

Core Business

Oil and Gas Energy Equipment Sector

油气能源装备板块

钻井设备
Drilling equipment

型号:

3000HP 9000米石油钻机

2000HP 7000米石油钻机

1500HP 5000米石油钻机

Model:
3000HP oil drilling rig
2000HP oil drilling rig
1500HP oil drilling rig



数字孪生智慧场站
Digital Twin Smart Station

基于工业数据智能技术的企业级油气项目综管集控平台（IOC）



- 让场站数据看得见 助力油气产业数字化转型

01 保障设备运行
Ensure the operation of equipment

02 强化安全生产
Strengthen safety production

03 提升现场作业水平
Improve the level of on-site operations

04 优化运营能力
Optimize operational capabilities

Oil and Gas Energy Equipment Sector
油气能源装备板块

核心配套设备 Core supporting equipment



泥浆泵



绞 车



海洋吊机



泥浆处理系统



电控包设备

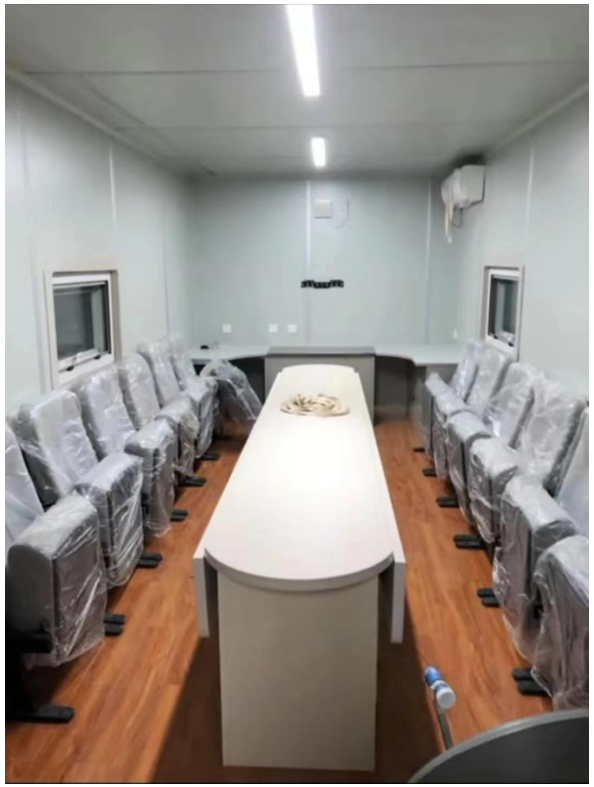


自动化排管装置

Oil and Gas Energy Equipment Sector
油气能源装备板块

- 设备控制中心和会议室、生活室
- Control Center and meeting room、works room







Close-up Photography





钻井设备配套的固控系统
Solid control system for drilling equipment





成套设备安装调试及培训
Installation, commissioning and training of complete equipment



钻机配套产品
Drilling rig supporting products


海洋钻机可调节套管指梁
Adjustable casing fingerboard for offshore drilling rig


海洋钻机立管指梁
Riser fingerboard for offshore drilling rig


海洋钻机中间平台
Belly board for offshore drilling rig


海洋钻机套管指梁
Casing fingerboard for offshore drilling rig


海洋钻机游动滑车
Travelling block for offshore drilling rig


海洋钻机死绳固定器
Deadline anchor for offshore drilling rig


海洋钻进平台井架 Derrick for Offshore Platform


倒绳机
Drill Line Spooler


管排架
Pipe Rack


BOP移运装置
BOP Handling Unit


猫道
Catwalk


发电机房
Generator House


电控房
Electric Control House


泥浆罐
Mud Tank

压力容器系列产品 Pressure vessel series products


热交换器
Heat Exchanger


冷却器
Cooler


压力容器
Generator House


井架 Mast


底座 Substructure


天车 Crown Block


绞车 Drawworks


游车 Travelling Block


转盘 Rotary Table

石油钻机电控及自动化设备
Oil drill rig electronic control and automation equipment


固控系统 Solid Control System



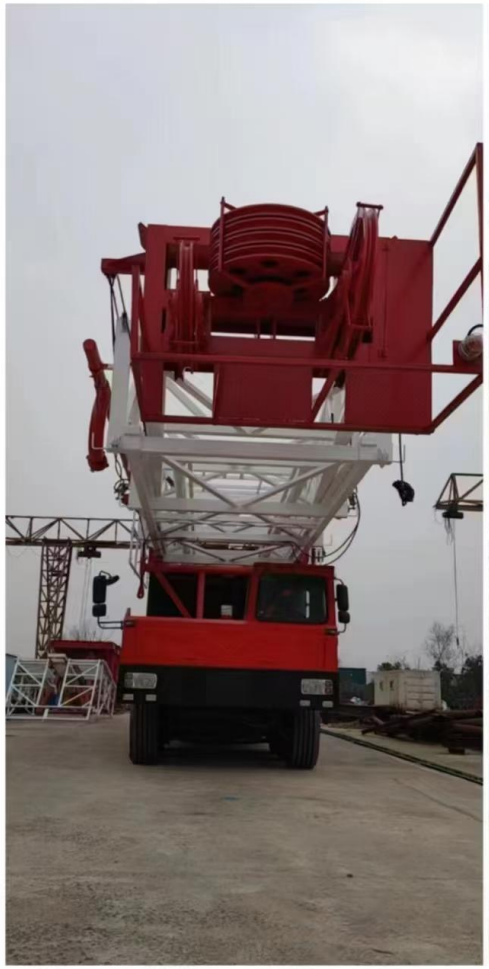
钻机配套设备：Other drilling equipment


电缆托架
Cable bracket
水泥库干灰混拌装置
Dry cement mixing unit
钻机供油装置
Oil supply system
供水装置
Water supply system


钻井泥浆净化系统
Drilling mud purification system
油水分离器
Oil/water separator
发电机房
Generator House
储气罐
Air Receiver

Oil and Gas Energy Equipment Sector
油气能源装备板块









不同型号修井机 Different models of workover rigs

Oil and Gas Energy Equipment Sector
油气能源装备板块

大型储油罐整体解决方案
Overall solution for large oil storage tanks







模块化炼油设备

模块化炼油厂是一种将传统现场建造的大型炼油设施，拆分为在工厂预制、再运往现场快速组装的“即插即用”式解决方案。

Modular refining equipment

Modular refinery is a "plug and play" solution that breaks down traditional on-site construction of large-scale refining facilities into prefabricated ones at the factory and then transported to the site for rapid assembly.



模块化炼油设备型号
Modular refining equipment model



最小规模：日产50吨（日产350桶）

主要型号：日产100吨（日产700桶）
日产300吨（日产2000桶）
日产1000吨（日产7000桶）

Equipment model:

Minimum scale: 50 tons per day (350 barrels per day)

Main model: 100 tons per day (700 barrels per day)
300 tons per day (2000 barrels per day)
1000 tons per day (7000 barrels per day)

与传统炼油厂的指标对比
Comparison of Indicators with Traditional Refineries





传统炼厂

制造周期：3~5年

总投资： 百亿级起步

（如2000万吨/年项目投资约300~500亿元）

资金回收周期： 8~12年（含建设期）

现场工作量： 100%现场施工

Traditional Refinery

Traditional Refinery
Manufacturing cycle ： 3–5 years
Total Investment: Starting from 10 billion RMB level
(For example, a 20 million tons/year project requires an investment of approximately 30–50 billion RMB)
Payback Period: 8–12 years (including construction period)
On-site Workload: 100% on-site construction

模块化炼厂

制造周期： 6~10个月

总投资：数亿~数十亿元；

资金回收周期：较传统节省40% 总投资可缩短至1-3年（投产快、分期滚动）

现场工作量：仅20%现场（80%在工厂预制）

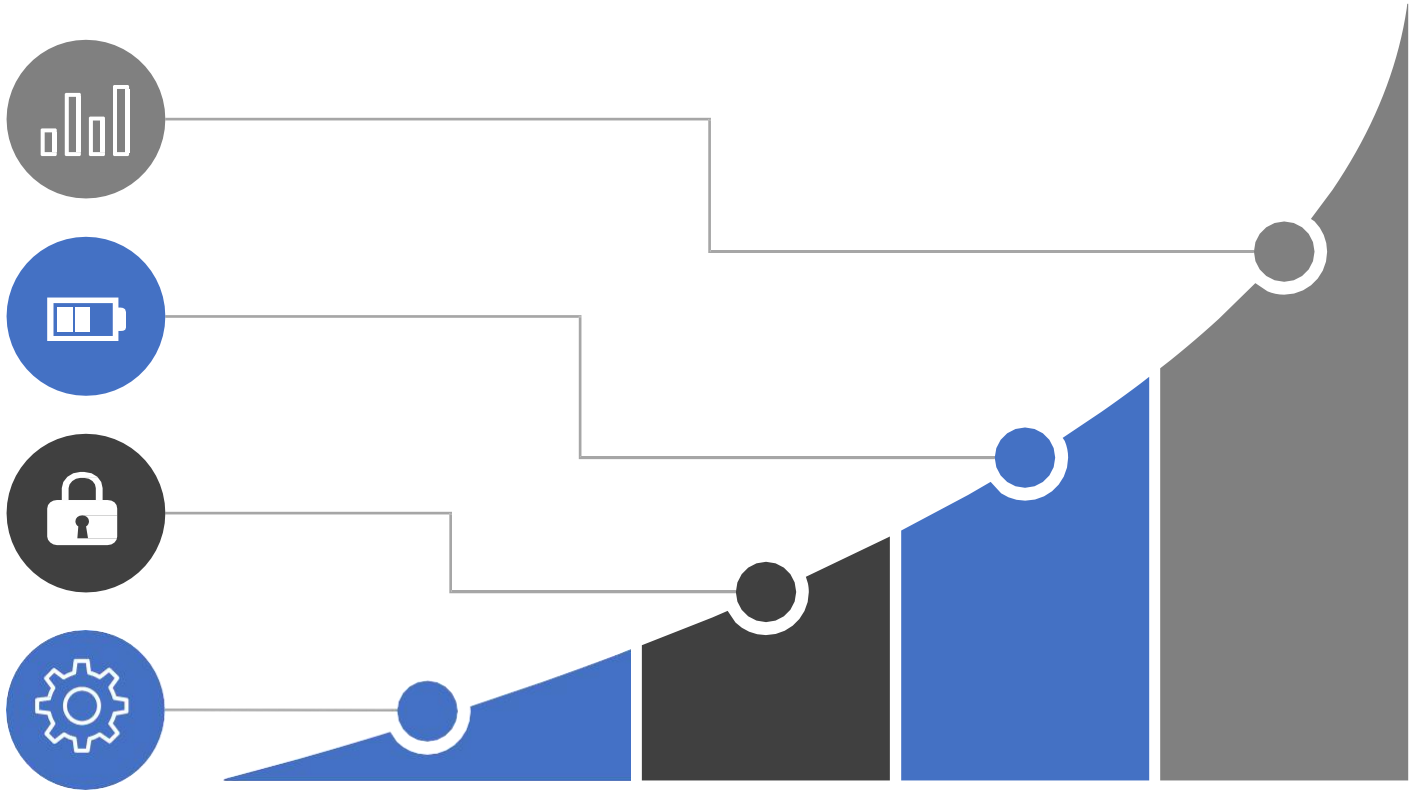
Modular Refinery

Manufacturing cycle: 6–10 months
Total investment: Hundreds of millions to several billion RMB
Payback period: 40% shorter than traditional projects; total payback can be reduced to 1–3 years (fast commissioning, phased rolling development)
On-site workload: Only 20% on-site (80% prefabricated in the factory)

设备优势说明
Equipment advantage description

模块化炼油设备
Modular Refinery Equipment

- 回报率高 High rate of return
- 使用寿命长 long service life
- 稳定性强 Strong stability
- 操作简单 Easy operate



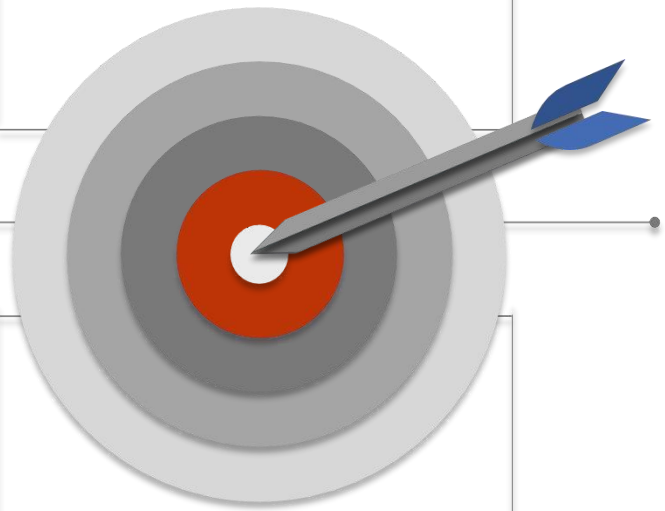
设备优势说明
Equipment advantage description

热能利用率高
High Thermal efficiency

预热脱水杂质少
Preheat, dehydrate, less impurities

催化剂消耗少
Low catalyst consumption

可调油提高品质
Oil regulating to improve oil products



模块化便于运输与移动
Modular design facilitates transportation and mobility

DCS 自动化程度高
DCS high degree of automation

工艺清晰，馏程分明
Clear process and clear distillation range

残渣碳化无固废 Residue carbonization without solid waste

设备设计侧重点
Equipment design focus



环保 Green

废水、烟气可以达标排放， 废渣可二次利用或填埋，生产无二次污染。

Wastewater and flue gas can be discharged up to standard, waste residue can be reused or landfilled, and there is no secondary pollution in production.



安全 Safty

自动控制系统结合控制室内人工操作; 重要机电设备一用一备， 双重保障。

Automatic control system combined with manual operation in the control room; one active and one standby for important electromechanical equipment, providing dual guarantee.



循环 Recycle

所有产品闭环式生产， 100％资源化利用。裂解气、余热再次利用，节能减排。

All products closed-loop production, 100% resource utilization. Pyrolysis gas, waste heat reuse, energy saving andemission reduction.

➢ 制造六步曲 Six Steps of Manufacturing

1.工厂预制**≥80%**组件

2.NDT无损检测**+**压力测试**+**泄漏检测“三件套”

3.模块拆分适配公路、铁路、海运限高限重

4.减震垫与预埋螺栓一次对位，基础施工时间缩短一半

5.虚拟仿真预演流程，现场调试时间砍掉**20%**

6.出厂前大数据标定，自带“数字孪生”

1. Factory prefabrication: ≥80% of components.

2. NDT + pressure test + leak test integrated inspection.

3. Modules split to meet height & weight limits for road, rail and sea transport.

4. One-time alignment of damping pads and embedded bolts, cutting foundation time by half.

5. Virtual simulation for process pre-commissioning, reducing on-site commissioning time by 20%.

6.Big data calibration before delivery, with built-in "digital twin".



分布式天然气能源站
集成解决方案

适配油田现场生产需求，以伴生油田天然气为燃料，通过冷热电三联供集成系统，为钻井平台、油气处理站、集输场站提供电力、供热、工艺热源。



Integrated Solution for Distributed Natural Gas Energy Stations

Adapted to the production needs of oilfield operations, it utilizes associated natural gas from oilfields as fuel and provides electricity, heating, and process heat sources to drilling platforms, oil and gas processing stations, and gathering and transfer stations through an integrated combined cooling, heating, and power (CCHP) system.

撬装天然气液化装置



采用模块化撬块集成，集成原料气净化、脱水脱酸、混合冷剂深冷液化单元，工厂预制完成，现场快速对接投产。可将油田伴生气、零散井气就地转化为 **LNG**。

小型液化装置规格：

6万—10万 — 15万— 30万Sm^3/天

Piggyback natural gas liquefaction unit

The modular skid-mounted integration incorporates units for raw gas purification, dehydration and desulfurization, and mixed refrigerant cryogenic liquefaction, with factory prefabrication completed for rapid on-site assembly and commissioning. It enables the in-situ conversion of oilfield associated gas and scattered well gas into LNG.

Specifications of the small liquefaction unit:60,000–100,000 – 150,000–300,000 Sm^3/day

车载移动井口气处理装置

可利用井口气生产 CNG/LNG，每套设备每天可以处理 3-5 万立方米天然气。

Mobile Onshore Gas Processing Unit for Vehicles

CNG/LNG can be produced from wellheads, with each set of equipment capable of processing 30,000 to 50,000 cubic meters of natural gas per day.






钻井、修井技术服务
Drilling and well repair technical services

我方具有丰富的油气田钻井、修井20余年实操经验，并拥有一批技术领先、专业可靠的丛式井、水平定向井工程队伍， 效率高效、施工可靠、技术稳定、成本可控。





We have over 20 years of practical experience in oil and gas field drilling and well repair, as well as a group of technically leading, professional and reliable engineering teams for cluster wells and horizontal directional wells, with high efficiency, reliable construction, stable technology, and controllable costs.

Oil and Gas Energy Equipment Sector
油气能源装备板块

核心团队曾参与给全球最大能源装备制造企业NOV公司的第三代钻井设备，生产制造221台套；

The core team has participated in the production and manufacturing of 221 sets of third-generation drilling equipment for NOV, the world's largest energy equipment manufacturing company;



Oil and Gas Energy Equipment Sector
油气能源装备板块

核心团队层参与过7套海洋钻井平台的钻机包生产制造，其中一台应用在中国“981”深海平台。

The core team has participated in the production and manufacturing of drilling rig packages for 7 offshore drilling platforms, one of which was applied to the "981" deep-sea platform in China.



海外维保中心业务板块
Overseas Maintenance Center Business Segment

我们的产品销售到任何国家，我们将开设一体化售后维保、技术服务中心，提供24小时服务。

Our products will be sold to any country, and we will establish an integrated after-sales maintenance and technical service center to provide 24-hour service



组装调试

Assembly&Adjusting



维修保障

Repair&Maintenance



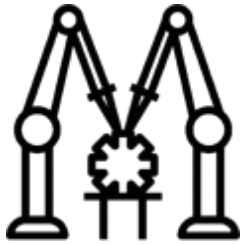
职业训练

work Training



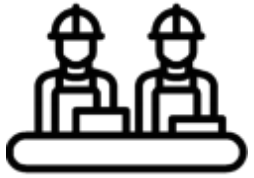
物流仓储

Logistic storage



翻修改造

Re mold&Renovate



零件加工

parts Manufacturing