

盾构隧道泥浆泵 SHIELD TUNNELING SLURRY PUMP

专业生产渣浆泵70余年

SPECIALIZED IN SLURRY PUMP FOR
OVER 70 YEARS



强大泵业集团有限公司
KINGDA PUMP GROUP COMPANY LTD.

ABOUT US

企业简介

100余名

专业技术人员

300余名

中高级技术工人

30多项

专利技术



强大泵业成立于1948年，现已成为全球领先的高性能泵送解决方案供应商和制造商，适用于采矿、建筑、环保、疏浚、电厂、化工、农田、盾构、水处理和其他涉及泥浆或污水等行业。

Kingda Pump was founded in 1948, now it has been a global leading supplier and manufacturer of high performance pumping solutions for mining and mineral processing, aggregates, environmental protection, dredging, tunneling, water treatment and other industries that involve slurry or sewage.



强大泵业占地300余亩，总建筑面积8万多平方米，年可生产渣浆泵、疏浚泵、脱硫泵、盾构用泵等各类工业用杂质泵10000台套，各类泵配件2800T。

Kingda Pump covers an area of more than 50 acres, with a total construction area of more than 80,000 square meters. It can produce 10,000 sets of various industrial pumps such as slurry pumps, dredging pumps, desulfurization pumps, tunneling pumps, and various pump parts 2800T.



强大泵业拥有主要生产设备378台，特种设备73台。具备从模型制造、铸造、热处理、机加工、钣金、衬胶、装配、试验等全制造链的生产能力。

Kingda Pump has 378 sets of main production equipment and 73 sets of special equipment. It has the production capacity of the whole manufacturing chain from model manufacturing, casting, heat treatment, machining, sheet welding, rubber lining, assembly, testing, etc.



强大泵业为绿色系统集成，包含高效多相浆体输送泵的绿色设计、制造、试验平台建设，生产绿色产品及全生命周期绿色分析建设。

Construction of a green design platform including high-efficiency multiphase slurry pumps, Green manufacturing platform construction, Green test platform construction, Production of green products and construction of green analysis of the whole life cycle.



目前在国内，强大渣浆泵在市场占有率已达到60%，污水泵市场占有率已超30%，强大泵业在国内外享有盛誉。

At present, in China, Kingda company's slurry pump market share has reached about 60%, and the sewage pump market share has exceeded 30%. Kingda pump enjoys a high reputation at home and abroad.

向世界级百年工厂奋进
ve to be a world-class century-old factory

HISTORY

企业发展历史



强大泵业集团始建于1948年其前身是石家庄恒大铁工厂
Kingda was founded in 1948, its predecessor was Shijiazhuang Hengda Iron Works

1948



转隶国家第一机械工业部直属厂改称第一机械工业部石家庄水泵厂
Subordinate directly to the First Ministry of Machinery Industry and renamed as Shijiazhuang Water Pump Works of the First Ministry of Machinery Industry

1964



改制为石家庄泵业集团有限责任公司
Restructured into Shijiazhuang Pump Industry Group Co., Ltd.

2000



改制为石家庄强大泵业集团有限责任公司
Restructured into Shijiazhuang Kingda Pump Industry Group Co., Ltd.

2006



强大泵业集团行唐泵业有限公司
Kingda Group Xingtang Pump Company Ltd.

2015



强大泵业集团有限公司
KINGDA PUMP GROUP COMPANY LTD.

至今

COMPANY CAPABILITY DESCRIPTION

公司能力介绍



成品库
Finished Product Warehouse



立体化自动仓库
Stereoscopic Automated Warehouse



台式热处理炉
Bench Type Heat Treatment Furnace



铸造工艺
Casting Process



CAE铸件模拟
CAE Casting Simulation



高压试泵站
Pump Test Station



除尘环保设备
Dust Free And Environmental
Protection Equipment



八米立式车床
8m
Vertical Lathe



龙门钻铣中心
Gantry-moving Type Milling
Machining Center

模型制造采用数控设备加工，能有效保证零件精度；铸造熔炼设备拥有中频感应炉10台，单体铸件重量可达28吨；炉前成份检验采用直读光谱分析仪，成份检测精确，可有效保证铸件质量；造型采用树脂砂生产，公司拥有连续混砂机设备6台，单机混砂能力40t/h；抛丸清理机5台，喷砂房1座，清理毛坯单件最大重量30吨；25t/h自动砂处理线2条，台车式热处理炉5台，可满足30吨以下零件的软、硬化热处理要求。

加工设备金属切削机床100余台，其中8米立车3台， $\phi 130$ - $\phi 200$ 落地镗铣中心3台，立式、卧式加工中心20余台；增置HL-16000型硬支承平衡机一台，可完成16吨以下叶轮的动平衡实验要求，淘汰了平衡架式静平衡方式，显著提高水泵转子件的旋转精度和水泵的运行可靠性。

The Pattern is processed by numerical control equipment, which can effectively ensure the accuracy of the parts. Casting and Melting equipment has 10 intermediate frequency induction furnaces, weight of a single casting can reach 28 tons. Direct Reading Spectrum Analyzer is used for the component inspection before the furnace, which can effectively guarantee component detection and casting quality. Moldings are produced with resin sand, 6 continuous sand mixers, capacity of 40t/h. There are 5 shot blasting machines, 1 sandblasting room, 2 automatic sand processing lines and 5 trolley-type heat treatment furnaces, handle single casting 30MT max.

Machining Workshop has more than 100 metal cutting machine tools, including three 8-meter vertical lathes, three $\phi 130$ - $\phi 200$ floor boring and milling centers, and more than 20 vertical and horizontal machining centers. HL-16000 type balancing machine complete meet dynamic balance test requirements of impellers under 16 tons, significantly improved the rotation accuracy and operation reliability of the pump.

采用先进的氮化硼刀具和合理的切削工艺，高效解决了高硬度耐磨材料的加工问题，大幅度提高了加工效率和精度。钣焊车间、衬胶车间设备齐全；拥有各类先进试验、测量、分析仪器设备500台。全部设备控制基本实现数字化（数控、数显），构成完整的生产工艺装备体系，具备强大的生产制造能力。

公司具有年产万吨的铸造能力，能生产多种黑色和有色金属材料，如灰铁、球铁、铜、铝、不锈钢、硬镍、高铬等金属；公司设有室内高压试泵站和低压试泵站，保证了出厂前产品性能100%合格；公司拥有各类先进的机加工数控设备，具有对大型旋转体零件进行动平衡测试的能力，保证了产品的精度和质量。

Using advanced boron nitride cutting tools and reasonable cutting technology, it efficiently solves the processing problem of high hardness and wear-resistant materials, and greatly improves the processing efficiency and precision. The welding workshop and the rubber lining workshop are well-equipped; there are 500 sets of various advanced testing, measuring and analyzing instruments and equipment. All equipment control is basically digitalized (digital control, digital display), forming a complete production process and equipment system, with strong production and manufacturing capabilities.

The company has an annual output of 10,000 tons of casting capacity, and can produce a variety of ferrous and non-ferrous metal materials, such as gray iron, ductile iron, copper, aluminum, stainless steel, hard nickel, high chromium and other metals; the company has an indoor high-voltage testing pump station and the low-voltage testing pump station, which ensure that the pump performance is 100% qualified before leaving the factory; the company has various advanced machining and digital control equipment, and has the ability to perform dynamic balance tests on large rotating spare parts, ensuring the accuracy and quality of the products.

WHY CHOOSE KINGDA

为什么选择我们



TECHNICAL SUPPORT

技术支持

强大与高校科研院所深度合作，持续加大新技术、新产品研发投入，实现产品升级换代。拥有国内首家渣浆泵研究实验室，并在厂区设有专门的产品研究中心，采用最先进的技术，提供快速有效的解决方案。

Kingda has in-depth cooperation with scientific research institutes of universities, continues to increase investment in research and development of new technologies and new products, and realizes product upgrading. It has the first slurry pump research laboratory in China, and has a special product research center in the factory area, using the most advanced technology to provide fast and effective solutions.



PROFESSIONAL TEAM

专业团队

工贸一体的大型中国工厂，采用PLM、ERP等数字化管理系统，提升精细化管理水平，全时订单进度可视化。

The large-scale Chinese factory integrating industry and trade adopts digital management systems such as PLM and ERP to improve the level of refined management and visualize the progress of orders all the time.



QUALIFICATION

资质证书



AFTER-SALES SERVICE

售后服务

拥有专业的售后工程师团队，7*24小时在线快速响应。

With a professional after-sales engineer team, 7*24 hours online quick response.

COMPANY PRESENTATION

公司展示



CASTING WORKSHOP 铸造车间



CASTING WORKSHOP 铸造车间



MACHINING WORKSHOP 机加车间



ASSEMBLY WORKSHOP 装配车间



MEETING ROOM 会议室



RECEPTION ROOM 会客室



DINING ROOM 员工食堂



STAFF ACTIVITY AREA 员工活动区

QUALITY INSPECTION

质量检验

公司设有质检试验台，严格检验进厂的原/辅材料和产品零件，对送检样品按国家标准进行抗拉强度、延伸率或者冲击试验、硬度检测、金相显微组织，并出具相应报告，对新材料、新工艺、新技术进行理化试验及分析研究，对轴料化学成分分析，确保数据准确，炉前材质化验，保证每炉次的最终成分在内控范围内。

The company has a quality inspection center to inspect the raw/auxiliary materials and product parts strictly, includes conduct tensile strength, elongation or impact tests, hardness tests, and metallographic microstructures on the samples submitted for inspection according to national standards, and issue corresponding reports, conduct physical and chemical tests and analytical research on new materials, new processes, and new technologies, analyze the chemical composition of the shaft material to ensure accurate data, and test the material before the furnace to ensure that the final composition of each furnace is within the internal control range.

QUALITY INSPECTION
BEFORE FURNACE
炉前质检



MACHINING PROCESS QUALITY INSPECTION 机加质检



机加工时执行“首件检验”、“序检”和“完工（成品）检验”三道工序，及时发现每个工序可能存在的质量问题，确保所检验零件的数据一致性，并验证使用的测量器具的有效性和准确性。

根据产品图纸和加工工艺要求，比对工件的尺寸、形状、表面质量等关键指标，确保产品达标。如发现不合格品，及时剔除，以防其进入下一个工序或下一道工艺环节，达到对工序的有效控制。

During the machining process, we carry out three inspection procedures: " Initial Production Inspection ", " In Process Inspection " and " Final Quality Control ", to promptly discover possible quality problems in each procedure and ensure the data consistency of the inspected parts, and verify the validity and accuracy of the measuring instruments used.

According to the product drawings and processing technology requirements, compare the key indicators such as the size, shape, and surface quality of the workpiece to ensure that the product meets the standard. If unqualified products are found, they shall be eliminated in time to prevent them from entering the next process or the next process link, so as to achieve effective control of the process.

PUMP TEST STATION

试泵站

强大泵业集团装配车间建有测试精度达到国际标准ISO9906中的1级、GB/T3216中1级的试泵站，渣浆泵的试验能力和试验精度为国内第一。试泵站分为高压试验区 and 低压试验区，设有两个水池和七个试验台，所有试验台均配备有以下仪表：高精度的电磁流量计、压力传感器、多功能电力仪表。数据自动采集并实时处理、计算机网络共享数据、智能评定测试结果。

Kingda assembly workshop has built a performance test station with a testing accuracy that reaches level 1 in the international standard ISO9906 and level 1 in GB/T3216. Both the test capability and test accuracy of the slurry pump are the first in China. The pumping test station has a high-voltage test area and a low-voltage test area, includes 2 pools and 7 test benches. All test benches are equipped with the following instruments: high-precision electromagnetic flowmeters, pressure sensors, and multi-functional electric meters. Automatic data collection and real-time processing, computer network sharing data, intelligent evaluation of test results.



KSG/KSGH SERIES SLURRY DISCHARGE PUMP FOR SHIELD TUNNELING

KSG/KSGH 系列盾构专用排浆泵

单层壳体轴向吸入卧式离心泵，用于泥水盾构隧道内输送盾构机刀盘切削下来的岩石、粘土、砂砾等大直径物料。过流部件采用高强度耐磨材质，适用于输送强磨损，高浓度、大颗粒的渣浆；也可作为进浆泵使用。

Single-layer casing axial suction horizontal centrifugal pump, used to transport large-diameter materials such as rock, clay, gravel, etc. cut by the shield machine cutter head in the slurry shield tunnel. The flow-through parts are made of high-strength wear-resistant materials, suitable for conveying highly abrasive, high-concentration, large-particle slurry; it can also be used as a slurry feed pump.



产品参数

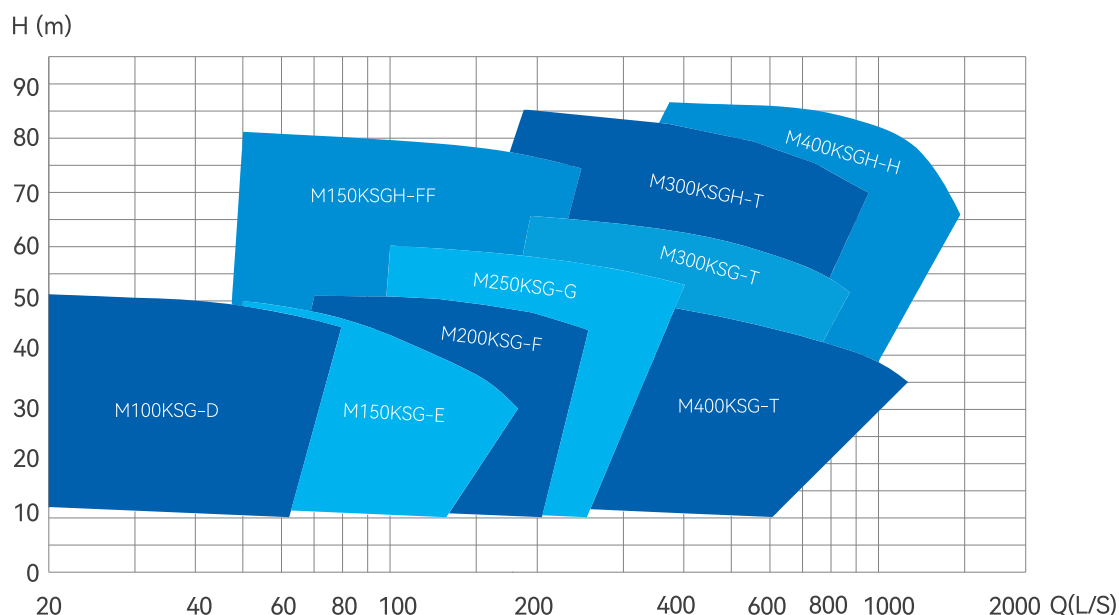
泵出口口径 (mm)	100~400
流量 (m³/h)	60~6000
扬程 (m)	10~85
材质	M

PRODUCT PARAMETERS

Discharge Diameter(mm)	100~400
Flow Rate(m³/h)	60~6000
Head(m)	10~85
Material	M

WORKING RANGE OF KSG/KSGH

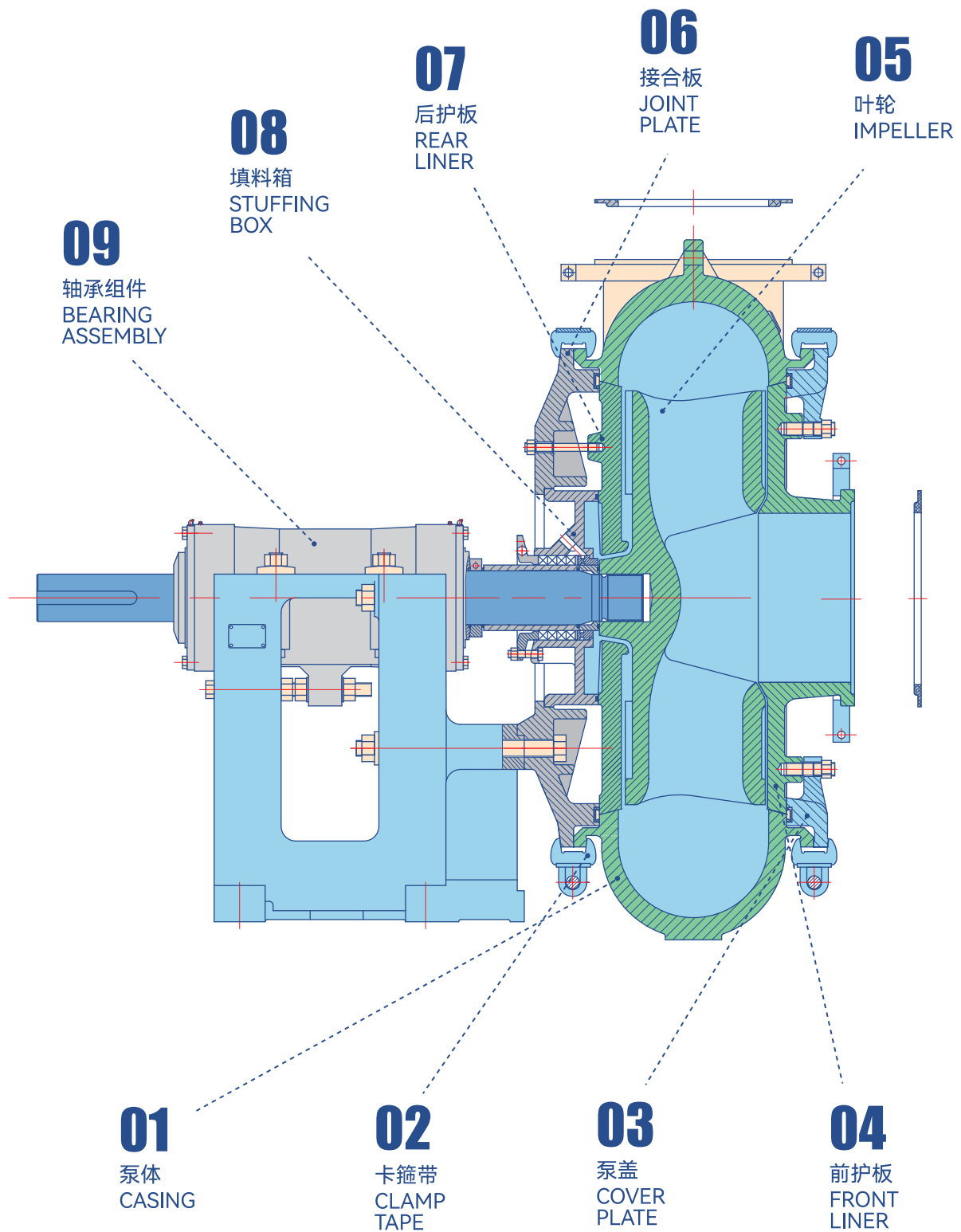
KSG/KSGH 系列 工作范围



ONLY FOR PRELIMINARY SELECTION
仅供初步选型用

KSG/KSGH SERIES CONSTRUCTION

KSG/KSGH 系列结构



TYPE KSG/KSGH SELECTION CHART AND PERFORMANCE

KSG/KSGH型谱及性能参数

型号 TYPE	允许配带 最大功率 ALLOWABLE MATING MAX POWER (KW)	材质 MATERIAL		清水性能 CLEAR WATER PERFORMANCE					
		泵体 CASING	叶轮 IMPELLER	流量 Q		扬程 HEAD H (m)	转速 SPEED n (r/min)	最高 效率 MAX (%)	汽蚀 余量 NPSH (m)
				(m³/h)	(L/s)				
M100KSG-D	60	M	M	36~252	10~70	3.5~51	600~1400	50	2.5~3.5
M150KSG-E	120	M	M	136.8~576	38~160	10~48	800~1400	60	3~4.5
M150KSGH-FF	260	M	M	180~900	50~250	35~80	500~1100	72	2~4
M200KSG-F	260	M	M	216~979.2	60~272	13~50	500~1000	65	3~7.5
M200KSGH-S	560	M	M	360~1296	100~360	28~80	500~950	72	2~5
M250KSG-G	600	M	M	360~1620	100~450	12~60	400~850	71	1.5~4.5
M250KSGH-G	600	M	M	612~2232	170~620	28~78	350~700	73	2~8
M300KSG-T	1200	M	M	504~3168	140~880	6~66	300~700	68	2~8
M300KSGH-T	1200	M	M	540~3600	150~1000	14~84	300~700	78	3~8
M350KSGH-TU	1200	M	M	360~3780	100~1050	19~72	300~500	71	3~6
M400KSG-T	1200	M	M	864~3816	240~1060	9~48	250~500	72	3~6
M400KSGH-H	1400	M	M	972~5994	270~1665	20~90	250~550	80	3~8.5

注:

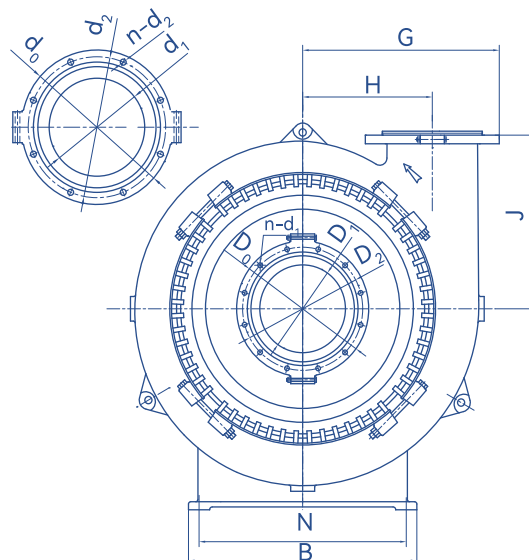
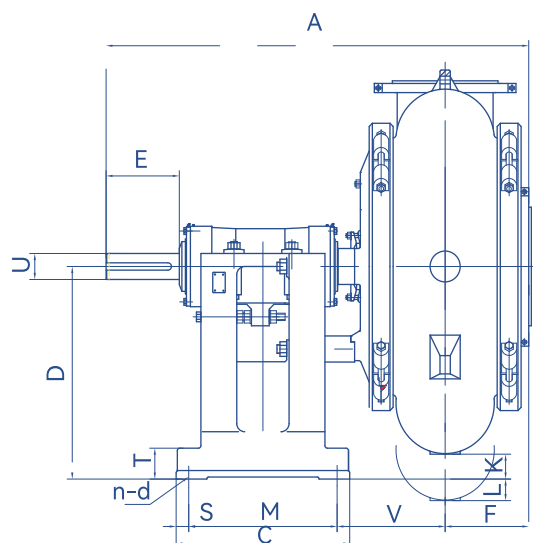
- “M”代表合金耐磨材料。
- 推荐流量范围 $50\% Q \leq Q \leq 110\% Q$ ($Q \approx$ 最高效率点流量)
- NPSH是指最高转速时, 推荐Q点所对应的NPSH值。

NOTE:

- “M”: alloy wear-resisant material
- Capacity range recommended : $50\% Q \leq Q \leq 110\% Q$ ($Q \approx$ capacity at highest efficiency point)
- NPSH: Appropriate to point Q recommended at highest speed.

OUTLINE AND INSTALLATION DIMENSION

外形 安装尺寸



型号 TYPE	A	B	C	D	U	E	F	G	H	J	K	L	M	N	V	T	S	n-d
M100KSG-D	1011	492	289	330	65	164	209	387	260	347	16	-	213	432	330	64	38	4-Φ22
M150KSG-E	1299	622	365	457	80	222	301	505	352	416	54	-	257	546	390	76	54	4-Φ29
M150KSGH-FF	1610	857	635	355	100	280	300	612	425	550	-	208	349	762	527	98	95	4-Φ35
M200KSG-F	1597	857	635	610	100	280	335	600	416	537	58	-	349	762	487	98	95	4-Φ35
M200KSGH-S	1774	920	780	450	120	280	338	672	475	626	-	206	640	760	455	90	70	4-Φ35
M250KSG-G	2016	1219	876	851	140	356	375	686	522	673	238	-	749	851	473	152	63	4-Φ41
M250KSGH-G	2062	1219	876	851	140	356	400	847	605	800	40	-	749	851	473	152	63	4-Φ41
M300KSG-T	2300	1150	1040	650	150	358	430	873.5	610	794	-	130	880	900	531	125	80	4-Φ48
M300KSGH-T	2448	1150	1040	650	150	350	510	1020	630	950	-	345	880	900	580	125	80	4-Φ48
M350KSGH-TU	2373	1460	1050	900	150	345	448	1065	765	1008	-	120	860	1200	649	150	95	4-Φ79
M400KSG-T	2320	1150	1040	650	150	350	439	943	692	921	-	274	880	900	537	125	80	4-Φ48
M400KSGH-H	2776	1392	1144	1067	180	409	630	1353	835	1250	-	106	920	1194	716	244	105	6-Φ67

型号 TYPE	吸入口法兰 SUCTION FLANGE				吐出口法兰 DISCHARGE FLANGE				泵 重 PUMP WEIGHT(KG)
	D ₀	D ₁	D ₂	n-d ₁	d ₀	d ₁	d ₂	n-d ₂	金属 METAL
M100KSG-D	305	152	260	8-Φ19	254	102	210	4-Φ19	610
M150KSG-E	368	203	324	8-Φ19	305	152	260	8-Φ19	1117
M150KSGH-FF	381	200	330	12-Φ25	318	150	270	12-Φ22	2600
M200KSG-F	457	254	406	8-Φ22	368	203	324	8-Φ19	2235
M200KSGH-S	457	254	406	8-Φ22	368	204	324	8-Φ19	3150
M250KSG-G	527	305	470	12-Φ22	457	254	406	8-Φ22	4450
M250KSGH-G	533	305	476	8-Φ29	483	254	432	8-Φ25	5000
M300KSG-T	552	356	495	8-Φ22	527	305	470	12-Φ22	5530
M300KSGH-T	650	400	600	12-Φ28	640	300	570	12-Φ39	9100
M350KSGH-TU	650	406	600	12-Φ28	600	356	540	12-Φ28	15929
M400KSG-T	705	457	641	16-Φ25	640	406	584	12-Φ25	13425
M400KSGH-H	754	508	696	16-Φ28	754	405	696	16-Φ28	18621

KSH SERIES SLURRY FEED PUMP FOR SHIELD TUNNELING

KSH 系列盾构专用进浆泵

双层壳体结构轴向吸入卧式离心泵；输送介质为含有固体颗粒的粘性浆体，也可用于输送强磨蚀的渣浆，过流部件内衬可更换。

Axial suction horizontal centrifugal pump with double shell structure; the conveying medium is viscous slurry containing solid particles, and it can also be used to convey highly abrasive slurry. The lining of the flow-through parts is replaceable.



产品参数

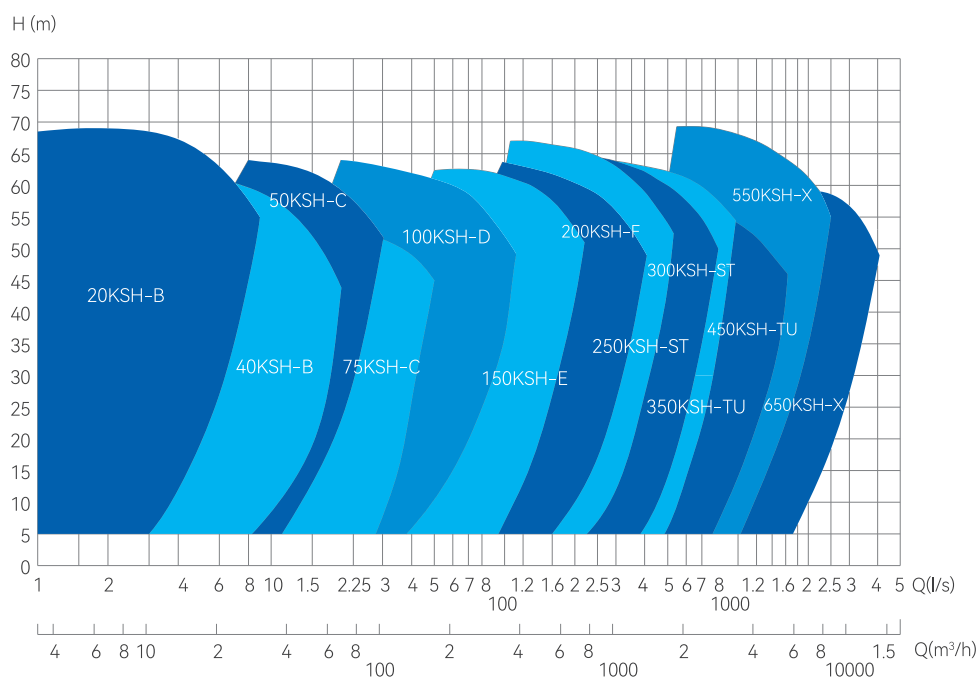
泵出口口径 (mm)	20~650
流量 (m³/h)	10~14000
扬程 (m)	10~70
材质	M/R

PRODUCT PARAMETERS

Discharge Diameter(mm)	20~650
Flow Rate(m³/h)	10~14000
Head(m)	10~70
Material	M/R

WORKING RANGE OF KSH

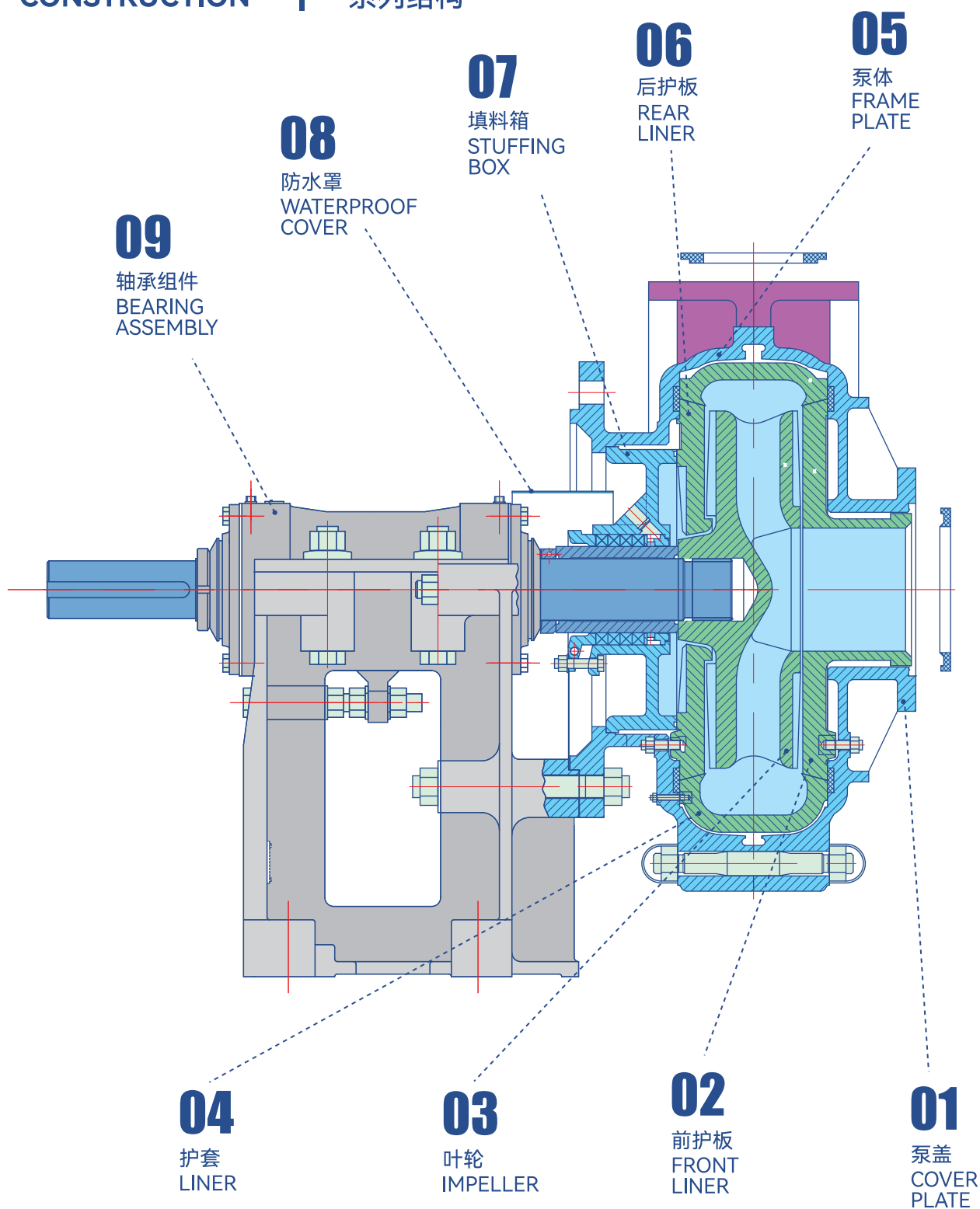
KSH系列工作范围



ONLY FOR PRELIMINARY SELECTION
仅供初步选型用

KSH SERIES CONSTRUCTION

KSH 系列结构



金属内衬渣浆泵脂润滑结构图
METAL LINER SLURRY PUMP CONSTRUCTION

TYPE KSH SELECTION CHART AND PERFORMANCE

KSH型谱 及性能参数

型号 TYPE	允许配带 最大功率 ALLOWABLE MATING MAX POWER (KW)	材质 MATERIAL		清水性能 CLEAR WATER PERFORMANCE					
		护套 LINER	叶轮 IMPELLER	流量 Q		扬程 HEAD H (m)	转速 SPEED n (r/min)	最高 效率 MAX (%)	汽蚀 余量 NPSH (m)
				(m³/h)	(L/s)				
M20KSH-B	15	M	M	12.6~28.8	3.5~8	6~68	1200~3800	43	2~4
M40KSH-B	15	M	M	32.4~72	9~20	6~58	1200~3200	48	3.5~8
M50KSH-C	30	M	M	39.6~86.4	11~24	12~64	1300~2700	58	4~6
M75KSH-C	30	M	M	86.4~198	24~55	9~52	1000~2200	74	4~6
M100KSH-D	60	M	M	162~360	40~100	12~56	800~1550	68	5~8
M100KSH-E	120								
M150KSH-E	120	M	M	360~828	100~230	10~61	500~1140	75	2~9
M150KSH-R	300								
M200KSH-F	260	M	M	612~1368	170~380	11~61	400~850	74	4~10
M200KSH-ST	560	M	M	540~1188	150~330	12~50	400~750	78	4~12
M250KSH-ST	560	M	M	936~1980	260~550	7~68	300~800	85	6
M300KSH-ST	560	M	M	1260~2772	350~770	13~63	300~600	80	3~10
M300KSH-T	1200								
M350KSH-TU	1200	M	M	1368~3060	380~850	11~63	250~550	82	4~10
M450KSH-TU	1200	M	M	2520~5400	700~1500	13~57	200~400	88	5~10
M550KSH-U	3000	M	M	2250~7740	625~2150	14~68	200~400	82	4.5~9.5
M650KSH-U	3000	M	M	3420~11880	950~3300	10~60	150~350	86	4.5~9.5

注:

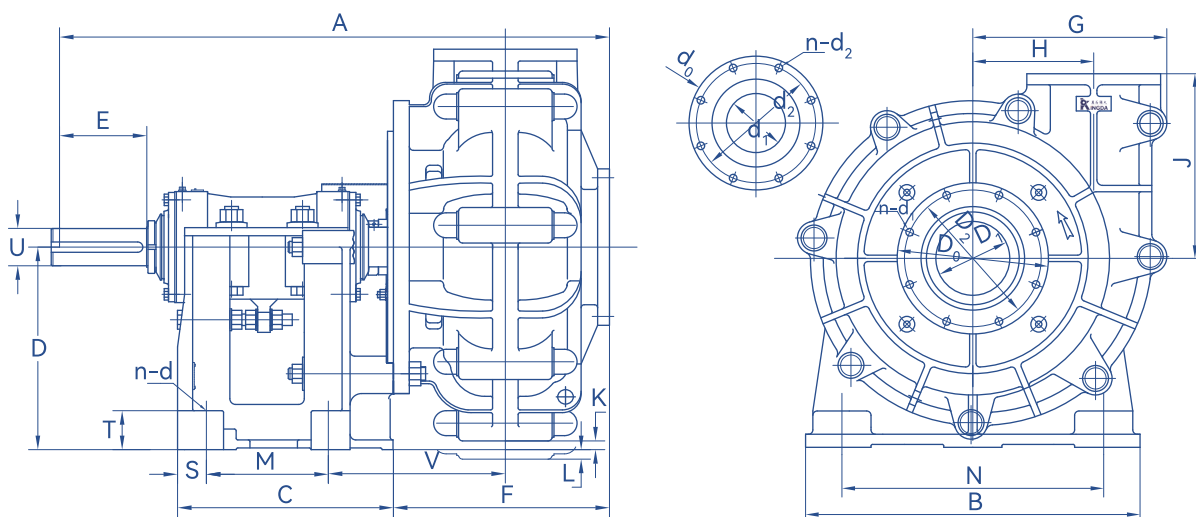
- “M”代表合金耐磨材料, “R”代表橡胶材料。
- 推荐流量范围 $50\% Q \leq Q \leq 110\% Q$ ($Q \approx$ 最高效率点流量)
- NPSH是指最高转速时, 推荐Q点所对应的NPSH值。

NOTE:

- “R”: rubber, “M”: alloy wear-resisant material
- Capacity range recommended : $50\% Q \leq Q \leq 110\% Q$ ($Q \approx$ capacity at highest efficiency point)
- NPSH: Appropriate to point Q recommended at highest speed.

OUTLINE AND INSTALLATION DIMENSION

外形 安装尺寸



型号 TYPE	吸入口法兰 SUCTION FLANGE				吐出口法兰 DISCHARGE FLANGE				泵 重 PUMP WEIGHT(KG)	
	D ₀	D ₁	D ₂	n-d ₁	d ₀	d ₁	d ₂	n-d ₂	金属 METAL	橡胶 RUBBER
R20KSH-B	152	38	114	4-Φ16	166	25	127	4-Φ16	91	77
R40KSH-B	184	51	146	4-Φ19	165	38	127	4-Φ19	104	118
R50KSH-C	216	76	178	4-Φ19	184	51	146	4-Φ19	191	154
R75KSH-C	279	102	235	4-Φ22	229	76	191	4-Φ22	263	236
R75KSH-D									363	290
R100KSH-D	337	152	292	4-Φ22	279	102	235	4-Φ22	626	454
R100KSH-E									728	635
R150KSH-E	406	205	356	8-Φ21	368	152	324	8-Φ21	1473	982
R150KSH-R									1655	1202
R200KSH-F	502	254	445	8-Φ29	432	203	375	8-Φ29	3274	2654
R200KSH-ST									3750	3130
R250KSH-ST	520	305	470	8-Φ26	520	275	470	12-Φ26	4318	3357
300KSH-ST	615	395	565	10-Φ26	552	305	495	12-Φ25	6409	-
300KSH-T									6815	
R300KSH-ST	585	356	521	12-Φ24	552	305	495	12-Φ25	-	4672
350KSH-TU	840	453	770	10-Φ36	673	356	610	12-Φ29	10000	-
R350KSH-TU	705	406	641	8-Φ35	673	356	610	12-Φ28	-	8960
R450KSH-TU	900	508	800	12-Φ42	900	460	800	12-Φ42	18864	16500
R550KSH-U	1115	700	1010	16-Φ35	1115	550	1010	12-Φ39	21500	18720
R650KSH-U	1230	736	1085	16-Φ43	1230	650	1085	16-Φ43	-	25700

型号 TYPE	A	B	C	D	U	E	F	G	H	J	K	L	M	N	V	T	S	n-d
R20KSH-B	583	295	248	197	28	79	206	187	98	171	46	-	143	254	181	38	24	4-Φ14
R40KSH-B	592	295	248	197	28	79	217	205	114	184	30	-	143	254	184	38	24	4-Φ14
R50KSH-C	768	406	311	255	42	125	280	238	138	210	58	-	175	356	234	48	32	4-Φ19
R75KSH-C	845	406	311	255	42	125	354	292	149	262	15	-	175	356	271	48	32	4-Φ19
R75KSH-D	943	492	364	330	65	164	353	292	149	262	60	-	213	432	279	64	38	4-Φ22
R100KSH-D	1021	492	364	330	65	164	424	406	229	338	-	10	213	432	318	64	38	4-Φ22
R100KSH-E	1178	622	448	457	80	222	433	406	229	338	117	-	257	546	351	76	54	4-Φ29
R150KSH-E	1302	622	448	457	80	222	557	551	318	460	-	63	257	546	402	76	54	4-Φ29
R150KSH-R	1360	680	590	350	85	215	554	551	318	460	-	170	490	560	312	70	50	4-Φ28
R200KSH-F	1646	990	765	610	100	279	623	679	419	635	-	12	584	762	410	98	60.5	4-Φ35
R200KSH-ST	1764	1150	780	650	120	280	692	677	419	635	28	-	620	900	439	125	80	4-Φ48
R250KSH-ST	1839	1150	780	650	120	280	762	774	464	673	-	85	620	900	461	125	80	4-Φ48
300KSH-ST	1873	1150	780	650	120	280	813	944	629	832	-	224	620	900	486	125	80	4-Φ48
R300KSH-ST	1873	1150	780	650	120	280	812	944	629	832	-	224	620	900	485	125	80	4-Φ48
300KSH-T	2268	1150	1040	650	150	352	813	944	629	832	-	191	880	900	486	120	80	4-Φ48
R350KSH-TU	2320	1460	1050	900	150	351	953	1075	660	889	-	115	860	1200	597	150	95	4-Φ79
R450KSH-TU	2533	1460	1050	900	150	351	1100	1444	940	1230	-	447	860	1200	615	150	95	4-Φ79
R550KSH-U	3210	1440	1375	900	240	455	1365	1645	1025	1328	-	553	1185	1200	775	150	95	8-Φ79
R650KSH-U	3290	1440	1375	900	240	455	1448	1815	1200	1575	-	762	1185	1200	785	150	95	8-Φ79

KZQ SERIES SUBMERSIBLE SLURRY PUMP

KZQ系列潜水渣浆泵 产品特点

立式结构，潜入水下工作，性能稳定、无堵塞、可靠性高、结构紧凑、安装方便、移动灵活。可对泵进行自动保护、自动运行和信号输出等控制。

广泛用于煤炭、电力、交通，河流疏浚，市政工程等领域。该类型泵适用于输送砂砾、泥浆及固体颗粒较大的渣浆，也用于江河采砂和采矿用船只。

Vertical structure, submerged underwater work, stable performance, no blockage, high reliability, compact structure, easy installation, flexible movement. The pump can be controlled automatically, such as automatic protection, automatic operation and signal output.

Widely used in coal, electric power, transportation, river dredging, municipal engineering and other fields. This type of pump is suitable for transporting gravel, mud and slurry with large solid particles, and is also used for river sand mining and mining ships.



产品参数

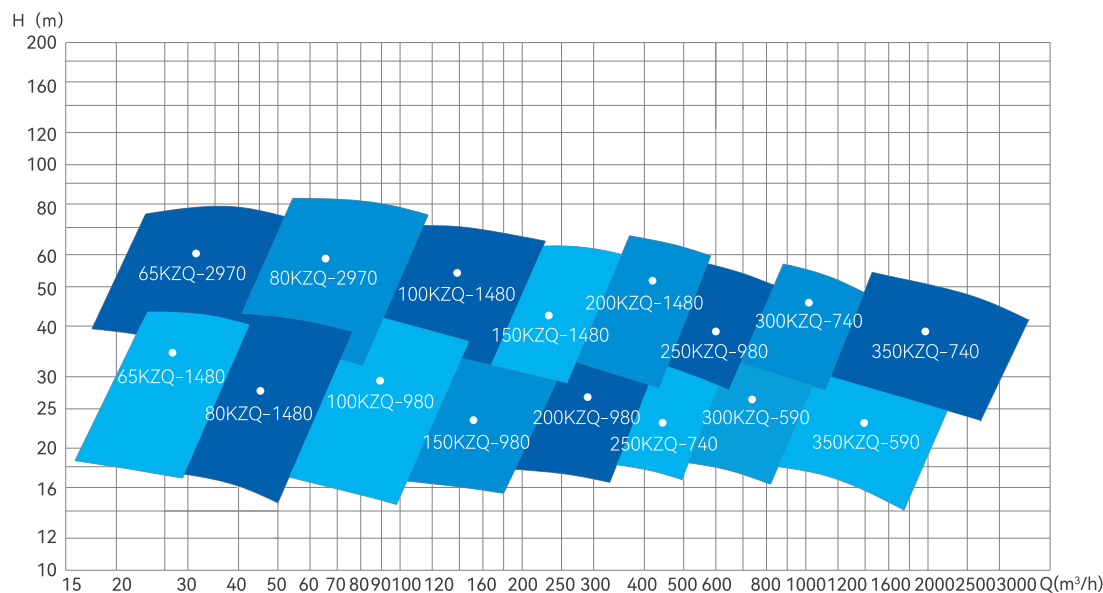
泵出口口径 (mm)	50~350
流量 (m³/h)	30~3500
扬程 (m)	10~120
材质	M

PRODUCT PARAMETERS

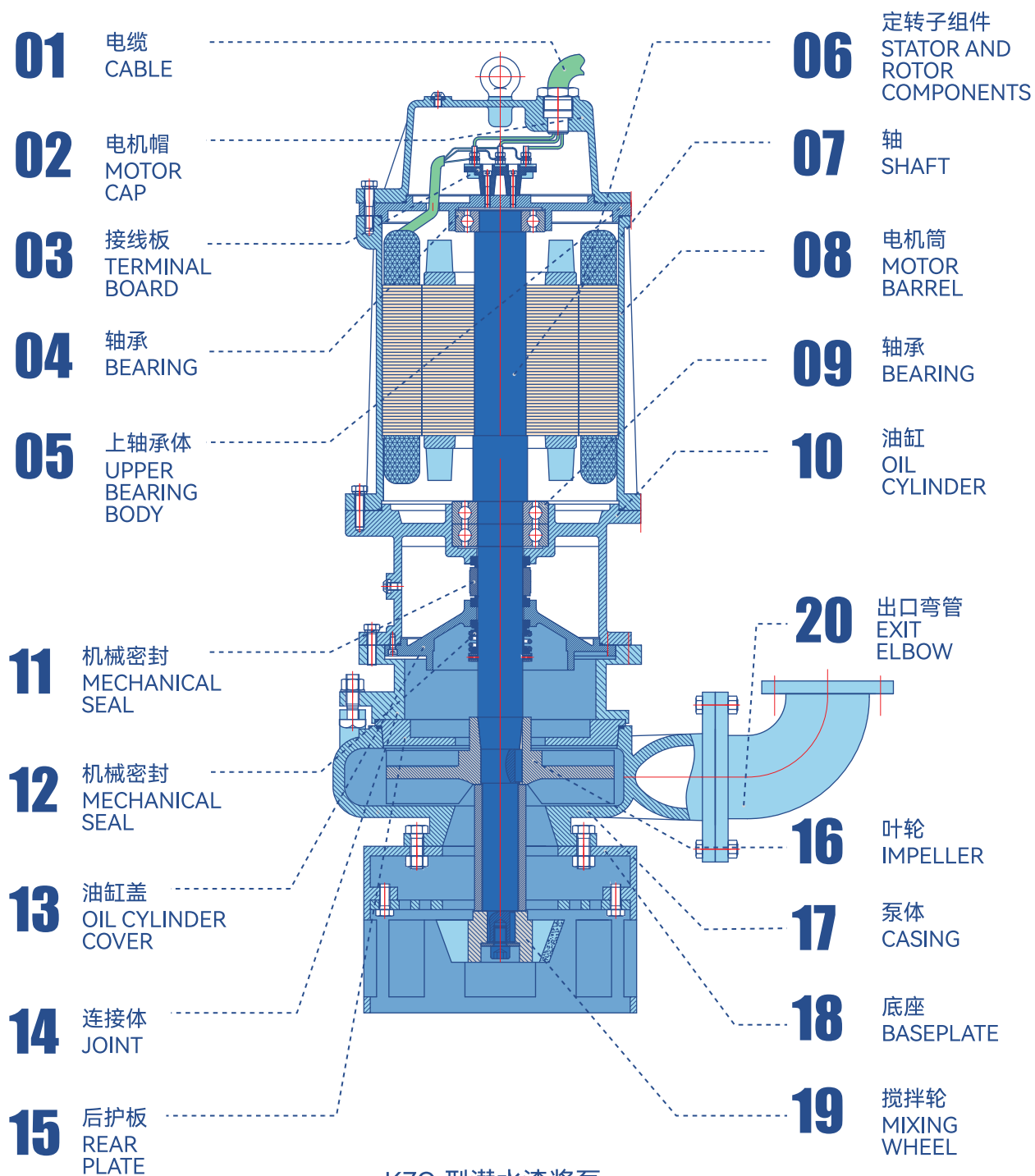
Discharge Diameter(mm)	50~350
Flow Rate(m³/h)	30~3500
Head(m)	10~120
Material	M

WORKING RANGE OF KZQ SUBMERSIBLE SLURRY PUMP

KZQ系列潜水渣浆泵 工作范围



ONLY FOR PRELIMINARY SELECTION
仅供初步选型用

KZQ SERIES
CONSTRUCTIONKZQ
系列结构KZQ 型潜水渣浆泵
KZQ SUBMERSIBLE SLURRY PUMP

TYPE KZQ PERFORMANCE

KZQ 性能参数

型号 TYPE	清水性能 CLEAR WATER PERFORMANCE				
	流量 Q (m³/h)	扬程 HEAD H (m)	转速 SPEED n (r/min)	最高 效率 MAX (%)	电机功率 POWER P (kw)
65KZQ20-20-4	20	20	1450	45	4
65KZQ20-15-3	20	15	1450	40	3
65KZQ20-40-11	20	40	2900	40	11
65KZQ30-55-18.5	30	55	2900	40	18.5
80KZQ30-30-7.5	30	30	1450	53	7.5
80KZQ50-80-37	50	80	2900	40	37
100KZQ100-22-18.5	100	22	1450	43	18.5
100KZQ100-45-45	100	45	1450	40	45
100KZQ100-75-45	100	75	1450	56	45
150KZQ200-15-18.5	200	15	980	57	18.5
150KZQ200-25-37	200	25	1450	45	37
150KZQ200-30-45	200	30	1450	49	45
200KZQ300-20-37	300	20	1450	56	37
200KZQ350-20-45	350	20	1450	56	45
200KZQ400-25-55	400	25	1450	45	55

使用条件:

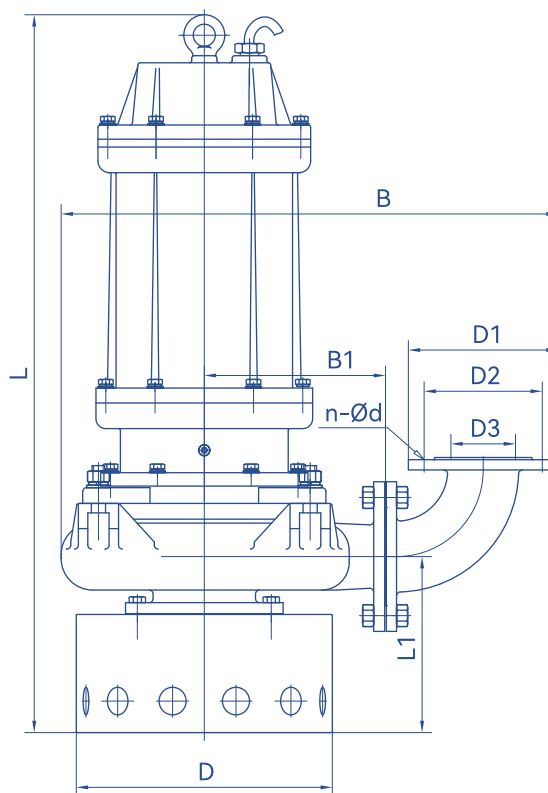
- 电源380V、三相、50HZ(可根据要求定制电压、频率)。
- 介质温度一般不超过60℃，PH值4-10，介质密度<1300 kg/m³。
- 适应强磨蚀固体颗粒的介质和轻度腐蚀性污水浆体。
- 也可根据现场条件进行特殊设计，提供全保护强制冷却方案。

USAGE CONDITIONS:

- Power supply: 380V, three-phase, 50Hz (voltage and frequency can be customized according to requirements).
- The medium temperature generally does not exceed 60℃, PH value ranges from 4 to 10, and the medium density is <1300 kg/m³.
- Suitable for media with strong abrasive solid particles and mildly corrosive sewage slurry.
- Special designs can be made based on on-site conditions, and a comprehensive forced cooling solution can be provided for full protection.

OUTLINE AND INSTALLATION DIMENSION

外形 安装尺寸



型号 TYPE	L	L1	B	B1	ΦD	泵重 PUMP WEIGHT	吐出口法兰 DISCHARGE FLANGE			
						(kg)	ΦD1	ΦD2	ΦD3	n-Φd
65KZQ20-20-4	722	146	575	215	245	95	160	130	65	4-Φ14
65KZQ20-15-3	676	157	528	185	245	90	160	130	65	4-Φ14
65KZQ20-40-11	807	157	575	185	273	140	185	130	65	4-Φ14
65KZQ30-55-18.5	960	157	575	185	273	240	185	145	65	4-Φ18
80KZQ30-30-7.5	915	224	630	230	325	390	190	150	80	4-Φ18
80KZQ50-80-37	1295	285	581	230	350	460	200	160	80	8-Φ18
100KZQ100-22-18.5	1215	300	729	245	340	350	220	180	100	8-Φ18
100KZQ100-45-45	1415	368	880	335	425	640	220	180	100	8-Φ18
100KZQ100-75-45	1370	355	970	400	425	640	220	180	100	8-Φ18
150KZQ200-15-18.5	1350	368	800	335	425	540	265	220	144	8-Φ18
150KZQ200-25-37	1370	368	933	335	425	580	265	220	150	8-Φ18
150KZQ200-30-45	1415	368	933	335	425	620	280	240	150	8-Φ18
200KZQ300-20-37	1456	375	1072	335	425	600	320	280	200	8-Φ18
200KZQ350-20-45	1504	375	1072	335	425	630	320	280	200	8-Φ18
200KZQ400-25-55	1592	378	1123	365	425	690	340	295	150	8-Φ23

ELECTRICAL AUTOMATION

电气自动化

公司拥有独立的电气、自动化和信息技术专业研发和设计部门，致力于为盾构用户提供完整的、高效的、可靠的一站式流体系统解决方案。

自2007年进入盾构外配套领域发展至今，能够提供盾构施工及外围系统等与用泵有关的配套解决方案及产品，如泥水环流系统中继泵站、盾构施工供水、供电系统、排污系统、监控系统以及远程通讯系统等；

我司自主研发的中继泵站成套设备，已经先后配套三大主机厂，具有性能先进、功能全面、专业性等特点。其控制系统通过实时采集主泵运转参数，上传至我公司远程数据中心，通过自主研发的数据分析软件将运转参数和泵特性进行实时分析，判断泵及环流系统运转工况及故障分析，研发中的智能泵远程监控系统（平台）是采用我司多年实践经验积累的智能算法模型，结合大数据分析手段，具有磨损分析、状态预警、远程运维等强大功能，势必将盾构领域渣浆泵的应用推向全新高度。

Our company has an independent R&D department for electrical, automation, and IT systems, providing efficient and reliable one-stop fluid system solutions for TBM users.

Since 2007, we have developed pump-related solutions for TBM construction, including slurry circulation relay pump stations, water supply, power supply, sewage, monitoring, and remote communication systems.

Our self-developed relay pump station equipment, used by major TBM manufacturers, offers advanced performance and comprehensive functionality. The control system collects main pump data in real-time, uploads it to our remote data center, and analyzes it with proprietary software for operational assessment and fault diagnosis. Our developing intelligent pump remote monitoring system uses smart algorithms and big data for wear analysis, condition warnings, and remote maintenance, advancing slurry pump applications in the TBM field.

温度振动一体变送器-LORA无线组网型

温度振动一体变送器被广泛应用在水泵等旋转设备温度和振动的在线测量。

电机故障判定方法

以电机正常运行时测定的振动速度、表面温度为基准，设定电机运行正常测定范围，当电机振动速度或表面温度超过正常范围即可判定电机出现故障。

传感器介绍

温度变送器是一款选用高性能的MEMS芯片，采用嵌入式技术、温度传感技术、振动传感技术开发生产的一款高性能、低功耗、抗干扰和复合型振动温度传感器。

性能指标

Exia IIC T4 Ga; Exia IIC T200 195°C Da

安装结构及安装说明

- 外壳整体采用铝合金材料。
- 在现场有条件的情况下可以采用**螺纹安装**，金属壳体上的标准螺纹（M8*1.25*10、M5*7）可与安装部位快速连接，其余螺纹规格可通过螺纹转接头形式处理。
- 同时M5螺纹也可以采用**磁吸安装**方式，现场免去打孔困扰，安装更加方便。
- 若需检测X、Y轴数据有特殊需求，需要着重注意传感器底部丝印标识，若仅监测单轴数据建议使用Z轴，即安装完成后垂直于设备底面的方向。

M5螺纹及磁吸型设备尺寸



“磁吸尺寸参考22mm的磁吸”

M8螺纹型设备尺寸



“磁吸尺寸参考22mm的磁吸”

测量范围	0、Y、Z轴振动速度	表面温度	剩余电量	信号强度
测量范围	0-50mm/s	-40~100°C		
精度等级	±1.5%FS (0.1KHz, 100mm/s)			
分辨率	0.1mm/s	0.1°C		
传输速率	按设备规格（均方根值）			

信号输出	LORA无线信号
通信接口	X、Y、Z三轴或单轴可选
供电方式	内置锂电池（3.6V 对插锂电）
通信速率	使用寿命可达8年（上传间隔1小时）
数据上传间隔	默认60min，最短上传间隔可设1分钟
防护等级	IP67
传输速率	10-1600Hz, 10-5000Hz可选
环境温度	普通款-40~85°C，高温款-40~150°C
工作电压	-40°C~80°C, 0%RH~80%RH
贮存温度	实时在线

温度振动一体变送器-NB-IoT无线网络型

温度振动一体变送器被广泛应用在水泵等旋转设备温度和振动的在线测量。

电机故障判定方法

以电机正常运行时测定的振动速度、表面温度为基准，设定电机运行正常测定范围，当电机振动速度或表面温度超过正常范围即可判定电机出现故障。

传感器介绍

温度变送器是一款选用高性能的MEMS芯片，采用嵌入式技术、温度传感技术、振动传感技术开发生产的一款高性能、低功耗、抗干扰和复合型振动温度传感器。

性能指标

一次性校准3年，流量可校准。

安装结构及安装说明

- 外壳整体采用铝合金材料。
- 在现场有条件的情况下可以采用**螺纹安装**，金属壳体上的标准螺纹（M8*1.25*10、M5*0.8*7）可与安装部位快速连接，其余螺纹规格可通过螺纹转接头形式处理。
- 同时M5螺纹也可以采用**磁吸安装**方式，现场免去打孔困扰，安装更加方便。
- 若需检测X、Y轴数据有特殊需求，需要着重注意传感器底部丝印标识，若仅监测单轴数据建议使用Z轴，即安装完成后垂直于设备底面的方向。

M5螺纹及磁吸型设备尺寸



“磁吸尺寸参考22mm的磁吸”

M8螺纹型设备尺寸



“磁吸尺寸参考22mm的磁吸”

测量范围	X、Y、Z轴振动速度	表面温度	剩余电量	信号强度
测量范围	0-50mm/s	-40~100°C		
精度等级	±1.5%FS (0.1KHz, 100mm/s)			
分辨率	0.1mm/s	0.1°C		
传输速率	按设备规格（均方根值）			

信号输出	NB-IoT无线信号
通信接口	X、Y、Z三轴
供电方式	内置锂电池（3.6V 对插锂电）
通信速率	使用寿命可达3年（上传间隔1小时）
数据上传间隔	默认60min，最短上传间隔可设2分钟
防护等级	IP67
传输速率	10-1600Hz, 10-5000Hz可选
环境温度	普通款-40~85°C，高温款-40~150°C
工作电压	-40°C~80°C, 0%RH~80%RH
贮存温度	实时在线

KINGDA 振动速度、温度一体化监测预警系统-LORA无线组网监测方案:

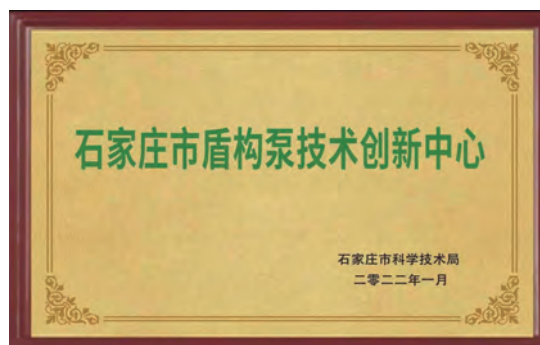
基于LORA无线通讯 视距无线1.5~3Km传输 电池供电完全免布线 曲线分析

微信、短信、振铃、邮件多种远程告警 24H在线监测记录 X、Y、Z三轴立体监测



LETTER OF PATENT

专利证书



NEW RESEARCH RESULTS

新研成果

大型盾构机进排浆泵—400口径盾构泥浆泵(配套15米以上大型盾构机)

400SGH盾构泥浆泵叶片流道内最大过流粒径达300毫米,可满足盾构领域输送大颗粒、高磨蚀工况需求。主要用于解决排浆泵配套15米以上盾构机输送土方量需

Large shield tunneling machine discharging and feeding pumps—400 diameter shield slurry pump (supported with large shield tunneling machine over 15 meters)

The maximum flow particle size in the impeller channel of the 400SGH shield tunneling slurry pump is 300 millimeters, which can meet the requirements of conveying large particles and high wear conditions in the shield tunneling field. Mainly used to meet the demand for soil transportation by shield tunneling

求,有效地保证水力效率。

400SGH盾构泥浆泵拥有自主知识产权,属于业内领先水平的高端产品,该产品的应用,将助力大国重器国产化,推动盾构工程装备高质量发展。

machines with a distance of more than 15 meters for slurry pumps effectively ensuring hydraulic efficiency.

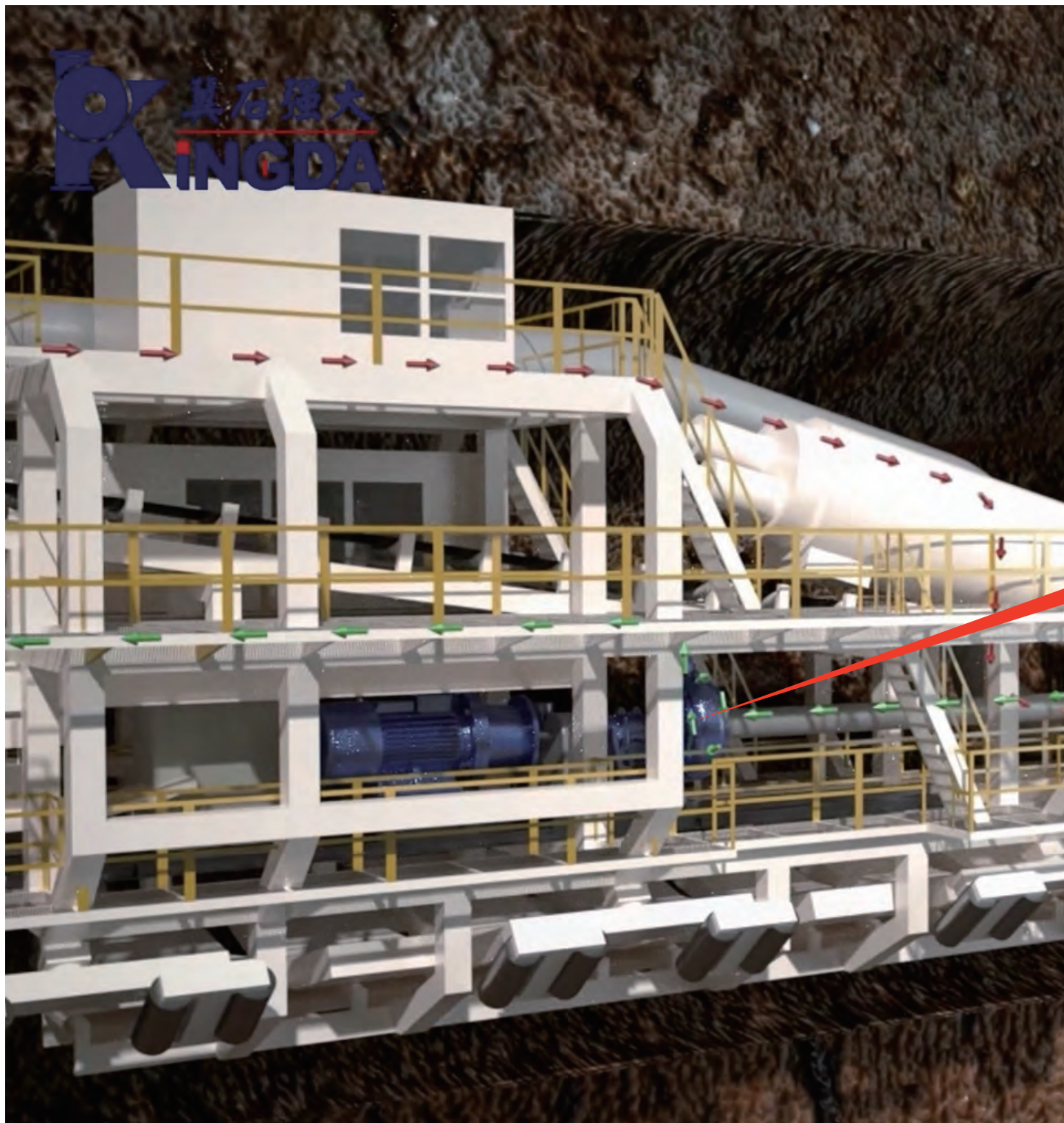
The 400SGH shield tunneling slurry pump has independent intellectual property rights and is a leading high-end product in the industry. The future application of this product will help the localization of heavy machinery in china and promote the high-quality development of shield tunneling engineering equipment.



400 SGH 盾构泥浆泵
400SGH SHIELD TUNNELING SLURRY PUMP

SLURRY PUMP FOR TBM

盾构机配套渣浆泵





BOOSTER PUMP STATION

中继泵站

OVERVIEW | 概述

盾构专用泥浆泵在环流系统中的应用——中继泵站

中继泵站分为进浆泵和排浆泵。泵站配备了进(排)浆泵、变频电机、变压器、变频器、控制柜及密封冲洗增压泵组等，通过控制系统与盾构机主控室相连，实行远程控制。

Application of Slurry pump for shield tunneling in circulation system - Booster Pump Station

The Booster pump station is divided into a slurry feed pump and a slurry discharge pump. The pumping station is equipped with an feed (discharge) slurry pump, variable frequency motor, transformer, frequency converter, control cabinet, seal flushing booster pump unit, etc. It is connected to the main control room of the shield machine through the control system for remote control.



BASIC CONFIGURATION | 基本配置

每套泵站配备高低压配电单元(高压柜、变压器和低压柜)、主电力驱动单元(主电动机、变频器)、主泵单元(渣浆泵及轴封水系统)、控制单元(自控柜、仪表)。

- 1、高低压配电单元:正常工作状态下，整套中继泵站的主电源来自地面变电站10KV单回电缆进线，经高压柜、变压器、低压柜给变频柜提供低压电源。
- 2、主电力驱动单元: 主要是低压变频电机，匹配主泵功率，要满足泵站对电机变频调速的要求。
- 3、主泵单元: 主要是进排浆泵及轴封水系统，承担输送浆体的主体功能。
- 4、控制单元: 控制单元作为盾构机中控系统的远程I/O子站。

Each pump station is equipped with high and low voltage power distribution units (high voltage cabinets, transformers and low voltage cabinets), main power drive units (main motors, frequency converters), main pump units (slurry pumps and shaft seal water systems), and control units (automatic control units cabinets, instruments)

1. High and low voltage power distribution unit: Under normal working conditions, the main power supply of the entire relay pumping station comes from the 10KV single-circuit cable entry of the ground substation, and provides low-voltage power to the frequency conversion cabinet through high-voltage cabinets, transformers, and low-voltage cabinets.
2. Main electric drive unit: It is mainly a low-voltage variable frequency motor, matching the power of the main pump, and meeting the requirements of the pumping station for motor frequency conversion speed regulation.
3. Main pump unit: It is mainly the inlet and outlet slurry pump and shaft seal water system, which undertakes the main function of transporting slurry.
4. Control unit: The control unit serves as the remote I/O substation of the shield machine central control system.

PUMP + MOTOR
泵+电机



**CONTROL
CABINET**

变频柜



**BOX-TYPE
TRANSFORMER**

箱式
变压器



**SHAFT SEAL
WATER SYSTEM**

封水
系统



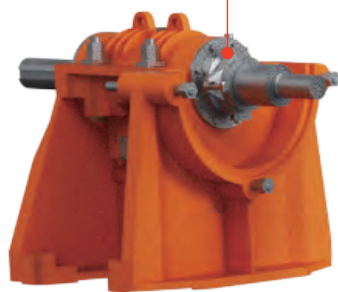
SPARE PARTS

备件

KSGH SERISE SLURRY
DISCHARGE PUMP

排浆泵

轴承组件
BEARING ASSEMBLY



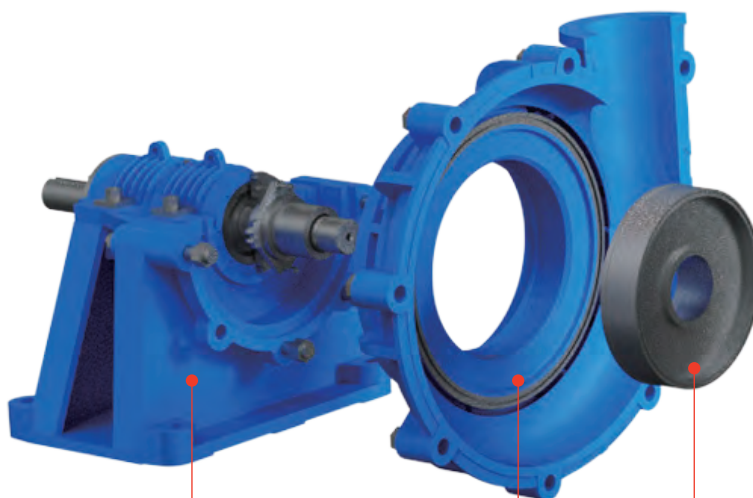
接合板
JOINT PLATE



填料箱
STUFFING BOX



后护板
RERA LINER

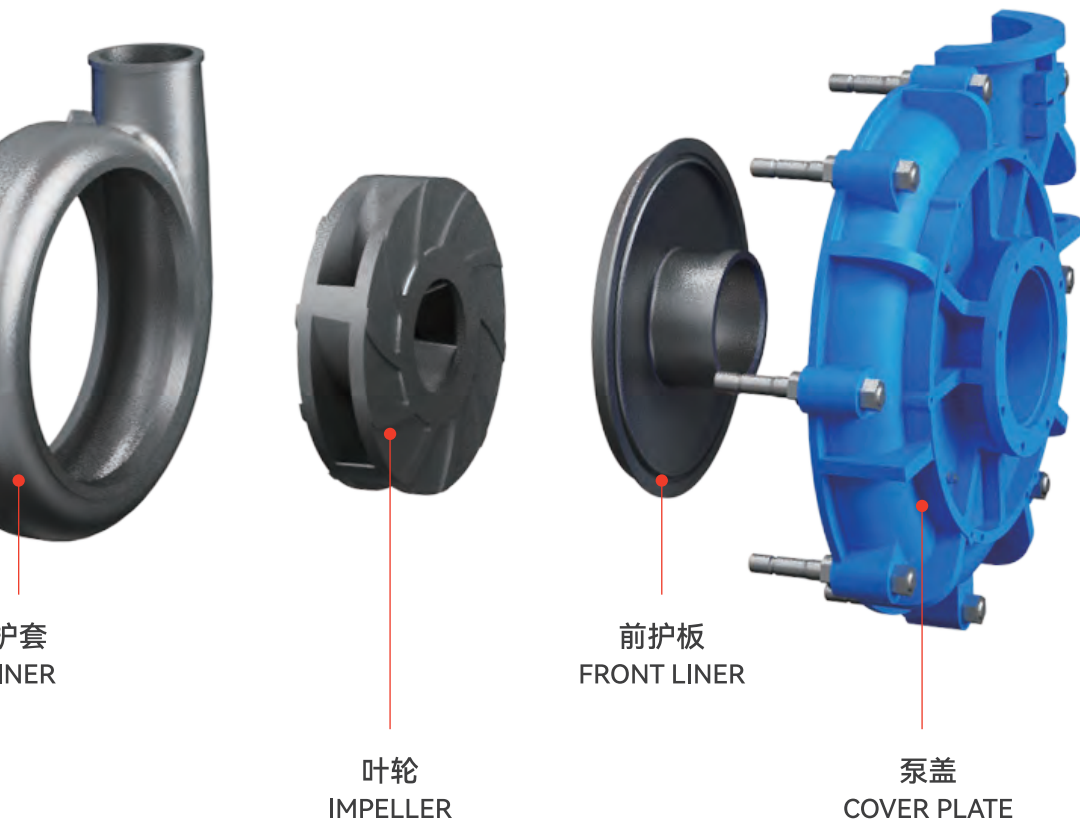
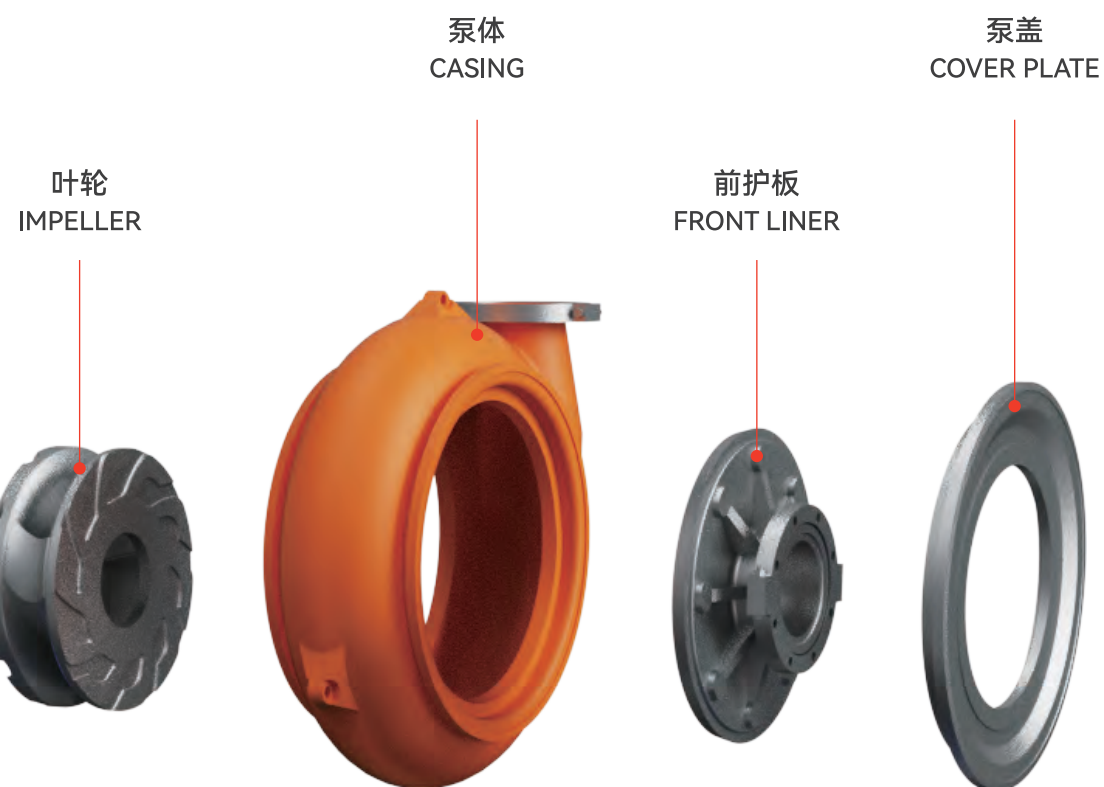


轴承组件
BEARING ASSEMBLY

填料箱
STUFFING BOX

泵体
FRAME PLATE

后护板
RERA LINER



**KSH SERIES
SLURRY FEED PUMP**
进浆泵

SHIELD PROJECT CLIENTS

盾构项目客户



中铁工程装备盾构机P2.1排浆泵300SGH
P2.1 Discharge Pump 300SGH for CREG Shield Tunneling Machine



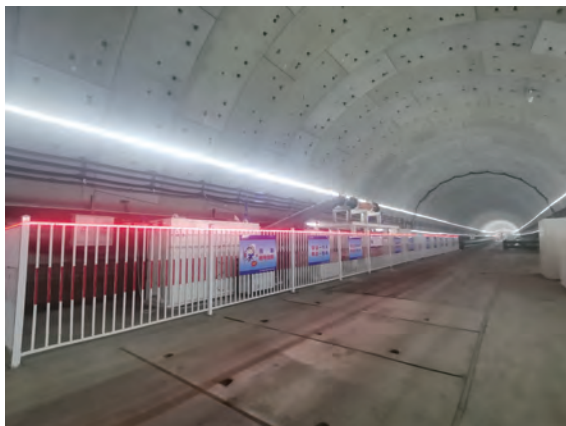
中交天和盾构机P2.1排浆泵300SGH
P2.1 Discharge Pump 300SGH for CCCC Tianhe Shield Tunneling Machine



中铁十四局穗莞深城际轨道交通
China Railway 14th Bureau Suiguan Shenzhen Intercity Rail Transit



广东华隧珠江三角洲水资源项目
Guangdong Huasui the Pearl River Delta Water Resources Project



中交隧道局东六环项目
CCCC Tunnel Engineering Company Ltd., East Sixth Ring Project



中铁隧道上海机场线
China Railway Tunnel Shanghai Airport Line



中交一航哈尔滨地铁
CCCC First Harbor Harbin Metro



中交天和新加坡地铁
CCCC Tianhe Singapore Metro



昆明地铁
Kunming Metro



中铁工程装备福州地铁
China Railway Engineering Equipment Fuzhou Metro



中铁一局厦门项目
China Railway First Bureau Xiamen Project



中铁22局项目
China Railway 22nd Bureau Project

SHIELD PROJECT CLIENTS

盾构项目客户



福州地铁滨海快线
Fuzhou Metro Binhai Express



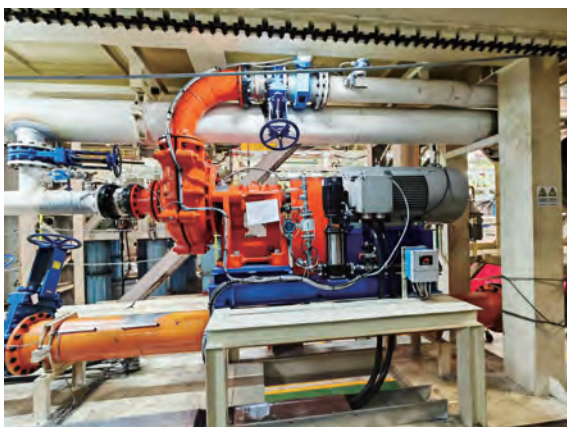
京滨铁路四标项目300KSGH
Jingbin Railway Section 4 Project 300KSGH



上海基础设施建设15米300SGH 泵站运行
Shanghai Infrastructure 15m 300SGH Pump Station
Operation



中铁14局上海机场线
China Railway 14th Bureau Shanghai Airport Line



上海隧道工程
Shanghai Tunnel Engineering



武汉地铁项目
Wuhan Metro Project



徐州市政工程排水小隧道
Xuzhou Municipal Engineering Drainage Small Tunnel



中铁15局横秦现场
Hengqin Site of China Railway 15th Bureau



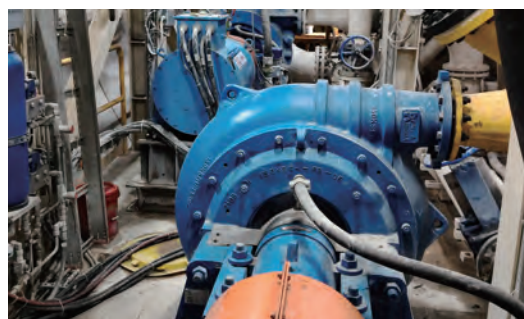
中交天和上海虹桥机场浦东机场二标段
CCCC Tianhe Shanghai Hongqiao Airport Pudong
Airport Section 2



中铁八局集团有限公司
China Railway No.8 Engineering Group Co.,Ltd



龙岗隧道
Longgang Tunnel



铁建重工盾构机P0.1泵
CRCC P0.1 Pump of Shield Tunneling Machine

为客户安全生产 高效运行保驾护航

TOGETHER WITH KINGDA FOR SAFE
PRODUCTION AND EFFICIENT OPERATION

强大泵业集团有限公司

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