

全新升级
洗砂革命
NEW UPGRADE

 洛阳隆中重工机械有限公司
LONGZHONG MACHINERY

QUALITY ASSURANCE
GOOD SERVICE



EXPORT STANDARD
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HS 洗砂回收机

HS SAND PLANT

洛阳隆中重工机械有限公司 / LUOYANG LONGZHONG HEAVY MACHINERY CO., LTD.



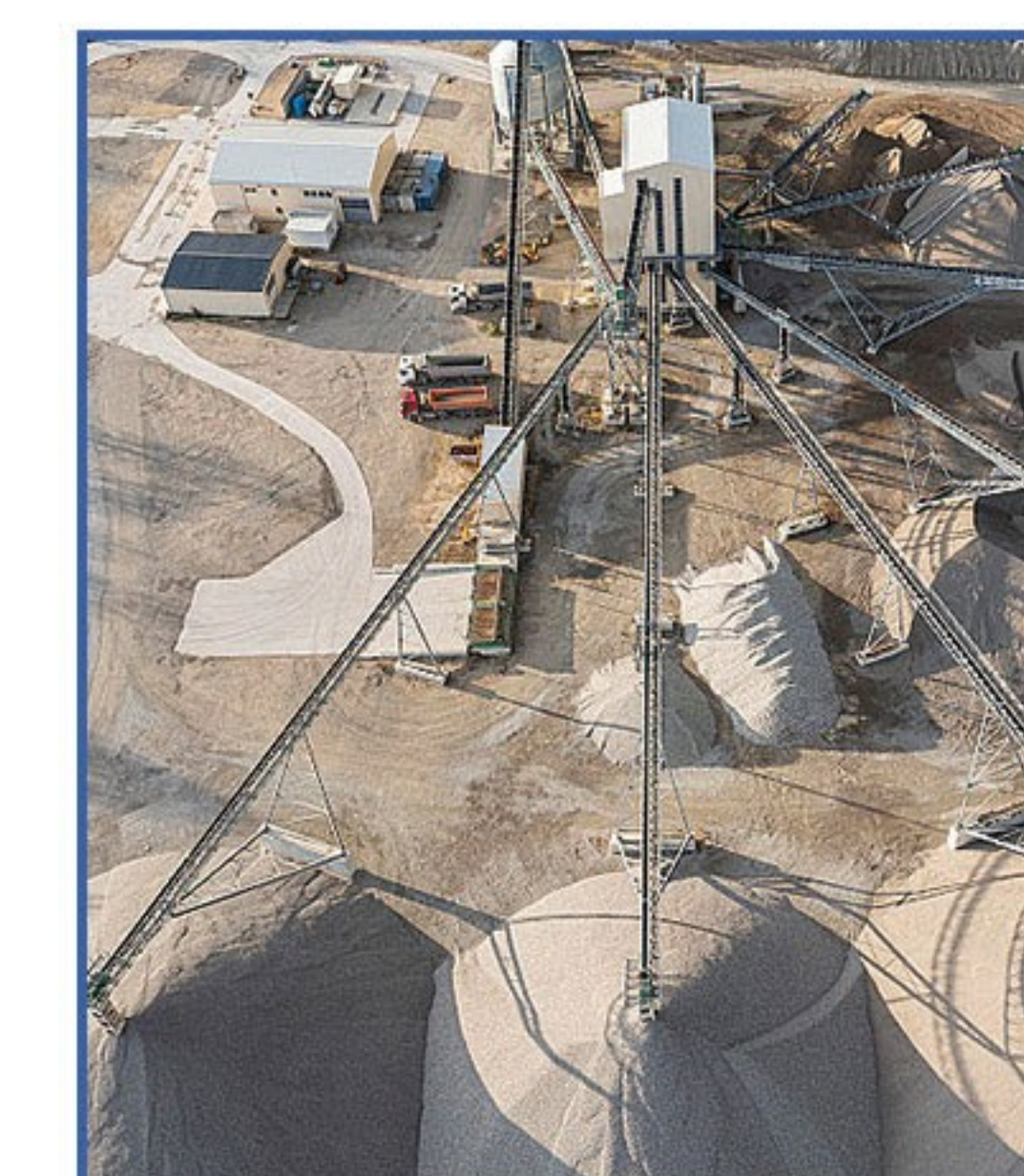
产品简介 / Product Introduction

HS洗砂回收机集砂水分离与粗细砂精准分级回收功能于一体，采用先进的双旋流分离与振动脱水筛分集成技术，可快速处理建筑泥浆、尾矿废水等复杂料浆。设备通过多级旋流器与脱水筛协同作业，实现粗砂脱水、细砂回收及污水净化，处理能力达100 – 120m³/h，能耗降低30%。

HS Sand Plant adopts integrated dual-cyclone separation and vibrating dewatering screening technology. It combines sand-water separation and precision sand classification and recovery into a single unit, enabling rapid processing of complex slurries such as construction mud and tailings wastewater.

HS Sand Plant quickly achieves coarse sand dewatering, fine sand recovery and wastewater purification. It delivers a capacity of 100 – 120 m³/h, with 30% less energy costs.

适用场景 / Applicable Scenarios



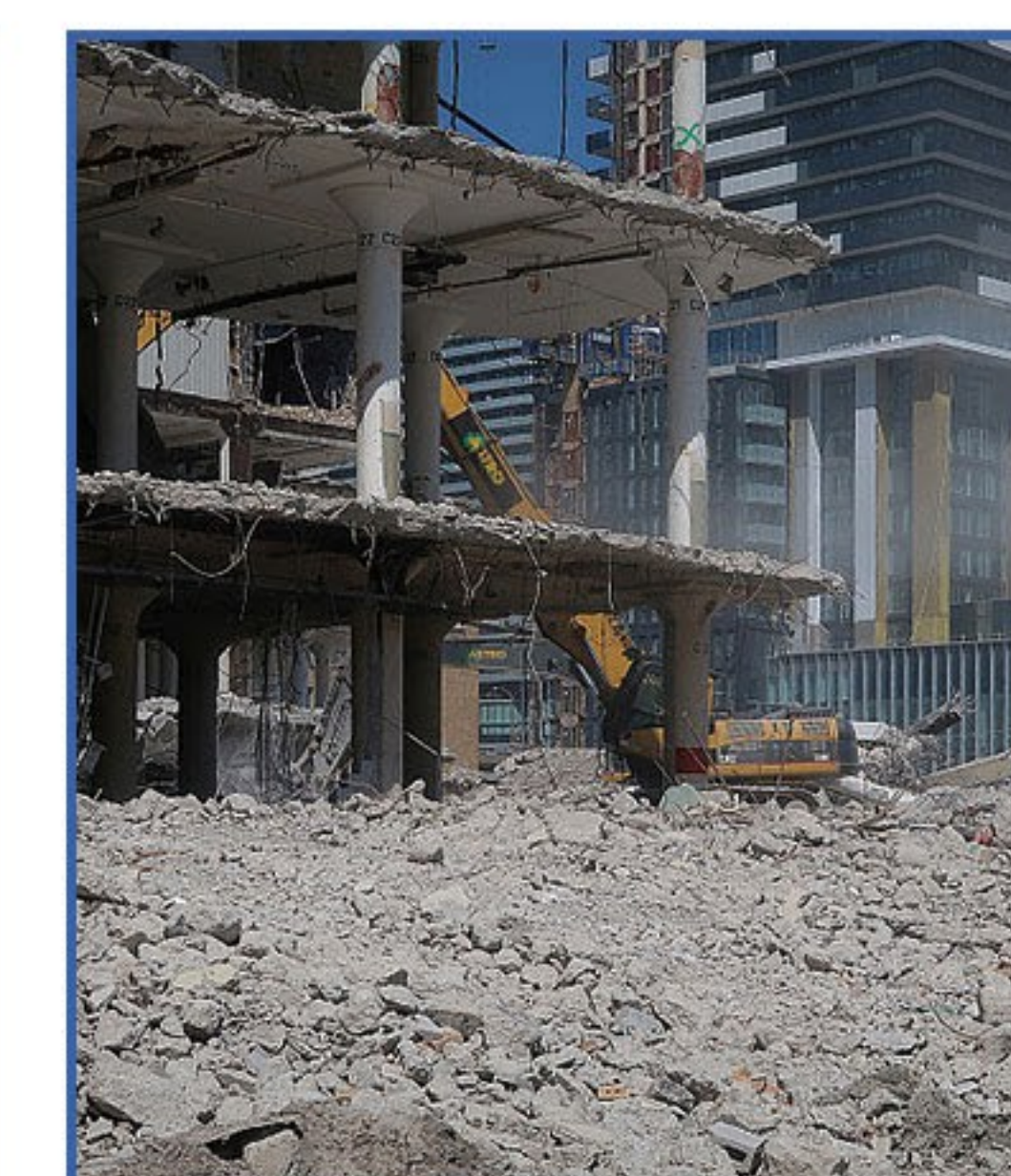
砂石骨料
加工

Aggregate
Processing



矿山尾矿
综合处理

Comprehensive
Tailings
Treatment



建筑废料
资源化再生

Construction
Waste Resource
Recycling



混凝土搅拌站
废水循环利用

Concrete Batching
Plants Wastewater
Recycling



水利工程
河道清淤

River Dredging
For Hydraulic
Engineering

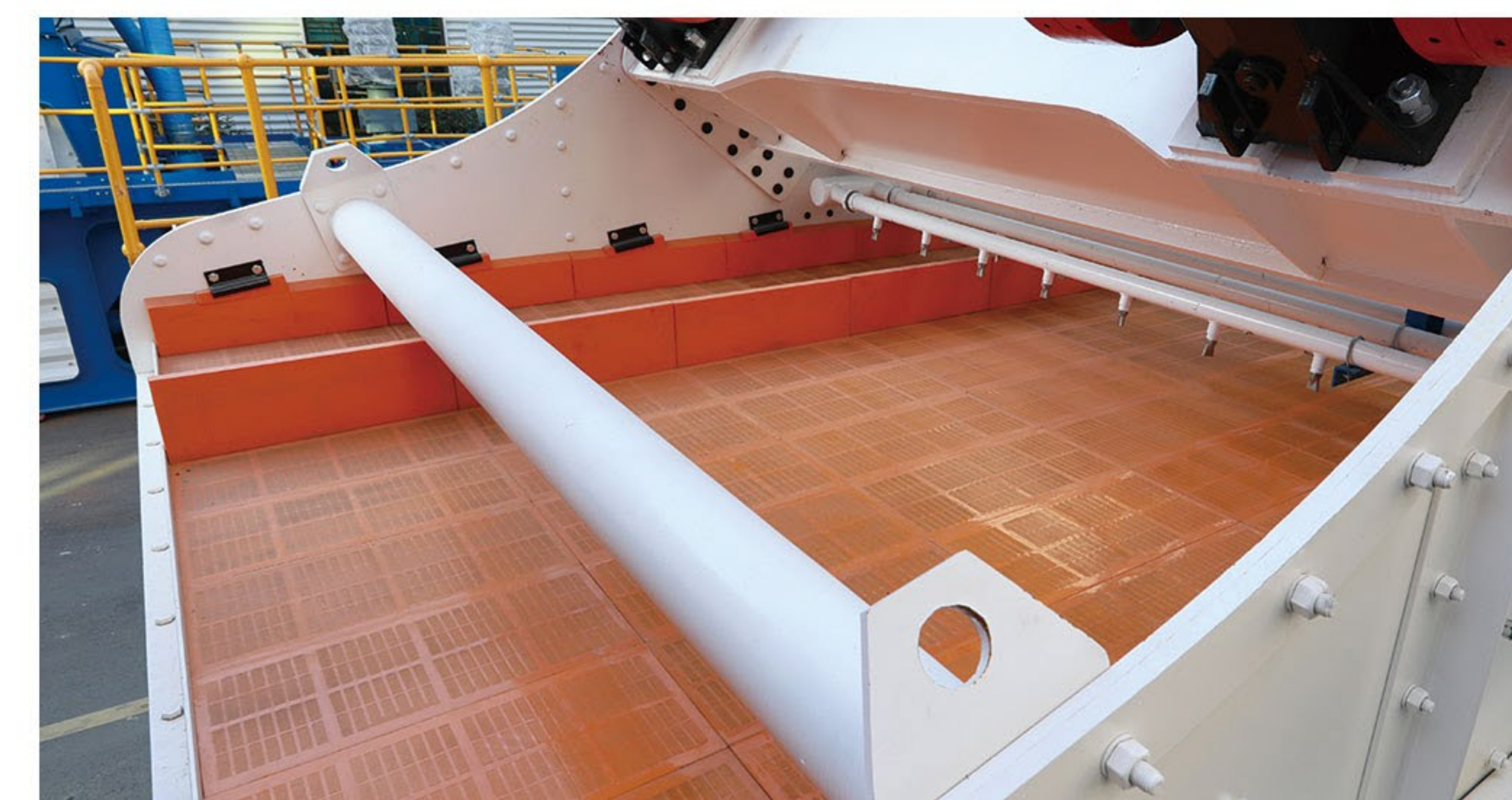
核心技术 / Core Technology

在技术创新上，突破传统单一回收模式，整合双旋流分离与振动脱水筛分技术，设备整体布局科学合理，运行过程高效且稳定可靠。

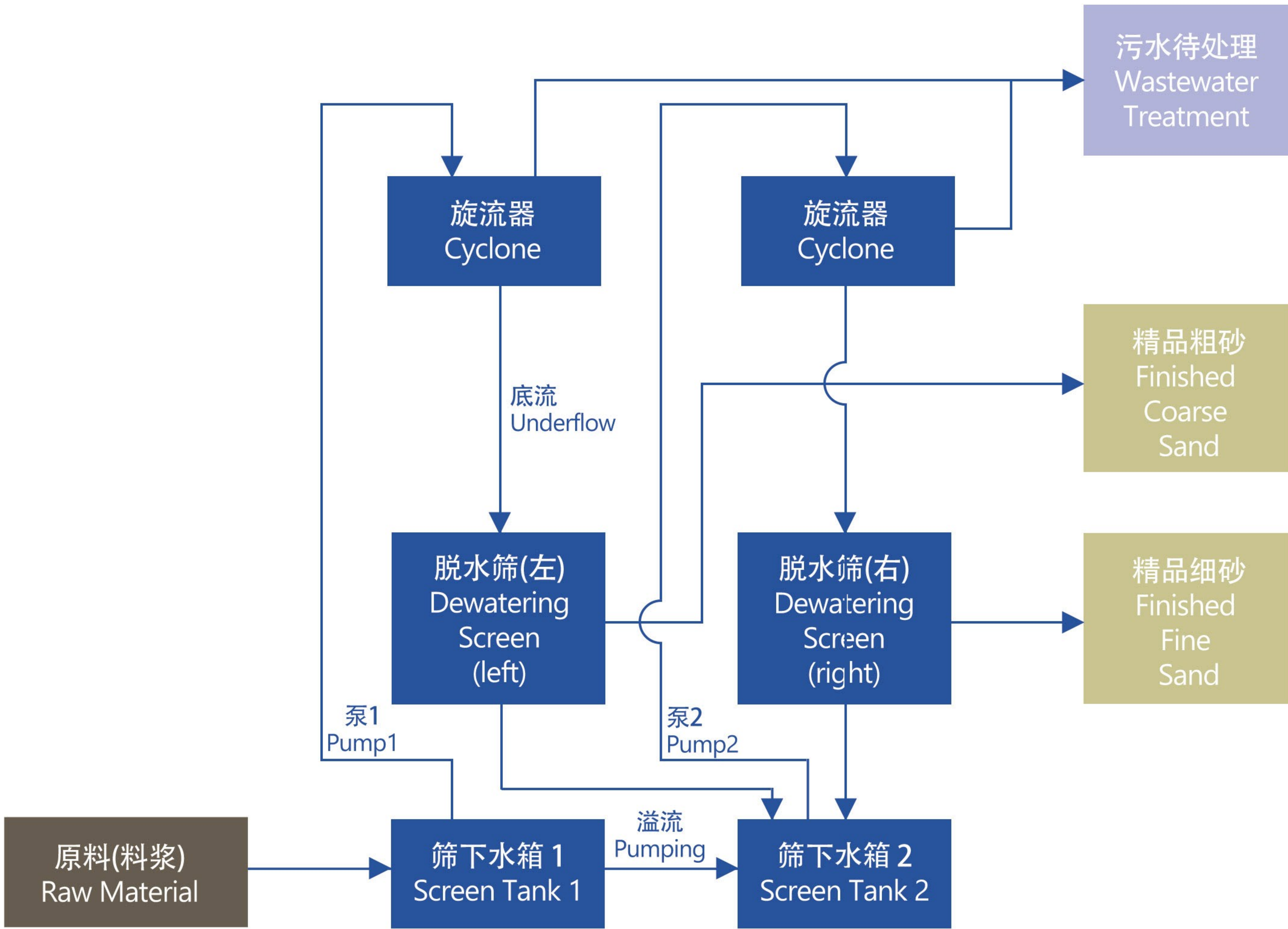
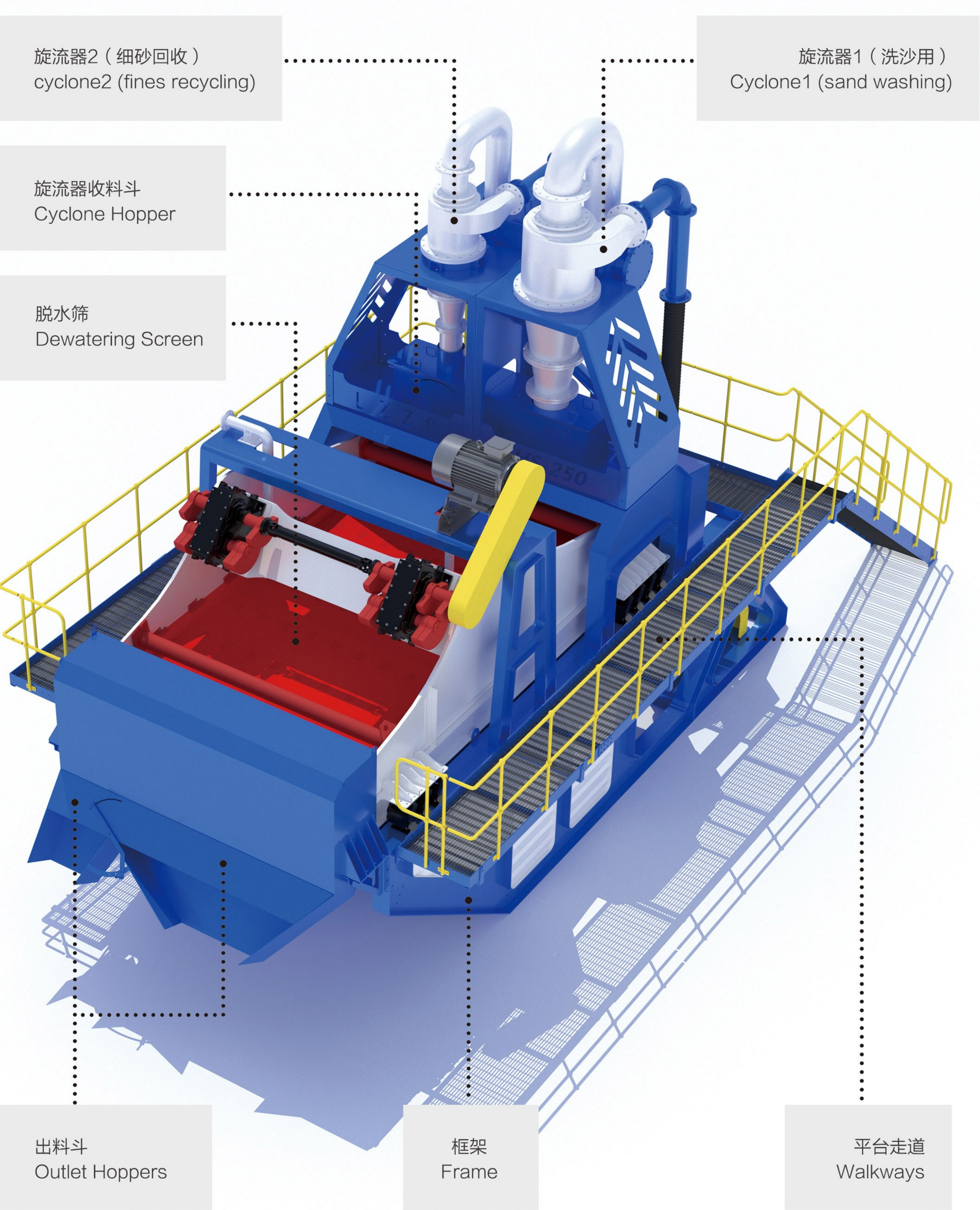
从结构组成来看，由双级旋流分离单元、左右双脱水筛及循环水箱系统构成一套完整的处理体系。

Breaking through traditional single-recovery models, HS Sand Plant innovatively integrates dual-cyclone separation and vibrating dewatering screening technologies. The equipment features a scientifically optimized layout, delivering high-efficiency, stable, and reliable operation.

Structurally, A dual-cyclone separation unit, Paired left/right dewatering screens, A recirculation water tank system, forming a fully integrated processing system.



基本结构：主要由进料循环系统、双级旋流分离模块、双脱水筛分组件及结构支撑单元四部分构成：
Structural Overview: HS Sand Plant consists of four core modules:



工作流程 / Workflow

原料先入筛下水箱1，经泵1输送至旋流器1；
旋流器1底流进入左脱水筛，脱水后产出精品粗砂，筛下液溢流至水箱2；
水箱2料浆经泵2送旋流器2，其底流入右脱水筛，脱水得精品细砂；
旋流器2溢流则作为污水待处理。
形成“进料→分离→脱水→循环”的闭环流程。
该流程实现砂石高效分级回收，提高资源利用率，推进污水减量化，助力绿色生产，为企业带来经济与环保双重效益。

- 1. Raw material first enters Undersized Water Tank1, then is pumped by Pump1 to Cyclone1.
- 2. The underflow from Cyclone1 feeds into the Left Dewatering Screen, producing finished coarse sand after dewatering. The screen drainage overflows to Tank2.
- 3. Slurry from Tank2 is pumped by Pump2 to Cyclone2. Its undrflow enters the Right Dewatering Screen, yielding finished fine sand.
- 4. The overflow from Cyclone2 discharges as wastewater for further treatment.

The whole system establishes a closed-loop process: Feeding → Separation → Dewatering → Circulation. Greatly improved the efficiency of sand and gravel classifying and recycling, as well as the reduction of sewage.

产品优势 / Product Advantages HS 洗砂回收机 / HS Sand Plant

1. 多级协同分离，提效又保砂：采用"双旋流分离+双脱水筛分+循环处理"组合，物料在流程内充分分离，提升符合规格砂的回收率，减少优质砂流失，高效产出精品砂。

2. 连续稳定，适应多种工况：适应多种作业场景，运行连续稳定，可靠性高。

3. 结构紧凑，安装便捷：结构合理，占地面积小，安装简单，维护方便。从原料输入到污水待处理，形成紧凑闭环，结构布局合理，无需复杂安装空间。

4. 核心部件易维护：日常维护泵、旋流器、脱水筛等核心部件，检修便捷，降低运维难度与成本。

5. 经久耐用，成本低廉：优化易损件设计，延长使用寿命，最大限度降低维修与运行成本。

6. 灵活定制，通用性强：可根据客户要求定制特定机型。通过调整参数，，适配多样化生产需求。

1. Multi-stage collaborative separation. Minimizes loss of high-quality sand and efficiently produces finished-grade sand.

2. Suitable for diverse operating scenarios, ensures continuous, stable operation with high reliability.

3. Rational structure with small footprint, simplified installation and maintenance.

4. Streamlined access to critical parts, reducing O&M difficulty and costs.

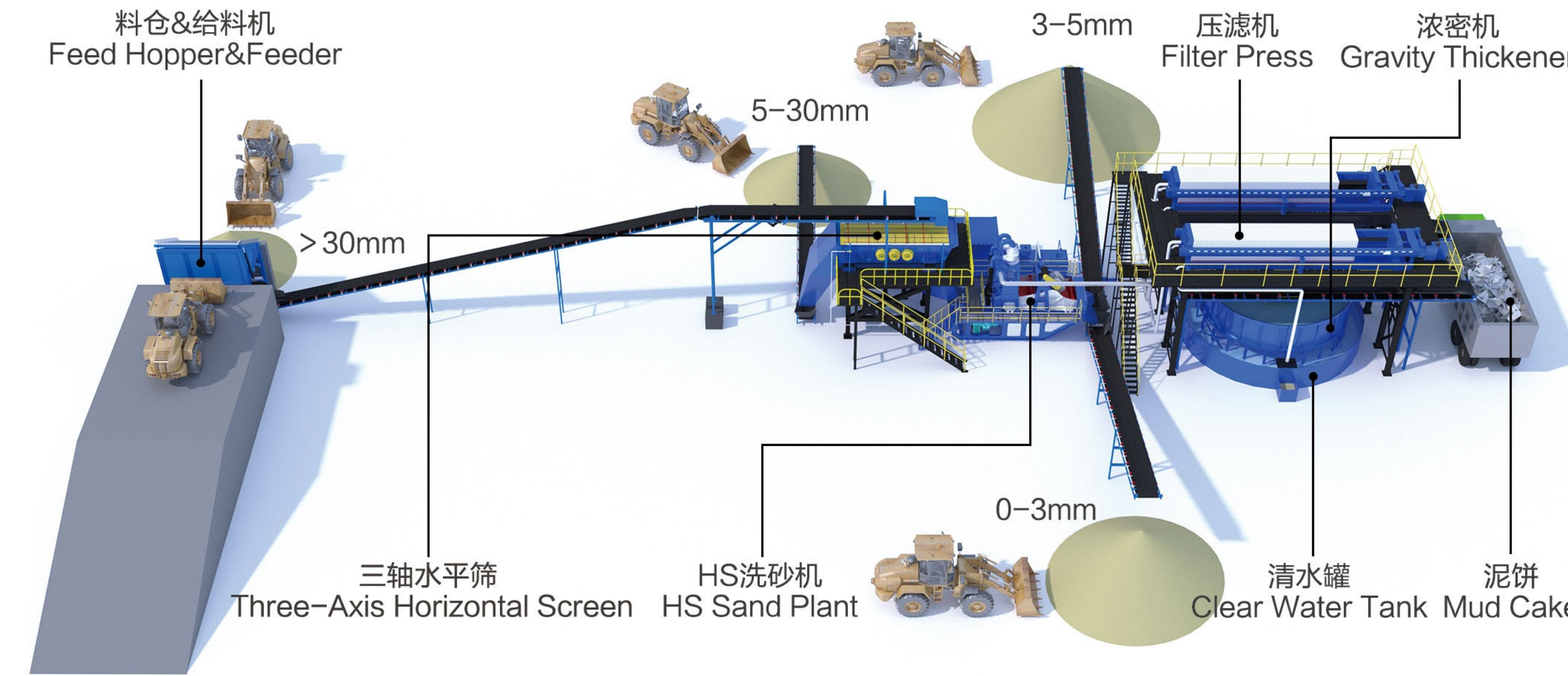
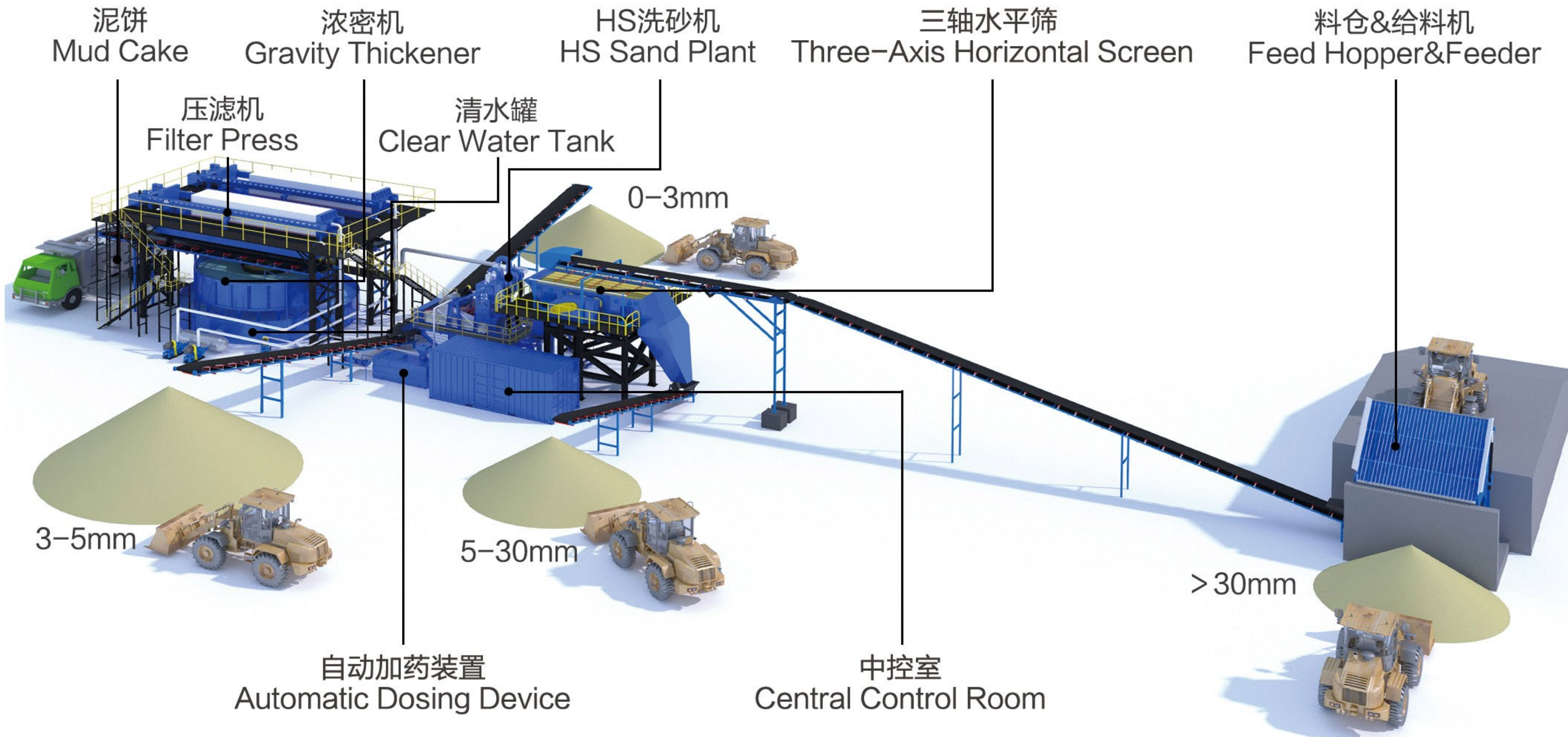
5. Optimized wear-part design, enhanced durability for extended service life.

6. Customizable configurations, tailor-made models available per client requirements.

规格型号 / Specification Model

设备型号 Model	HS100	HS150	HS200	HS250	HS300
产量 Capacity (t/h)	≤100	≤150	≤200	≤250	≤300
处理水量 Water Volume (m/h)	300	400	500	700	800
旋流器1规格 Cyclone1 (mm)	610	660	710	840	900
旋流器2规格 Cyclone2 (mm)	350	400	500	610	660
脱水筛规格 Dewatering Screen (mm)	ZKX1848	ZKX2448	ZKX3060	ZKX3660	ZKX4272
功率 Power (kw)	74	93.5	114	157	190

新型洗砂工艺流程 / New Sand Washing Process Flow >>>



原料经过进料斗或给料机进行初步筛分，>30mm物料输出为料堆；
<30mm物料经皮带机输送至水平筛，经过喷淋清洗筛分，输出为5-30mm物料堆放；
其余物料进入筛下水箱，泵送至双级旋流分离模块及双脱水筛分组件形成“分级处理+循环流转”的料浆输送体系，分别产出精品粗砂3-5mm和精品细砂0-3mm；
而生产环节产生的污水，被泵送至浓密机进行浓缩分离，浓缩后的污泥被压滤机进一步挤压脱水，形成泥饼，排出的清水则循环使用。

Raw material enters via feed hopper/conveyor, >30 mm output stacks as stockpile, and <30 mm material transfers via belt conveyor to horizontal screen Undergoes spray washing and screening, outputs 5-30 mm graded aggregate for storage. Remaining material enters undersized water tank, and pumped to dual-cyclone separation module and dual dewatering screen unit, produce finished coarse sand 3-5mm and finished fine sand 0-3mm respectively. The wastewater is pumped to thickener for concentration and separation. The concentrated sludge is further squeezed and dehydrated by filter press to form sludge cake, while the discharged clean water reused in process.