:20-800 m3/h

扬程:1,600m

压力:180bar

温度:180℃

Pump sizes: 40 to 200

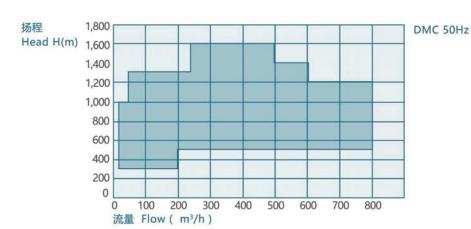
Capacities: 20 to 800 m3/h

Heads: up to 1,600 m

delivery pressure up to 180 bar

Temperature up to 180°C

#### DMC 性能范围 DMC Perfotmance Range



#### 应用领域

#### The design is ideal for

- 纸厂里水针泵、冲洗水、冷凝水泵
- 锅炉水温度可达180℃,不需预暖泵
- 电站和一般工业冷凝液的输送
- 海水淡化工程 (反渗透方法)
- 用于联合循环电站和工业自备电厂辅助系统用泵



- In paper mills needle pumps, backwashing pumps,flushing pumps,etc.
- Boiler feed duties up to 180°C pre-warming not required
- Condensate service in power stations and industrial plants
- · Desalination(Reverse Osmosis)
- Auxiliary services within combined-cycle and industrial power plant

#### 广泛的服务领域和应用范围

#### **Extensive Knowledge in Products and Processes**





大连宏亚泵业有限公司能为各种类型的电厂提供产品,包括核电厂,化石燃料电厂,地热电厂, 太阳能热电厂,联合循环电厂,各类工业自备电厂。

我们能为亚临界及超临界火电厂提供锅炉给水泵,循环水泵,凝结水泵以及其他辅助系统用泵。

我们在流体输送领域具有丰富的专业知识,使我们的客户从中受益,我们致力于设计和提供更可 靠更低成本的流体解决方案,以满足日益发展的电力工业需求。

我们在效率和可靠性方面不断创造新的纪录,使我们的广大客户效益提高。

Dalian Hongya Pump Industry Co.,LTD offers products for all types of power plants-nuclear reactor,fossil fired,geothermal, solar power ,combined cycle,large and small industrial power plants.

We offer boiler feed pumps for subcritical and supercritical fossil fuel plants, cooling water pumps condensate extraction pumps and pumps for auxiliary services.

Providing technical expertise in a broad spectrum of pumping applications benefits our customers Engineering and implementing reliable, cost effective pumping solutions to meet the demands of a continually evolving power generation industry is our focus.

We have a successful track record of improving our customers' profitability by setting new standards in efficiency in reliability.

#### DMC 设计特点及优点 **Design Features and Benefits**

#### 轴封 Shaft Seal

可安装单端面或双端面机械密封,根据具体的 应用条件, 机械密封箱体可选用水冷或无冷两 种结构。

Single or double mechanical seal may be installed. Cooled or uncooled design according to specifications available.

#### 轴向推力轴承 **Axial Thrust Bearing**

甚至在极端操作条件下仍能 维持长使用寿命。成对安装 的风冷圆锥滚子轴承为标准 设计, 滑动轴承结构为可选 设计。

Designed for long life even under extreme operating conditions. Paired, fan-cooled taper roller bearings are standard. Sleeve bearing is available.

# **Heavy Bearing**

通过恒位油杯自动补 油润滑,风扇冷却是

With automatic lubrication using constant level oiler. Fan cooling available.

壳体支撑

**Casing Support** 

for large sizes or high temperatures.

脚支撑为标准设计,对于大规格和高温条件下可采用中心线支撑。

Foot mounted is standard. Centerline mounted is available

壳体由受限制的O型圈密封, 因此壳体密封 不受温度的迅速变化和高压的影响。

O型圈

**O-rings** 

Casing sealing by confined o-rings therefore unaffected by rapid temperature variations and high pressures.

#### 管口尺寸 **Branch Size**

通过外部的穿杠螺栓固定壳体,大的入口口径可以优化进口的流动状态,通过降低流道中的流 速达到减少噪音效果, 允许更高的力和力矩。

Large branch optimizes inlet flow is enabled by external positioning of the tie bolts. Reduced noise levels through low branch velocities. Higher forces and moments allowed.

#### 密封箱体 **Seal Housing**

可选择冷却或无冷的设计方案; 易于安装的水冷腔结构: 合理的 接口布置;冷却充分。

Can be cooled or uncooled design; easy access to cooling chamber; clearly arranged connections; intensive, uniform cooling.

#### 径向轴承 **Radial Bearing**

润滑油润滑的耐磨轴承为标准设 计; 滑动轴承结构为可选择设计。 Oil lubricated antifriction bearing is standard; sleeve bearing also available.

# Shaft

临界转速高于运转转速;极小的轴挠度。磨损区域受 到保护。转速可达4,000 rpm。

Critical speed is higher than operating speed;small shaft deflection. Areas subject to wear are protected.Running speeds up to 4,000 rpm.

#### 口环 **Wear Rings**

在整个泵使用期内维持泵的高效运行降低 维护费用,提高泵的可靠性和缩短停机时 间。叶轮带口环结构为可选设计。

Maintain high efficiency during pump life. Low maintenance cost, high availability and short down times. Impeller wear rings are optional.

#### 叶轮 Impeller

在低的NPSHa的情况下,有些规格的泵可选择首级双吸 叶轮。

In case of low NPSH available, first stage double suction impeller can be provided for selected pump sizes.



可选设计。

#### AK系列单级离心泵

#### AK series single stage centrifugal pump

① 部件号230叶轮,我们可以提供可靠高效的多种叶轮选择应用于各种工况,降低泵在生命周期内的成本,特别是能耗成本,运行成本以及停机成本。高强度,高可靠的Rotary-key叶轮驱动形式可以方便快捷的拆卸和装配降低了维护成本,Rotary-key自锁以及保持转动安全的功能。对泵运行中产生的轴向力不敏感。

Part no.230 Impeller, Hongya can supply versatile range Airtight impellers that are applied on different work condition, minimizing life cycle costs/energy cost/operation cost/downtime cost. Robust, reliable rotary-key can enable fast and simple dismantling and reassembly and helps minimize maintenance costs. Insensitive to axial force while pumps running.

②部件号135 耐磨板,外部可调节的耐磨板,可以方便快捷的调节叶轮间隙,保持持续的高效率并将泵生命周期成本最小化。

Part no.135 Side adjustable plate allows fast and simple impeller clearance setting, thereby, minimizing life cycle and ensuring continued high efficiency

动力密封单元:当泵在运行时,叶轮产生离心力, 在叶轮密封腔内形成液体环。这种液体环成为轴封, 防止泄漏。

Dynamic seal, When the pump is running, the expeller generates centrifugal forces which form a liquid ring in the expeller seal chamber. This liquid ring becomes the shaft seal and prevents leakage.



Pump on running



Pump not on running

寿命,从而降低泵生命周期成本。 **SAIRTIGHT** 旅旅報報 Case cover Expeller Stuffing box housing 付叶轮 后泵盖 Part no.162.2 Part no. 604 Part no. 451

③ 部件号102泵体,较大的泵采用双流道泵体减少了轴向力和轴挠度,以最大限度的提高轴承和轴封的使用寿命,从而降低泵生命周期成本。

Part no.102 Volute Casing, The larger pump adopts dual-flow structure, it can reduce axial force and deflection, thereby expanding life cycle of bearing and shaft seal to minimize the maintenance cost.

④ 部件号210轴, 重型轴使在填料函处的跳动最小化, 小于 0.05mm / 0.002in , 有助于延长轴封使用寿命,减少意外停机并降低维护成本。

Part no.210 Shaft, Heavy-duty shaft reduces deflection at stuffing box to <0.05 mm/0.002 in, it helps to extend shaft seal lifecycle and reduces un expected shut down and maintenance costs.

⑤部件号339轴承箱体单元,可靠的,简化的,重型轴承单元最大限度地减少意外停机,从而减少停机成本和维护成本。轴承单元包括油润滑和脂润滑可以全面满足各种需求:脂润滑可适用于温度120℃/250°产之内的工况;油润滑可适用于温度180℃/355°F

Part no.339 Bearing housing unit, Reliable, simplified, heavy-duty bearing unit minimizes unexpected shutdowns and reduces maintenance costs. Bearing unit includes oil and grease lubrication for all performance needs: grease lubrication for.

6 部件号 423/507 迷宫油封,轴承箱体两端安装了创新的非接触式轴承油封,由三部分组成:防尘盘,唇封和迷宫油封。 三重轴承防护可以防止润滑剂泄漏并阻止外部污染物进入轴承箱体。这种创新的防护解决方案延长了轴承单元使用寿命,将意外停机和维护成本最小化。

Part no. 423/507 labyrinth, Airtight adopts of innovative, non-contacting bearing isolators at the both ends of the bearing house consist of three elements: a deflector, a lip seal and a labyrinth. This triple bearing protection prevents lubrication leaks from the bearing house and keeps contaminants out. No contact between the lip seal and shaft when the pump is rotating also means no water, which extends the lifecycle of the unit.

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动力密封结构部件 Dynamic seal unit

#### 通用,可靠,高效的水力模型满足各种工况的需求

#### Versatile range of reliable and efficient impeller can meet various application demands

闭式叶轮,应用于泵送干净的液体或含有杂质的

Closed Impeller is used for pumping clean liquids or liquids containing some impurities.



开式叶轮,应用于随机污染物的液体,浓度可达

Open Impeller is designed for liquids containing solid particles, abrasive liquids or stock up to 8 % consistency.



特殊开式轮,应用于含有较大随机污染物的液 高效无堵塞涡流式叶轮,应用于含有较长,大固 体,浓度可以达8%。

Special Open Impeller is suitable for liquids containing bigger solid particles and long fibers, abrasive liquids or stock up to 8 % consistency.



低脉冲轮,应用于粘性小于4000cST\*的液体和

有低压力脉冲要求的工况。 Low Pulse Impeller is suitable for viscidity up to 4000cST\*, designed and manufactured to minimize pressure pulsations.



耐腐耐磨特殊开式叶轮,应用于浓度小于70%的

含有较大随机污物的非纤维浆料。 Wear-resistant open impeller for non-fibrous slurries up to 70% consistency containing large



体颗粒的液体。

Non-clogging vortex impeller for liquids containing long and large solids.



#### 材料选择

#### Materials available

111.07		The state of the s	IC .
双相不锈钢	ASTM	A890	Grade 3A
双相不锈钢	ASTM	A890	Grade 1B
双相不锈钢	ASTM	A890	Grade 5A
奥氏体不锈钢	ASTM	A743	Grade CF-8
奥氏体不锈钢	ASTM	A743	Grade CG-3M
奥氏体不锈钢	ASTM	A743	Grade CN-7M
奥氏体不锈钢	AVESTA	654 SMO*	

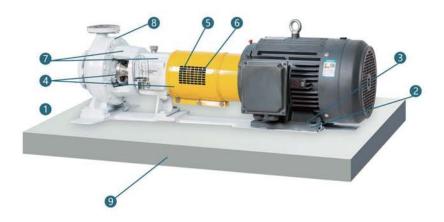
马氏体不锈钢	ASTM	A747	Grade CB7Cu-2
<b>臬基合金</b>	ASTM	A494	CW-6M
钛合金	ASTM	B367	C-3
灰铸铁	ASTM	A48	CL 35 B
球墨铸铁	ASTM	A395	60-40-18
碳钢	ASTM	A216	WCB
高铬铸铁	ASTM	A532	IIIA

#### 方便快捷的安装理念

#### Quick and easy installation concept

刚性的、无扭曲、热镀锌的泵基础板易于安装和在混凝土地基上灌浆。AIRTIGHT泵拥有多种安装选项,帮助降低生命周期成本。

Rigid, twist-free, hot-dip galvanized pump base plates are easy to install and grout on concrete foundations. AIRTIGHT pumps have a variety of mounting options to help reduce life cycle costs.



#### 保障运行安全和便于维护的设计

Safe operation and easy maintenance design

标准的结构钢材质的底座可以直接安装在地面上,作为安装在机座上或橡胶座上的可活动底座,现场不需要灌浆。该底座形式通过预先灌注混凝土进行了加固,将管路载荷通过结构钢底座传递到混凝土基础上。

The standard structural steel base can be mounted directly on the ground as a movable base mounted on the base or on the rubber seat. No grouting is required on site. The base form is reinforced by pre-filled concrete and the line load is transferred to the concrete foundation through the structural steel base.

①优化的框架尺寸和高标准化可以降低高达 30% 的混凝土使用量。由此带来的高强度、刚性基础显著的削减了振动,减少了磨损并延长了泵、密封、电机的使用寿命。

Optimized frame size and high standardization can reduce concrete usage by up to 30%. The resulting high-strength, rigid foundation significantly reduces vibration, reduces wear and extends the life of the pump, seal, and motor.

2 镀锌安装板允许安装大一规格的电机。

The galvanized mounting plate allows the installation of a larger size motor.

3 不锈钢调整块在联轴器对中时允许方便快捷的调整电机位置。地脚螺栓的可选项有焊接地脚螺栓、 灌浆地脚螺栓和化学锚栓。

The stainless steel adjustment block allows for quick and easy adjustment of the motor position when the coupling is centered. The anchor bolts are available with welded anchor bolts, grout anchor bolts and chemical anchors.

4 转子的护罩严格按照安全规范来设计。

The cover of the rotor is designed in strict accordance with safety regulations.

5 护罩两边的视窗允许在运行中安全方便的使用频闪仪检查联轴器。

The observation view on both sides of the shield allows safe and convenient use of the stroboscope to check the coupling during operation.

6 带加长段的多种弹性联轴器便于快速维护。

Multiple flexible couplings with extended sections for quick maintenance.

7后拉式设计便于维护时快速方便的打开进行检查。

The pull out design makes it quick and easy to open for inspection during maintenance.

8 预留顶丝孔使泵主要零部件的拆卸非常简便。

Retaining the top hole makes it easy to disassemble the main parts of the pump.

9 传统 ISO、API 标准底座满足需要标准安装的工况。

The traditional ISO and API standard base meets the requirements of standard installation conditions.

### AK系列泵配件 AK series spares



 迷宫油封 / 防尘盘
 部件号: 423/507
 轴承单元

轴承单元 部件号: 339
Bearing housing unit part no: 339



耐磨板 部件号:135 Sideplate part no:135



轴 部件号: 135 Shaft part no: 135



开式叶轮 部件号:230

闭式叶轮 部件号: 230 Closed impeller part no: 230



泵体 部件号: 102 Volute casing part no: 102



泵盖 部件号:161
Case cover part no:161