

Looking ahead,
going beyond expectations
Ahead > Beyond



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智能变频供水设备

INTELLIGENT FREQUENCY CONVERSION
WATER SUPPLY EQUIPMENT

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荏原机组概述

EBARA UNIT OVERVIEW

荏原是世界上最大的水泵制造商之一，在70年代初开始生产供水机组，距今已有50年的生产经验，目前在日本供水市场占有率达到40%，拥有超过六十万套供水机组正在运行。荏原供水机组产品，在整合日本供水机组产品技术经验的同时，亦结合国内二次供水领域的特点，在产品结构，设备运行，节能降耗等方面，进行了更深层的研发。

Ebara is one of the largest pump manufacturers in the world. It began to produce water supply units in the early 1970s. It has 50 years of production experience. At present, it has 40% of the water supply market in Japan and has more than 600000 water supply units in operation.

Ebara water supply unit products not only integrate the technical experience of Japanese water supply unit products, but also combine the characteristics of domestic secondary water supply field, and carry out deeper research and development in product structure, equipment operation, energy conservation and consumption reduction.

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荏原在生活供水领域拥有全球最先进的技术，可为生活供水提供系统解决方案。

EBARA HAS THE WORLD'S MOST ADVANCED TECHNOLOGY IN THE FIELD OF DOMESTIC WATER SUPPLY, WHICH CAN PROVIDE SYSTEM SOLUTIONS FOR DOMESTIC WATER SUPPLY.

居民生活供水

DOMESTIC WATER SUPPLY FOR RESIDENTS

房地产行业飞速发展，城镇住宅、公寓、宿舍、别墅等住宅建筑增量明显，现有市政供水管线压力已无法满足住宅建筑的高层化的需求，高层住宅居民需要通过二次供水设备补偿市政供水管线压力不足，以稳定持续的保障高层住宅居民用水。

With the rapid development of the real estate industry, the increment of urban residential buildings, apartments, dormitories, villas and other residential buildings is obvious. The pressure of the existing municipal water supply pipeline can not meet the demand of high-rise residential buildings. High-rise residential residents need to compensate for the insufficient pressure of the municipal water supply pipeline through secondary water supply equipment, so as to stably and continuously ensure the water use of high-rise residential residents.

公共设施供水

UTILITY WATER SUPPLY

城市建设规模不断扩大，城市可利用土地资源有限的问题日趋明显，高层建筑、超高层建筑已成为城市的主流建筑，医院、学校、写字楼、商业综合体等公共建筑设施亦在此列，相较于普通居民住宅，公共建筑设施用水工况复杂，用水高峰集中，供水安全性要求苛刻，实现其供水系统的安全稳定运行，对设备的性能极具考验。

With the continuous expansion of urban construction scale, the problem of limited available land resources in cities is becoming more and more obvious. High-rise buildings and super high-rise buildings have become the mainstream buildings in cities, and public building facilities such as hospitals, schools, office buildings and commercial complexes are also included. Compared with ordinary residential buildings, the water use conditions of public building facilities are complex, the water use peak is concentrated, and the water supply safety requirements are strict, so as to realize the safe and stable operation of their water supply system, It is a great test for the performance of the equipment.

荏原可提供专业定制化供水方案，为客户排忧解难。

EBARA CAN PROVIDE PROFESSIONAL CUSTOMIZED WATER SUPPLY SOLUTIONS TO SOLVE CUSTOMERS' PROBLEMS.



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荏原产品，广泛应用于长距离输水，高海拔接力加压，山区景区供水等工况。

EBARA PRODUCTS ARE WIDELY USED IN LONG-DISTANCE WATER TRANSMISSION, HIGH-ALTITUDE RELAY PRESSURIZATION, WATER SUPPLY IN MOUNTAIN SCENIC SPOTS AND OTHER WORKING CONDITIONS.

山区接力供水 RELAY WATER SUPPLY IN MOUNTAINOUS AREAS

由于我国国情水情复杂，区域差异性大，当前全国农村供水保障水平总体仍处于初级阶段，随着农村经济发展，为顺应农村居民对美好生活的向往，至2025年，全国农村自来水普及率计划达到88%，各区域将着力实现农村供水由小型分散供水到适度集中供水，实现农村供水工程布局的优化。

Due to China's national conditions, complex water conditions and large regional differences, the current national rural water supply guarantee level is still in the primary stage. With the development of rural economy, in order to comply with the yearning of rural residents for a better life, the national rural tap water penetration rate is planned to reach 88% by 2025. All regions will strive to realize the rural water supply from small-scale decentralized water supply to moderate centralized water supply, so as to optimize the layout of rural water supply projects.

调蓄加压供水 REGULATED STORAGE PRESSURIZED WATER SUPPLY

截止至去年年末，我国城镇人口已经占到了我国总人口的64.72%，城镇居民日用水量显著增加，在原城区供水余量有限的情况下，用水高峰期老旧小区供水压力不足等问题逐渐突出，增设的市政调蓄增压泵站，推动老旧管网泵站的改造与更新及老旧小区供水改造，对于改善居民生活质量意义重大。

By the end of last year, China's urban population had accounted for 64.72% of China's total population, and the daily water consumption of urban residents had increased significantly. Under the condition of limited water supply surplus in the original urban area, the problems such as insufficient water supply pressure in the old community at the peak of water consumption have gradually become prominent. The additional municipal regulation and storage booster pump station is of great significance to promote the transformation and renewal of the old pipe network pump station and the water supply transformation of the old community, which is of great significance to improve the quality of life of residents.



荏原专注于供水设备智慧化升级，助力国内智慧城市建设。

EBARA FOCUSES ON THE INTELLIGENT UPGRADING OF WATER SUPPLY EQUIPMENT AND HELPS THE CONSTRUCTION OF SMART CITIES IN CHINA.

工业生产供水

INDUSTRIAL PRODUCTION WATER SUPPLY

工业用水指生产用水及厂区生活用水的总称，包含原料用水、产品处理用水、冷却用水等用途，常见供水系统有水循环系统、水处理系统、加压补水系统等。

Industrial water refers to the general term of production water and domestic water in the plant, including raw water, product treatment water, cooling water and other purposes. Common water supply systems include water circulation system, water treatment system, pressurized water replenishment system, etc.

依托百年水泵研发经验，荏原可为工业生产供水系统提供完美解决方案。

RELYING ON 100 YEARS OF EXPERIENCE IN PUMP RESEARCH AND DEVELOPMENT, EBARA CAN PROVIDE PERFECT SOLUTIONS FOR INDUSTRIAL PRODUCTION WATER SUPPLY SYSTEMS.



荏原在生活供水领域拥有全球最先进的技术，可为生活供水提供系统解决方案。

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水景泳池加压系统

WATER FEATURE SWIMMING POOL PRESSURIZATION SYSTEM

随居民对生活居住环境要求的提高，人们对景观工程建设的关注度正逐渐增多，景观喷泉、绿化浇灌、泳池水幕等系统需求亦随之增多。

With the improvement of residents' requirements for living environment, people's attention to landscape engineering construction is gradually increasing, and the demand for landscape fountain, greening irrigation, swimming pool water curtain and other systems is also increasing.

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高铁供水系统

HIGH SPEED RAIL WATER SUPPLY SYSTEM

随着中国城市化进程加快，以高速铁路为代表的大规模兼远距离的客货运输，属于集多专业、多工种于一身的复杂系统，高铁内部供水系统及类似工况，需要解决高集成化、高稳定性、极限温度适应性等问题。

With the acceleration of China's urbanization, the large-scale and long-distance passenger and freight transportation represented by high-speed railway belongs to a complex system integrating multiple disciplines and types of work. The internal water supply system of high-speed railway and similar working conditions need to solve the problems of high integration, high stability and extreme temperature adaptability.

荏原以客户为导向，高度定制化产品为客户实际需求提供优质可靠的解决方案。

EBARA IS CUSTOMER-ORIENTED AND HIGHLY CUSTOMIZED PRODUCTS TO PROVIDE HIGH-QUALITY AND RELIABLE SOLUTIONS FOR CUSTOMERS' ACTUAL NEEDS.





产品丰富 技术全面

RICH PRODUCTS AND COMPREHENSIVE TECHNOLOGIES

从水泵、机组到水处理设备，荏原拥有完善的产品体系。不断创新的研发、专业的产品设计、先进的加工制造、严谨的试验检测，确保了荏原全系列产品始终保持“稳定、高效、长寿命”的特性。高品质高性能的产品有力支持着我们为各行业的客户提供安心安全的解决方案。

EBARA has a completed products offerings, including pump, pump unit and other water treatment equipment. Innovative R&D, professional product design, advanced manufacturing, and stringent testing ensure the "stable, efficient and long life" features of EBARA products. With high quality and high performance products, we provide customers of various fields with safe and reassuring solutions.



HPE 家用型供水机组

用途

- 高铁供水系统
- 家用型绿地灌溉
- 自来水增压
- 消防管冲水
- 小型空调补水

特点

- 永磁同步电机，节能高效。
- 根据变频器自动调整转速，实现最适压力
- 整机运行噪音低至40分贝
- 占地空间小，设备最大尺寸280×320×350mm
- 防护壳体等选用难燃材料，确保安全性与低噪音
- 具备电加热等防冻措施，可户外使用

3S 卧式泵供水机组

用途

- 家庭型增压供水
- 高层建筑接力加压
- 小型住宅增压供水
- 循环水系统补水

特点

- 省空间，外形尺寸，最大尺寸 1100 * 1060 * 800 mm (长*宽*高 H);
- 全变频运行，软起软停，极大消减水锤效应
- 既适用从市政管网直结叠压供水，也可从水箱取水进行加压供水;



E系列 室外型景观供水机组

用途

- 旧小区供水增压改造
- 户外型供水增压改造
- 多层住宅、办公楼加压供水

特点

- 室外安装，无需单独设置泵房
- 安装方便，现场只需连接进出水管路，连接电源即可运行;
- 具备防冻加热措施
- 可满足单个小区增压改造水量需求



DY-BN 罐式管网叠压供水机组

用途

- 用于住宅小区的加压供水。

特点

- 机组由立式不锈钢多级泵、控制柜、稳流罐、管路、阀门、气压罐组成，
- 从市政供水管网直接取水，
- 在市政管网的基础上直接加压供水，实现节能、卫生运行，占地面积小

DY-BX 箱式管网叠压供水机组

用途

- 用于医院、学校、高档写字楼等用水安全性要求高的场合
- 管网末端小区增压供水

特点

- 机组由立式不锈钢多级泵、控制柜、管路、阀门、气压罐、不锈钢水箱、智能装换装置组成，
- 根据市政供水压力情况，根据程序设定选择从市政供水管网直接取水或从水箱取水，实现节能运行，
- 市政停水，可通过水箱临时供水



BNS 标准变频供水机组

用途

- 管网末端水压不稳区域加压供水
- 超高层接力加压
- 各类水循环系统
- 补水系统

特点

- 从蓄水设备（水箱）取水，进行变频加压，实现出口压力稳定供水，
- 供水压力不受管网压力波动的影响
- 可配合真空排气罐应用于各类水循环系统



Z系列 一体化智慧泵房

用途

- 多层住宅、办公楼加压供水，旧小区供水增压改造，户外型供水增压改造。

特点

- 室外安装，无需单独设置泵房
- 安装方便，现场只需连接进出水管路，连接电源即可运行；
- 具备防冻加热措施
- 可满足单个小区增压改造水量需求

卧式泵系列 市政增压泵站

用途

- 市政主管网长距离输水接力加压
- 景区引水上山

特点

- 在市政管网的基础上直接加压供水，叠压节能运行
- 水泵形式多采用卧式离心泵或双吸泵等大流量泵形式
- 可通过数据传输系统完成多级泵站联动运行



1972年开始生产销售供水机组



占日本供水市场40%的份额



近百项专利技术



累计已销售60万套以上

EVMS 新一代立式多级泵

NEW GENERATION VERTICAL MULTISTAGE PUMP



1 创新叶轮切割方案

■独特的“Shurricane”飞镖叶轮专利设计，革命性的叶轮边缘切割方案，新颖、精密、高效、可靠。



3 管道连接多样化

■根据应用要求，可提供各种管道连接法兰型式
■可配置活动法兰，以保障水泵的灵活应用。



2 节能

■可配置IE5能效永磁电机使用，实现最优节能性
■水泵标配接口可满足传感器的直接安装
■可配置一体式变频控制器，在不配备外部控制系统的情况下，可实现水泵的自主控制运行



4 易于维护

■独特的刚性联轴器设计，能够保证在不拆卸电机的情况下对机械密封进行更换

水泵智能变频解决方案

INTELLIGENT FREQUENCY CONVERSION SOLUTION FOR WATER PUMP

- 1 系统采用三冗余控制（PLC/变频器/电机），保证供水机组更安全可靠运行
- 2 同步机性能转矩稳定，矢量控制动态响应快，分布式PID，水压控制更稳定，同时解决了新楼交付PID需要后期调试问题
- 3 泵控系统内部高速CAN总线控制，外部485总线实现远程监控机组运行，远程调试、远程软件升级，高效运营
- 4 无压力传感器技术与最佳效率轮值技术，使泵控系统效率始终保持最优状态



系统功能



一体机设备集成PLC控制功能、变频器驱动功能、电机执行功能



轻量化相对异步机尺寸缩小43.7%，重量减轻45%，安装维护快捷方便



独特散热设计，风噪低，高载频低磁密设计，彻底告别电磁噪音！IP55防护等级、内置滤波器EMC C2等级、耐高温50℃设计、驱动器无易损件



高度集成化，简化电气系统设计，节省系统配线、接线端子、变频器安装柜等，不增加系统成本



长寿命，轻量化，模块化
不接线对插安装维护，不调试新模块默认参数直接接入系统，减少维护成本



能效满足IE5，较传统供水系统综合节电率达10%~30%，运营成本下降



Ahead > Beyond

技术特点

TECHNICAL FEATURES

通过高效电机（IE5相当）和推定末端压力运转模式，实测确认节能约15%

Through the high-efficiency motor (equivalent to ie3) and the estimated end pressure operation mode, the actual measurement confirms that the energy saving is about 15%

无人值守，智慧运行，节省用户的每一份精力

全自动运行功能：供水设备能够实现自动恒压变频供水，可以对进口市政管网进行限压保护，避免设备进水口对市政管网产生负压功能。对于水箱水位进行监测，有自动补水、溢流报警、水箱管网自动切换等功能。

小流量稳压功能：设备依据运行过程中检测运转时间，上次停止时间，系统控制避免无谓的停止，尽量减少供水压力的变化。

百年经验，厚积薄发，解决用户的每一份顾虑

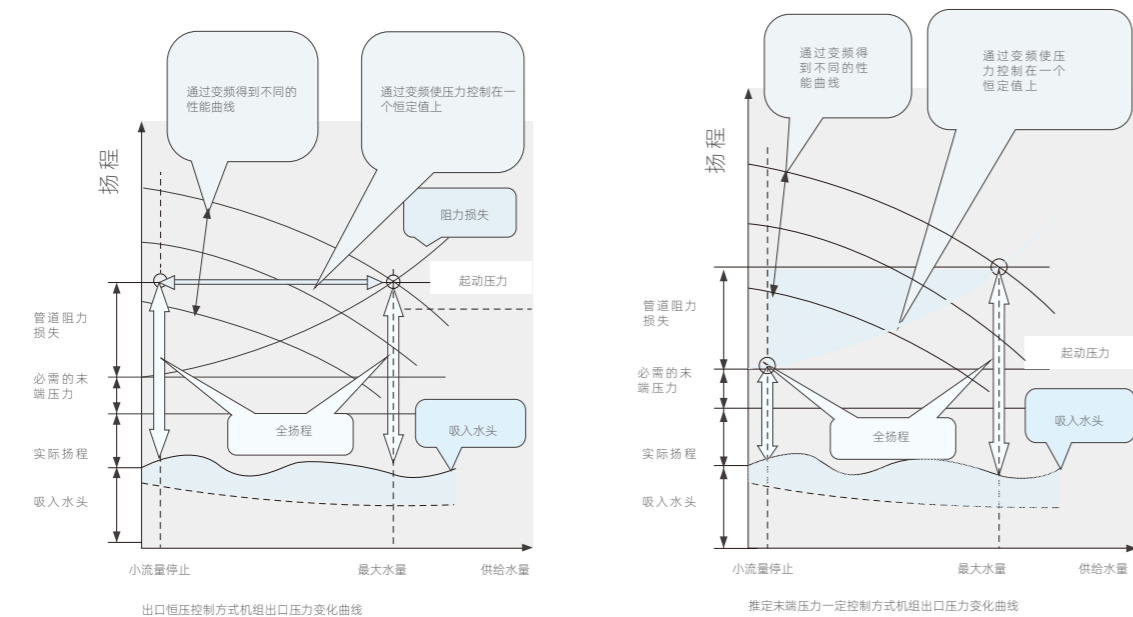
无传感器运行功能：传感器失效情况下，设备可根据系统内存储水泵性能曲线，预测实时水泵扬程，流量，能效，实现正常供水。

控制系统冗余功能：主控制器失效的情况下，辅控制器可自动接手机组设备的运行控制，确保用户的正产供水需求（一体机配置功能）。

独有技术，久经考验，节约用户的每一份投入

终端智能稳压：机组能够根据用户用水量变化，智能调整设备出口压力，确保用户终端用水稳定。

多泵均衡运行功能：当供水量超过当前泵高效区以外时，设备能够自动追加或减少水泵的运行台数，确保水泵始终运行于高效区。



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设备运行数据监控
Equipment operation data monitoring
远程控制运行
Remote control operation
视频安防监控
Video security monitoring



报警信息监控
Alarm information monitoring
历史数据查询
Historical data query
水质水压预警
Water quality and water pressure warning

管控智能

CONTROL INTELLIGENCE

压力、频率、转速、电压、电流、功率、累计用电量、累计运行时间、设备启停次数、故障报警信息流量、水位、门禁状态、水淹报警、消防报警、视频安防、环境监控、水质状态。

Pressure, frequency, speed, voltage, current, power, cumulative power consumption, cumulative operation time, equipment startup and shutdown times, fault alarm information flow, water level, access control status, flooding alarm, fire alarm, video security, environmental monitoring, and water quality status.

百年传承 赢得信任

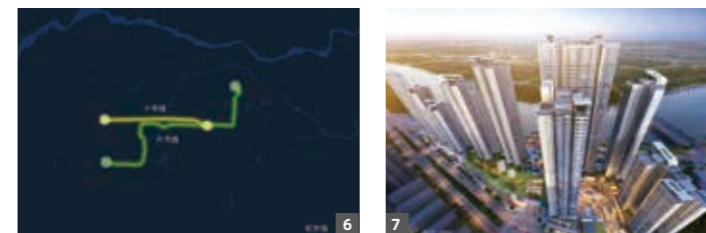
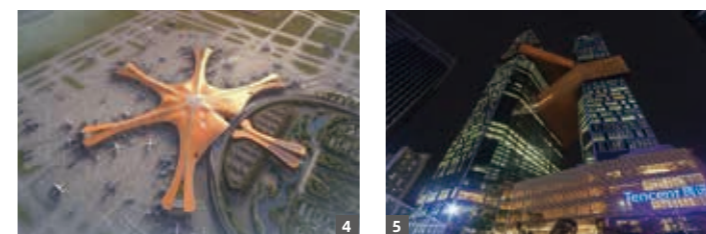
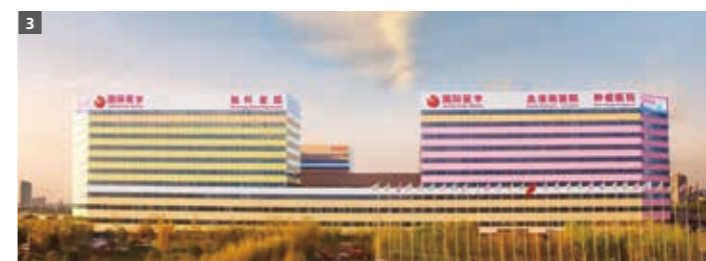
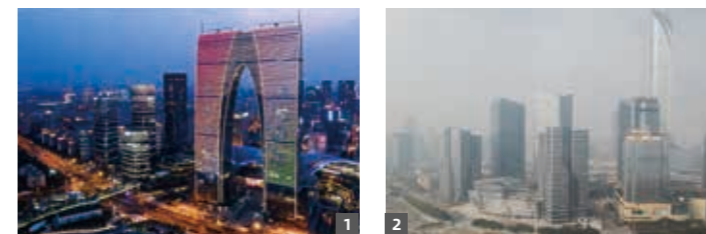
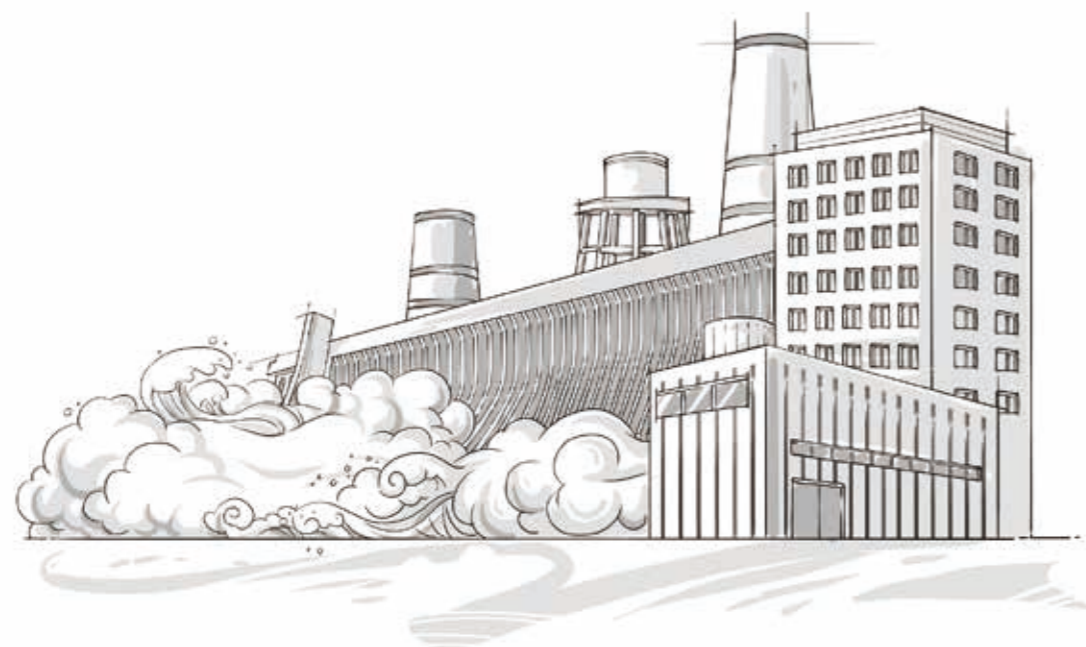
A HUNDRED YEARS OF INHERITANCE AND TRUST

1912年，畠山一清先生与东京帝国大学井口在屋博士创立井口式机械事务所，成为日本离心泵理论的奠基者。百年间的技术积淀，我们不断为行业树立新的标准，成为目前世界上最大单一品牌泵类产品制造商。

在以其雄厚实力，在建筑、市政、工业等各个领域构建了一站式全方位响应机制和服务体系，广泛参与到前期交流、产品定制、设计研发、试验测试、安装调试、售后维护及改造的整个产品生命周期的运营管理，从而赢得了全世界客户的广泛信任。

In 1912, Issey Hatakeyama and Dr. Iguchi of the Imperial University, jointly established the Inokuchi Type Machinery Office, and thus they became the founder of the centrifugal pump theory in Japan. Over the 100 years, we have established new standards for the pump and become the largest pump manufacturer of single brand in the world.

With powerful strength, we have built instant response and service system in the fields of construction, municipal engineering, and industry. We participate in the operation and management during entire cycle of the products from early communications, product customization, R & D, test, installation after-sales service and improvements, and we have won the confidence of customers all over the world.



项目案例 PROJECT CASES

1 东方之门

项目采用:	
CDX单级离心泵	38台套
控制柜	55套
FS系列端吸泵	17台套
供水机组	11台套
CN中开泵	48台套
EVM立式多级泵	23台套

2 金融港商务中心

项目采用:	
CDX单级离心泵	4台套
控制柜	59套
FS系列端吸泵	37台套
供水机组	8台套
CN中开泵	48台套
EVM立式多级泵	6台套

3 西安国际医学中心

项目采用:	
各类设备合计	440余套

4 北京大兴国际机场

项目采用:	
供水机组、EVM立式多级泵等合计	4台套

5 深圳腾讯大厦

项目采用:	
供水机组、EVM立式多级泵等合计	3台套

6 郑州地铁 6、10、机许线

项目采用:	
污水泵及控制柜:	1860余套
消防泵组及控制柜:	390余套
污水提升装置:	100余套
空调水泵:	80余套

7 华润集团

项目采用:	
给、排水产品	8400余套

8 龙湖集团

项目采用:	
给、排水产品	6900余套