

核能重装业务介绍

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RELIABLE, TRACEABLE

Nuclear and Heavy Equipment Business Unit 核能重装事业部

Company Profile 公司介绍



伊莱特——为人类锻造更加安全、绿色与高效的未来工业。

伊莱特致力于向各类先进装备与高价值资产提供关键可靠部件，我们在锻造行业拥有半个世纪的坚定承诺，以及超过30年的国际市场服务经验。

我们在中国和西班牙的10个生产基地和2500余名员工，服务于清洁能源、化石能源、海洋工程、隧道掘进、水泥制造、金属矿山等不同市场的客户。

伊莱特高度聚焦于锻造行业，主要产品包括盘类、环类、筒体锻件，锻棒与锻轴，耐磨介质等，涵盖了从0.3公斤到350吨的各类大中小型锻件。我们能提供从原材料定制、锻造、热处理、高精度机加工、检测、复杂运输的整套解决方案。

我们拥有全球少数公司才具备的极限制造能力，可提供最大重量350吨的自由锻件，最大直径22米的整体无缝轧环，最大高度5米的锻轧式筒节，以及最大长度25米的径向锻棒。伊莱特在2022年制造出了直径15.7米，周长49.2米的整体无缝锻环，创造了吉尼斯世界纪录。

这些加工能力帮助我们推出一系列创新性产品，并将其成功应用于四代核电、日产万吨水泥回转窑、掘进直径16米盾构机、25MW 漂浮式海上风机等超级装备中。

愿景：为人类锻造更加安全、绿色与高效的未来工业。

使命：成为全球高端装备锻件核心部件制造商。

价值观：诚实、谦逊、坚韧、拼搏。

Iraeta - Forge a safer, greener and more efficient future for mankind.

Iraeta is committed to supplying mission-critical, high-reliability components for advanced equipment and high-value assets. We have half a century of dedication to the forging industry and over 30 years of service offering experience in the global market.

We serve clients across clean energy, fossil fuels, marine engineering, tunnel boring, cement production, and metal mining sectors through our 10 production bases in China and Spain, supported by a workforce of over 2,500.

Specializing exclusively in forging, Iraeta manufactures disc, ring, and shell forgings, forged bars & shafts, as well as wear-resistant grinding media—covering small, medium, and large forgings ranging from 0.3 kg to 350 tons. We deliver end-to-end solutions, from custom material preparation and forging to heat treatment, high-precision machining, testing, and complex logistics.

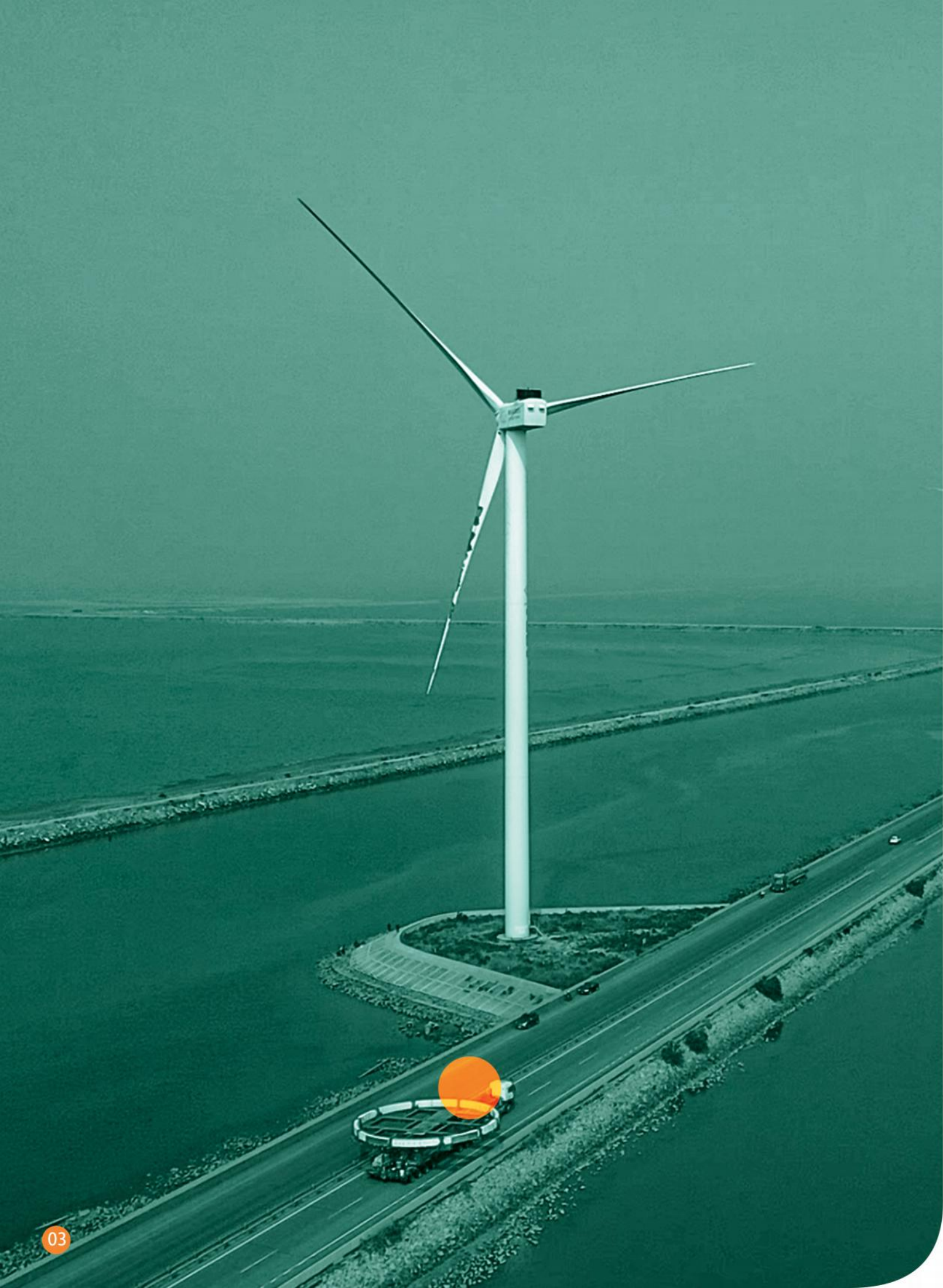
With extreme manufacturing capabilities that only a handful of global firms possess, we can provide open-die forgings with a maximum weight of 350 tons, seamless rolled rings up to 22 m in diameter (monolithic construction), rolled cylindrical shells up to 5 m in height, and radially forged bars up to 25 m in length. In 2022, Iraeta set a Guinness World Record by producing the largest seamless forged ring ever made: 15.7 m in diameter (49.2 m circumference).

These processing capabilities enable us to launch a series of innovative products, which have been successfully applied to super equipment such as the fourth-generation nuclear power plant, cement rotary kilns with a daily output of 10,000 tons, shield machines with a tunneling diameter of 16 m, and 25 MW floating offshore wind turbines.

Vision: Forge a safer, greener and more efficient future for mankind.

Mission: Become the core manufacturer of equipment forgings in the world.

Values: Honesty, humility, tenacity, and diligence.



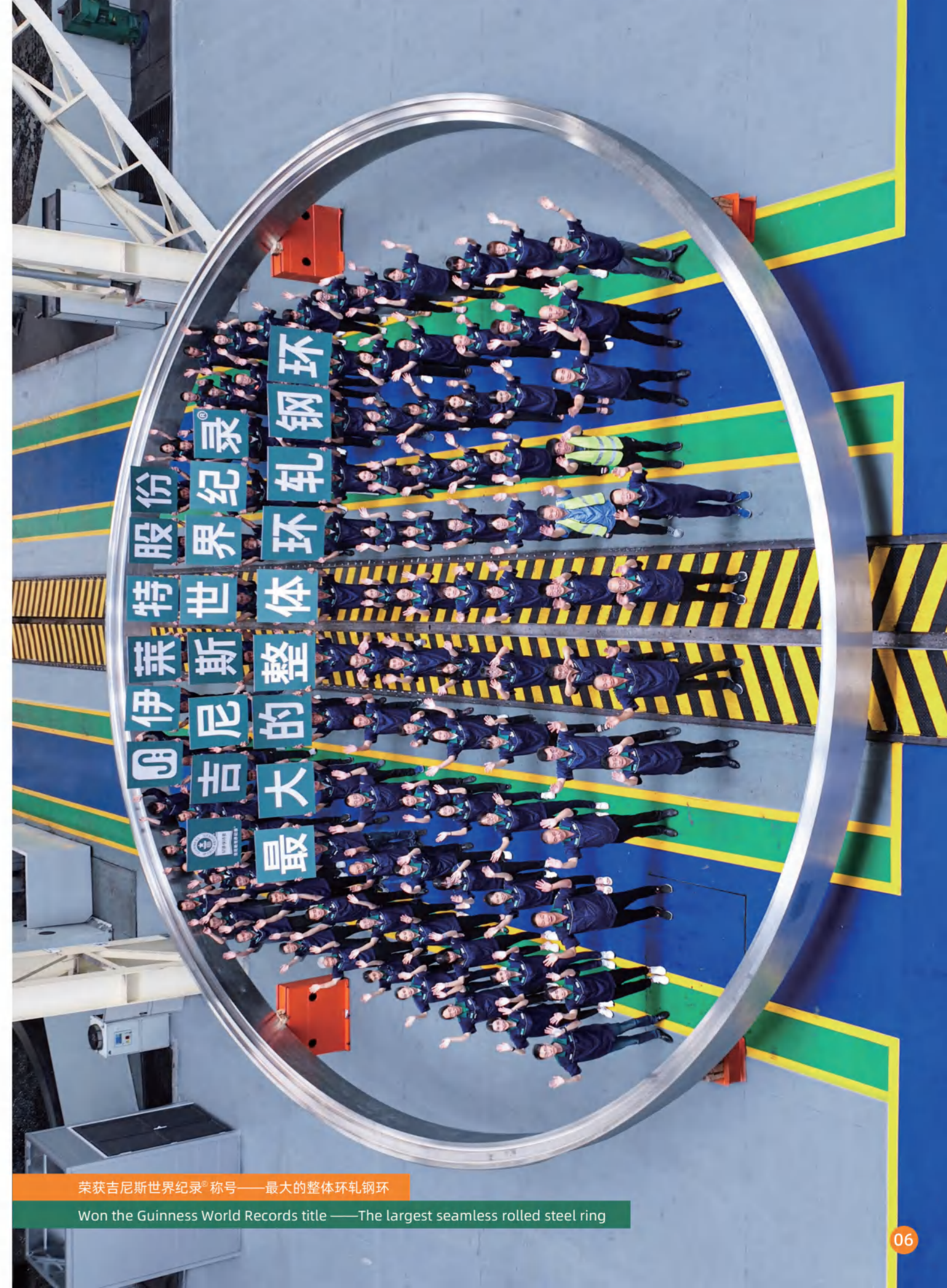
Support Ring

- Diameter 15,673 mm
- Weight 150 t
- Material F316H
- Research and develop seamless construction technology in cooperation with Institute of Metals, Chinese Academy of Science
- Near-net-shape radial-axial rolling technology

支承环

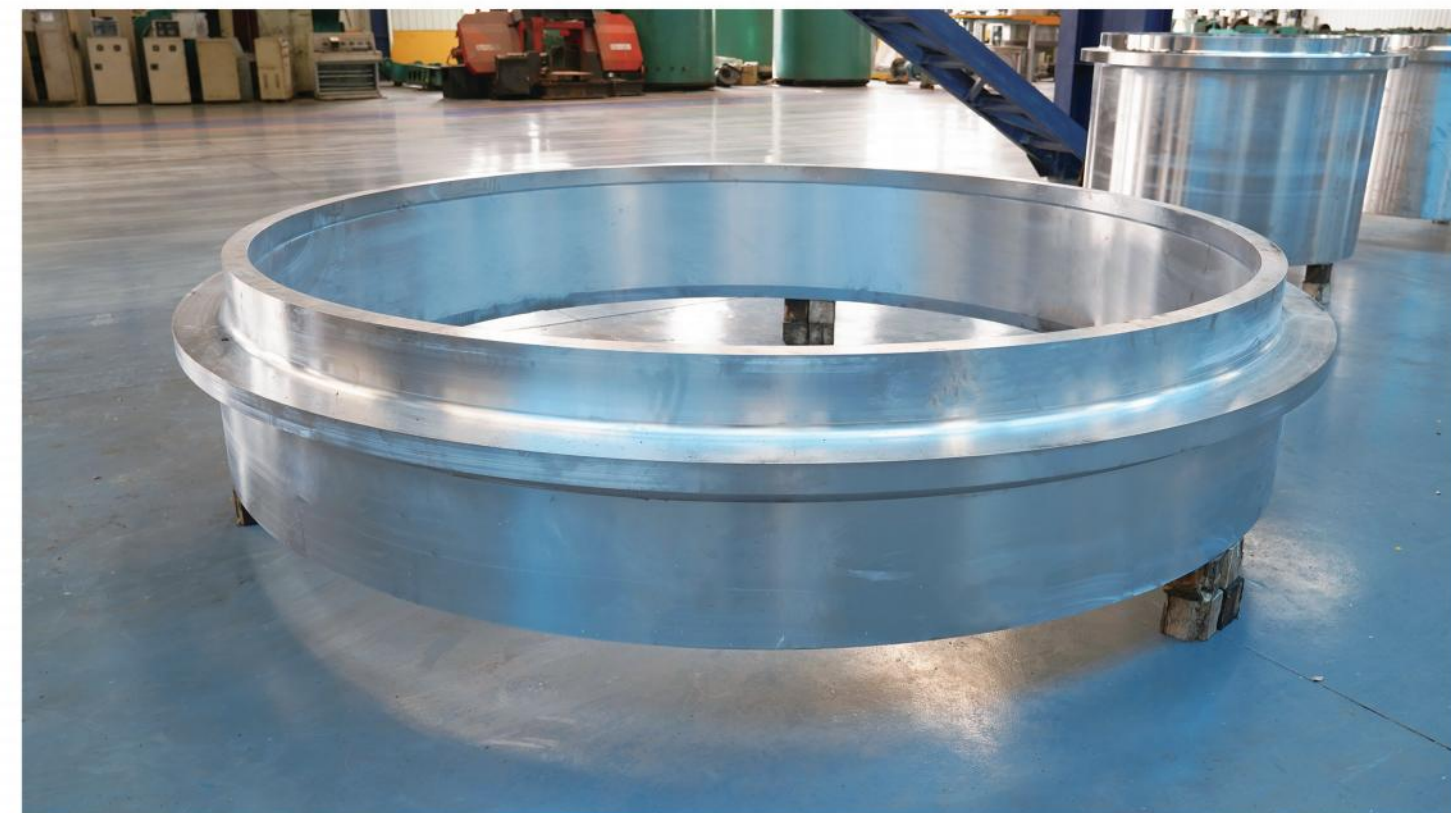
- 直径15673mm
- 重量150 t
- 材质F316H
- 与中科院金属所合作研发无痕构筑技术
- 近净成形径轴向轧制工艺

Nuclear power component
核电部件





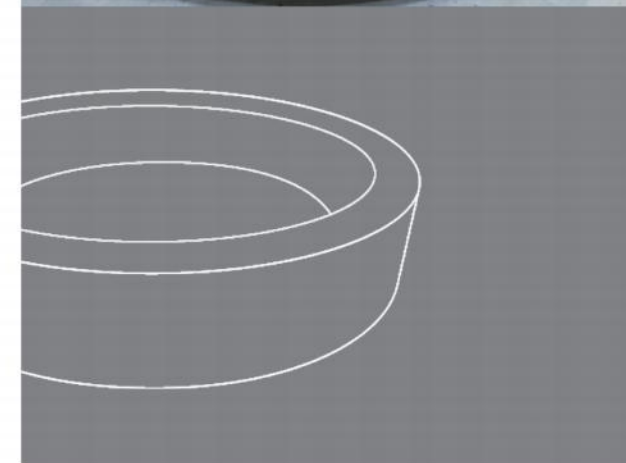
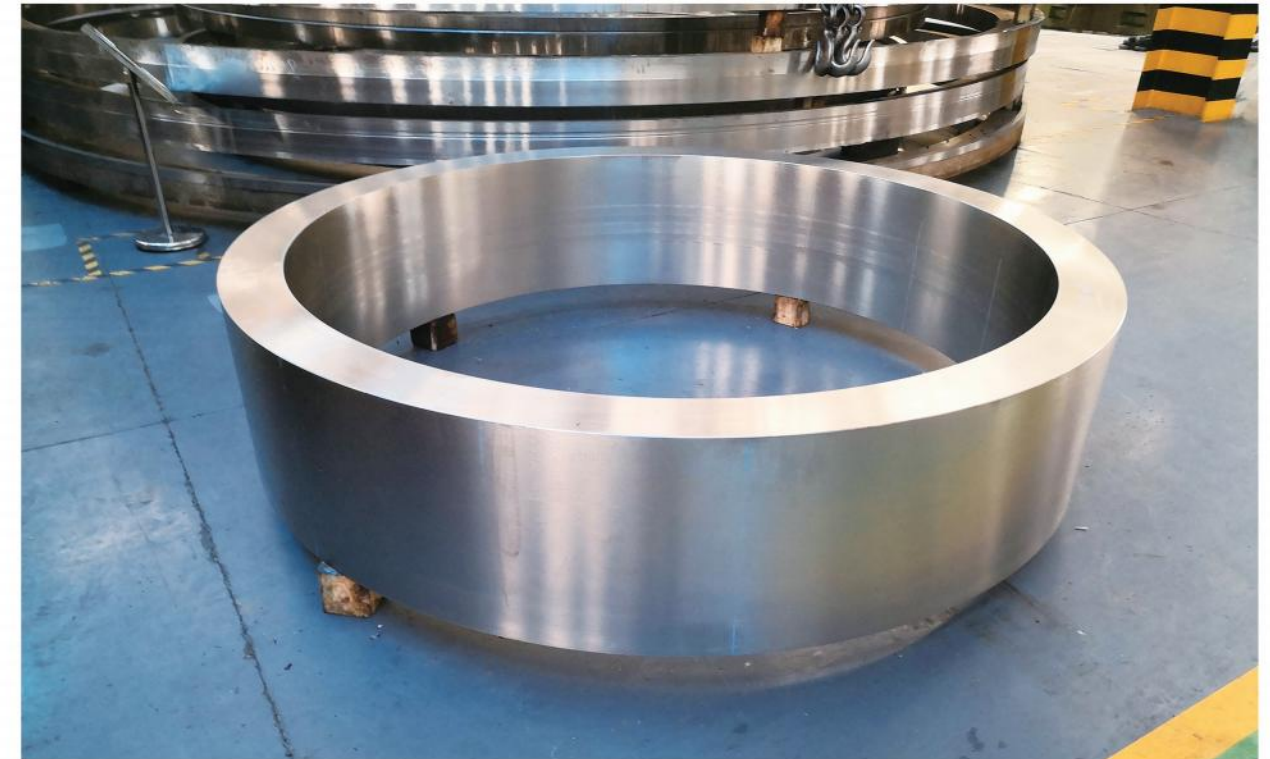
泵支承锻件
Pump support forging



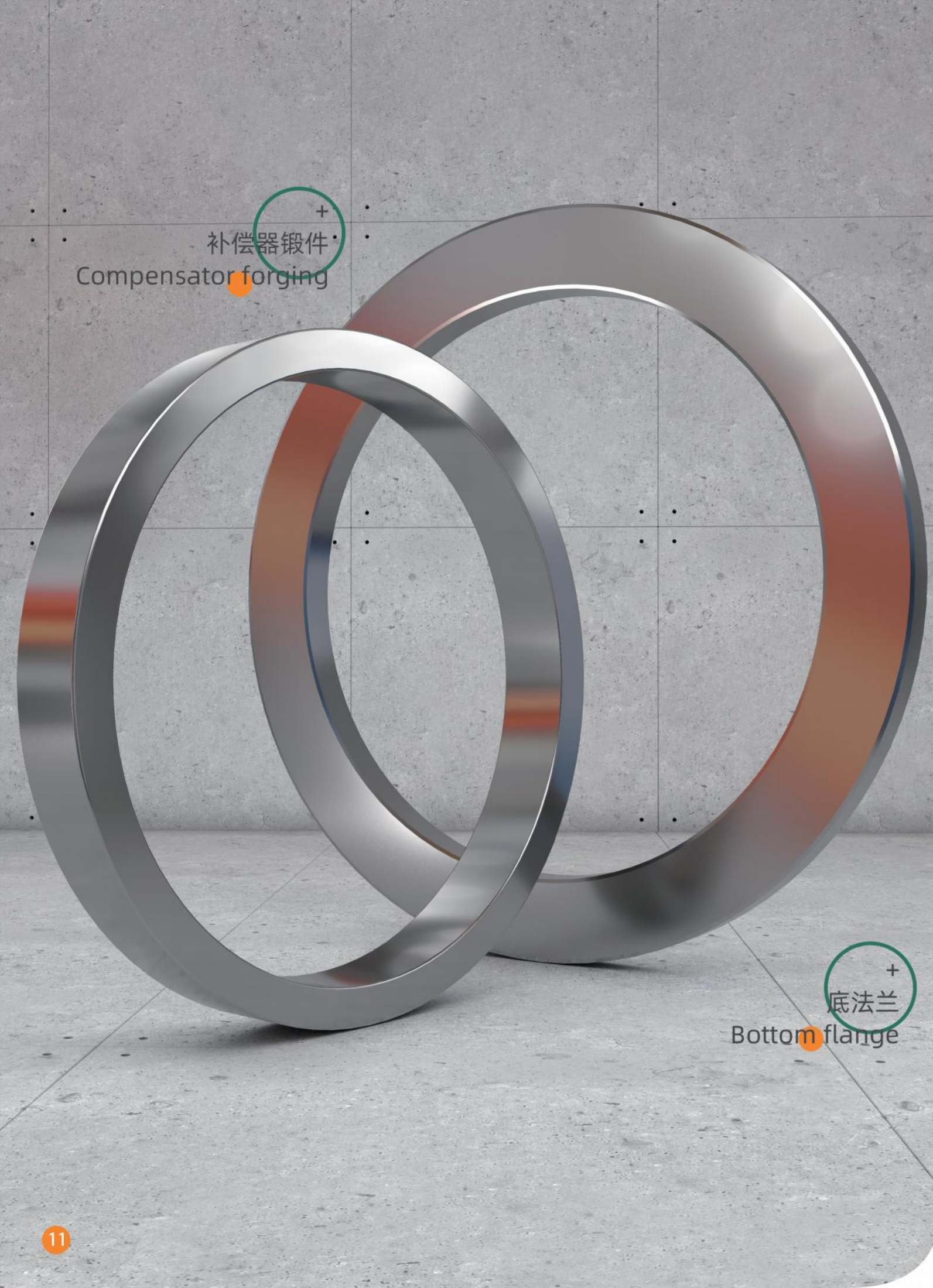
泵支承锻件
Pump support forging



旋塞锻件
Cock forging



旋塞锻件
Cock forging

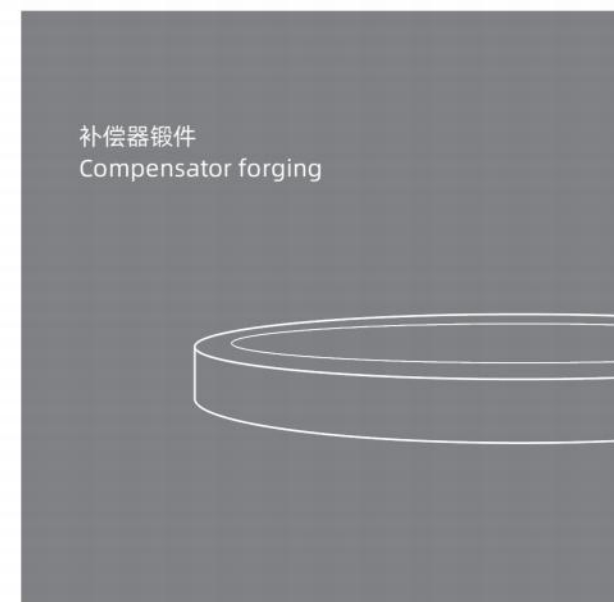
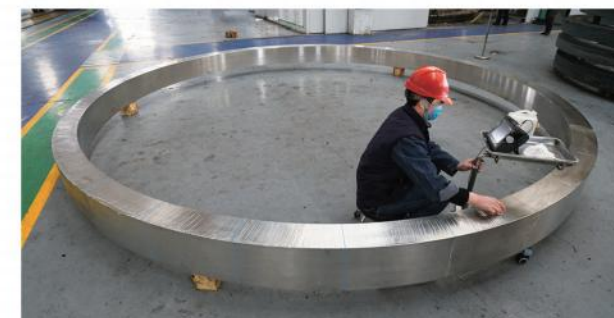


补偿器锻件
Compensator forging

底法兰
Bottom flange



底法兰
Bottom flange



补偿器锻件
Compensator forging





Pressure vessel forgings for chemical and petrochemical industries

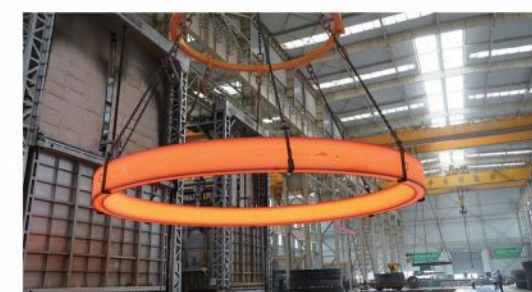
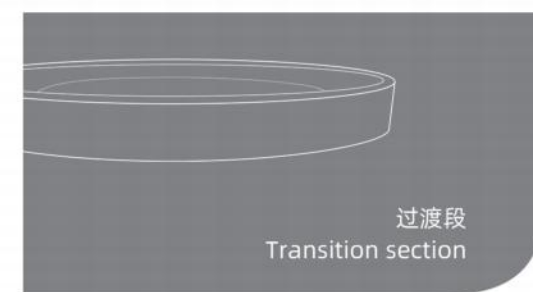
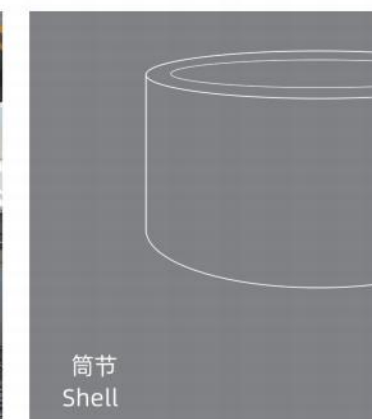
化工及石化领域压力容器配套锻件

Selected cases and clients:

LNG Canada
CNPC
Sinopec
LS Heavy Machinery.
Shanxi Yangquan Coal Industry
LOINTEK, S.L.

部分案例及客户:

LNG Canada
中石油
中石化
兰石重工
山西阳煤
LOINTEK, S.L.



SHELL

OUTER DIAMETER/
INNER DIAMETER/HEIGHT:
6000/5000/3000 mm

TRANSITION SECTION

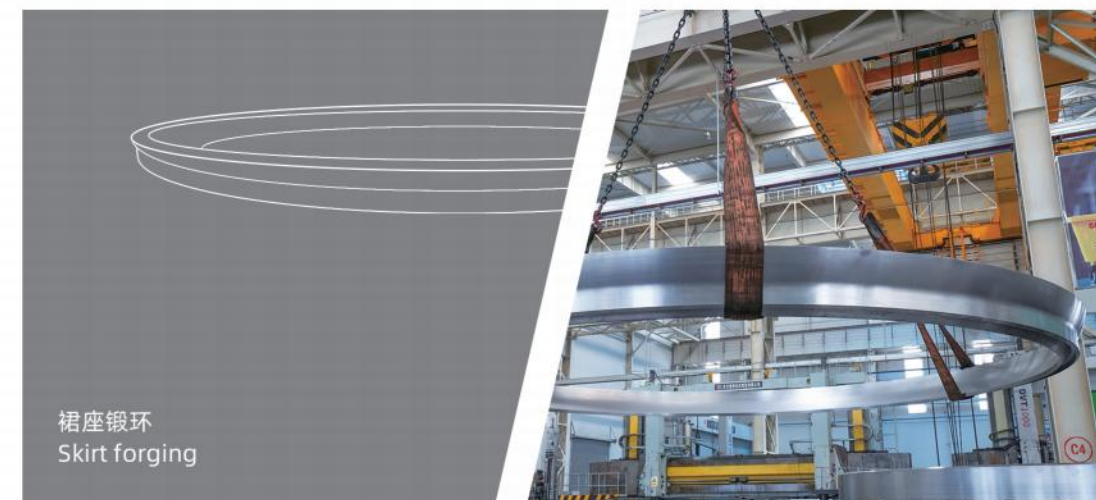
OUTSIDE DIAMETER/
INSIDE DIAMETER/HEIGHT:
9962/9482/1050 mm

筒节

外径/内径/高度:
6000/5000/3000 mm

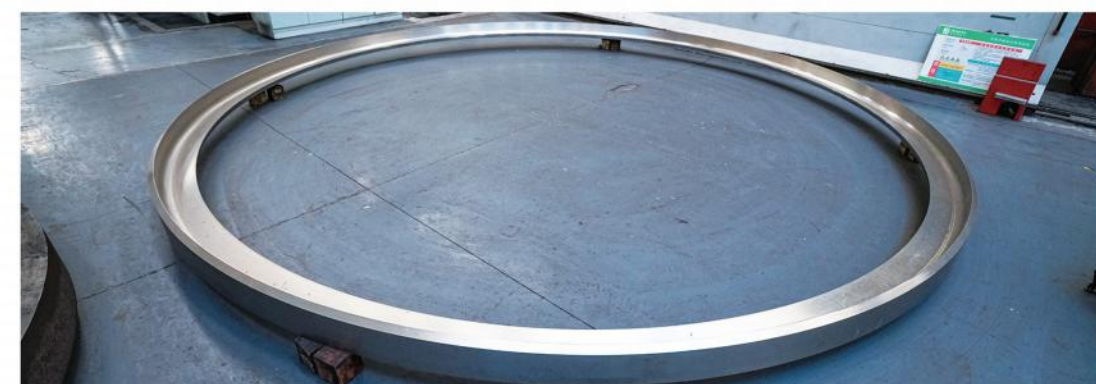
过渡段

外径/内径/高度:
9962/9482/1050 mm



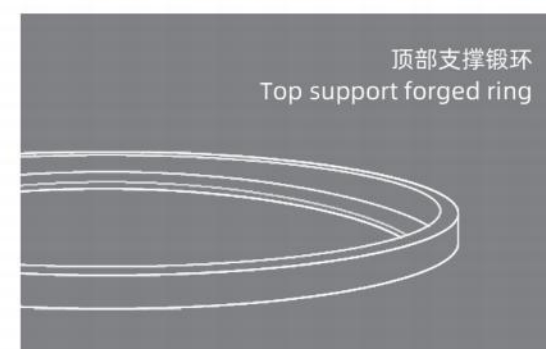
SKIRT FORGING

OUTSIDE DIAMETER/
INSIDE DIAMETER/HEIGHT:
7677/7059/430 mm



TOP SUPPORT FORGED RING

OUTSIDE DIAMETER/
INSIDE DIAMETER/HEIGHT:
6879/6379/222 mm

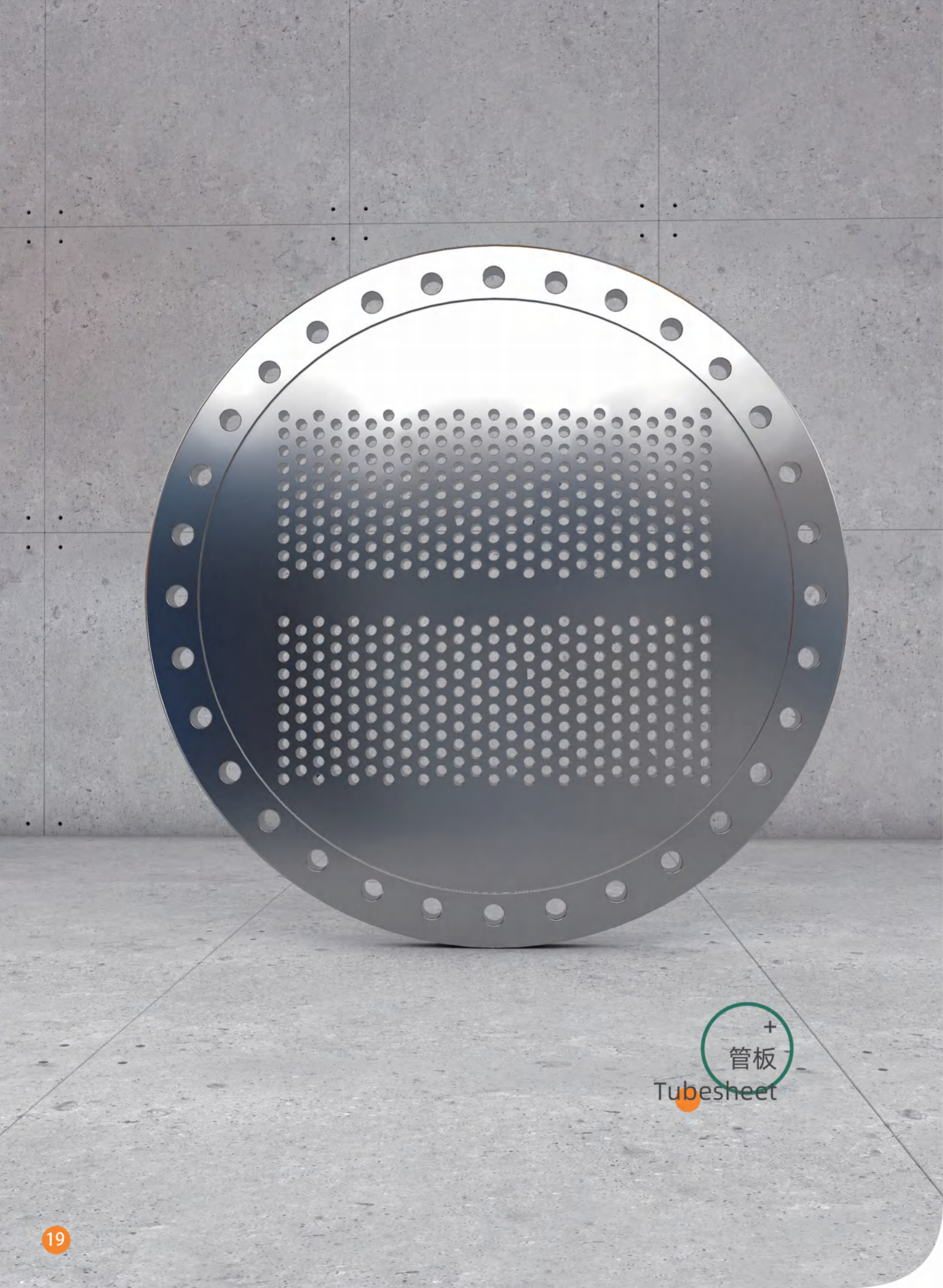


裙座锻环

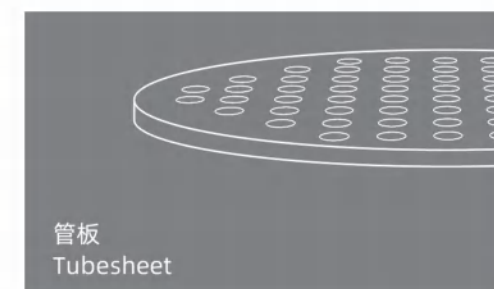
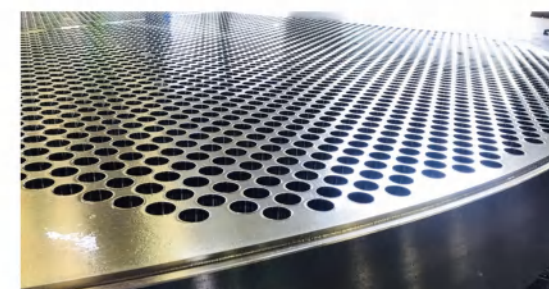
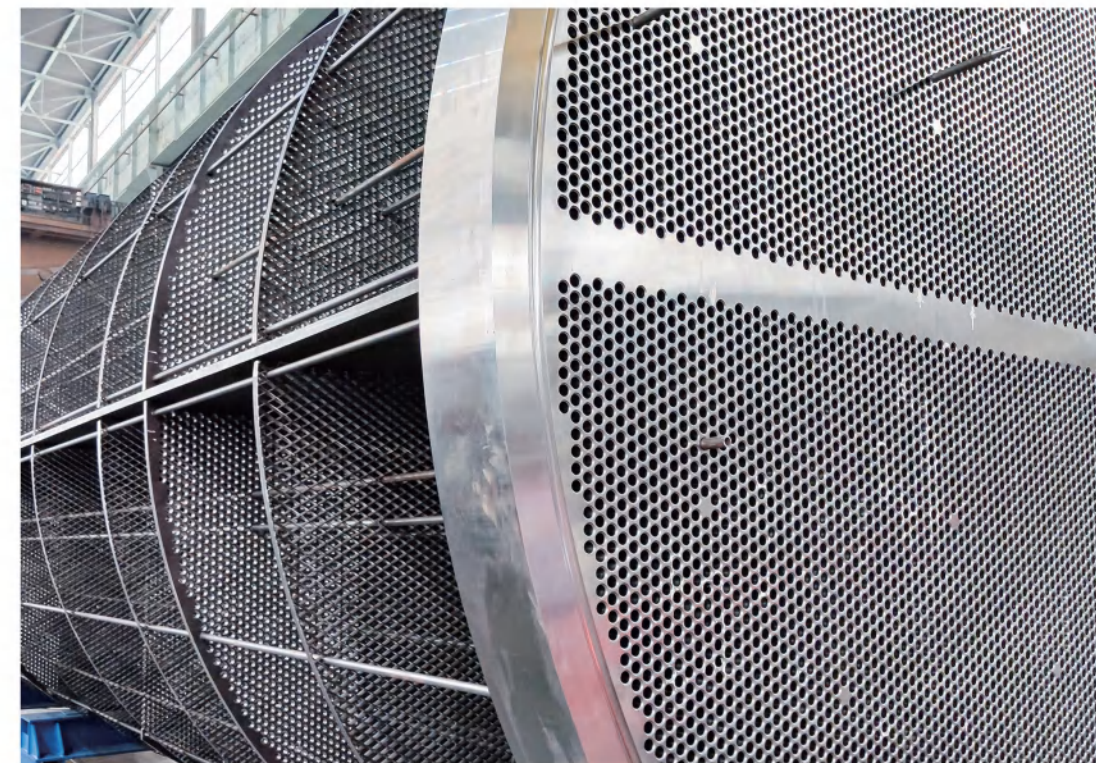
外径/内径/高度:
7677/7059/430 mm

顶部支撑锻环

外径/内径/高度:
6879/6379/222 mm



+
管板
Tubesheet



管板
Tubesheet

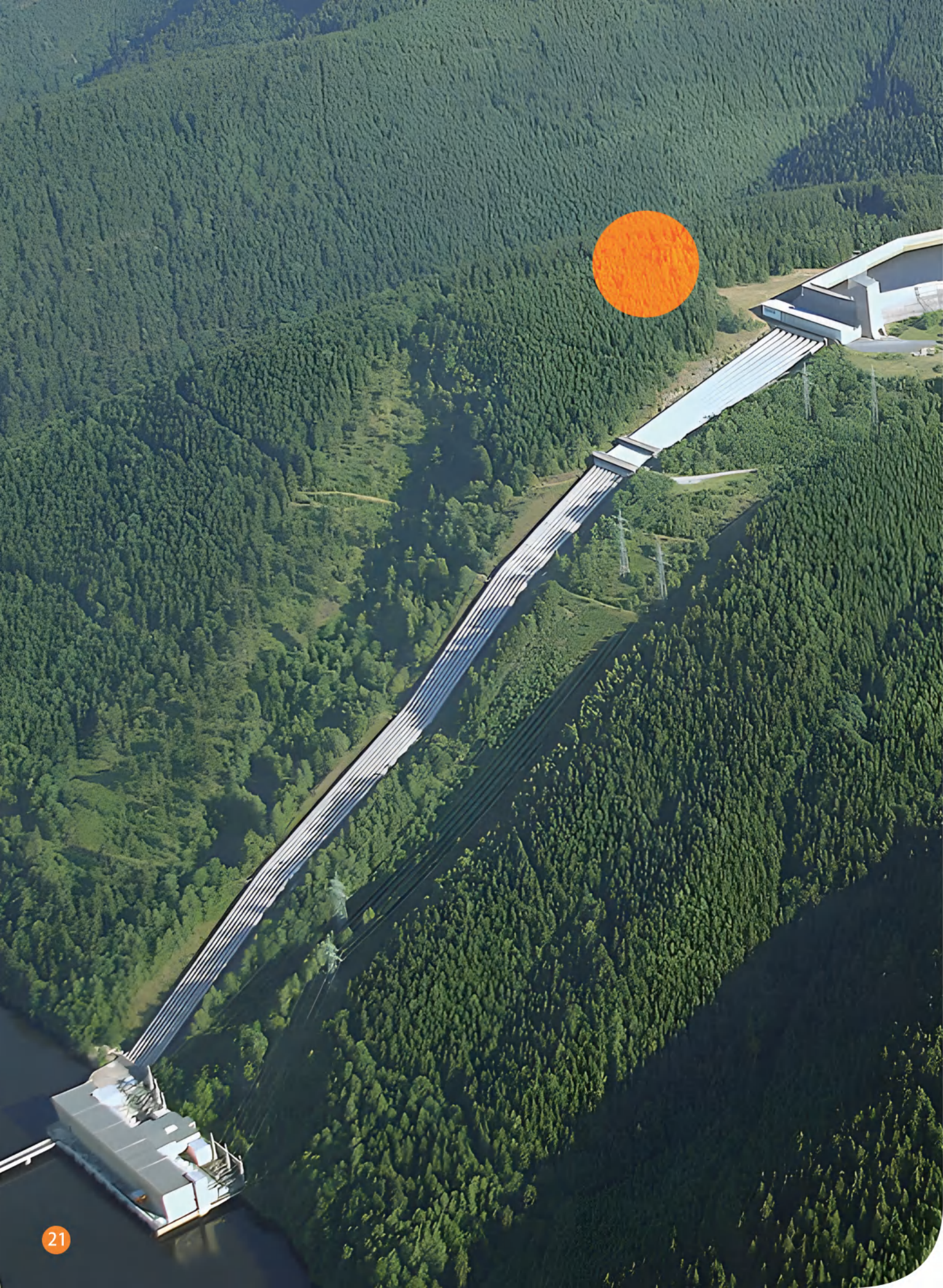


TUBESHEET

OUTSIDE DIAMETER/HEIGHT:
4400/210 mm

管板

外径/高度:
4400/210 mm



Forgings of Hydroelectricity and pumped-storage power station

水电与抽水蓄能用锻件

Selected cases and clients:

- Fengning Pumped-storage project
 - Huanggou Pumped-storage project
 - Yangjiang Pumped-storage project
 - Wudongde Hydropower Station
-

部分案例及客户:

- 丰宁抽水蓄能项目
 - 荒沟抽水蓄能项目
 - 阳江抽水蓄能项目
 - 乌东德水电站项目
-



顶盖法兰
Top cover flange

磁轭圆盘/环板
magnetic yoke disc/annular plate



顶盖法兰
Top cover flange



磁轭圆盘/环板
magnetic yoke disc/annular plate



TOP COVER FLANGE

OUTSIDE DIAMETER/
INSIDE DIAMETER/HEIGHT:
6950/5700/410 mm

MAGNETIC YOKE DISC/ ANNULAR PLATE

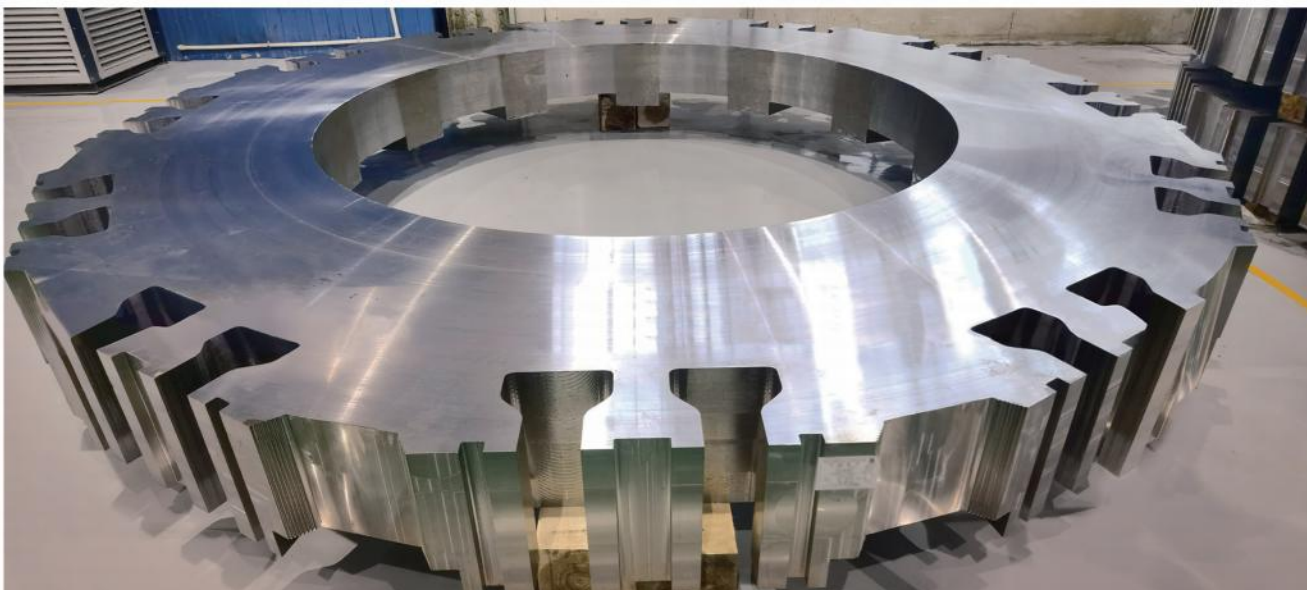
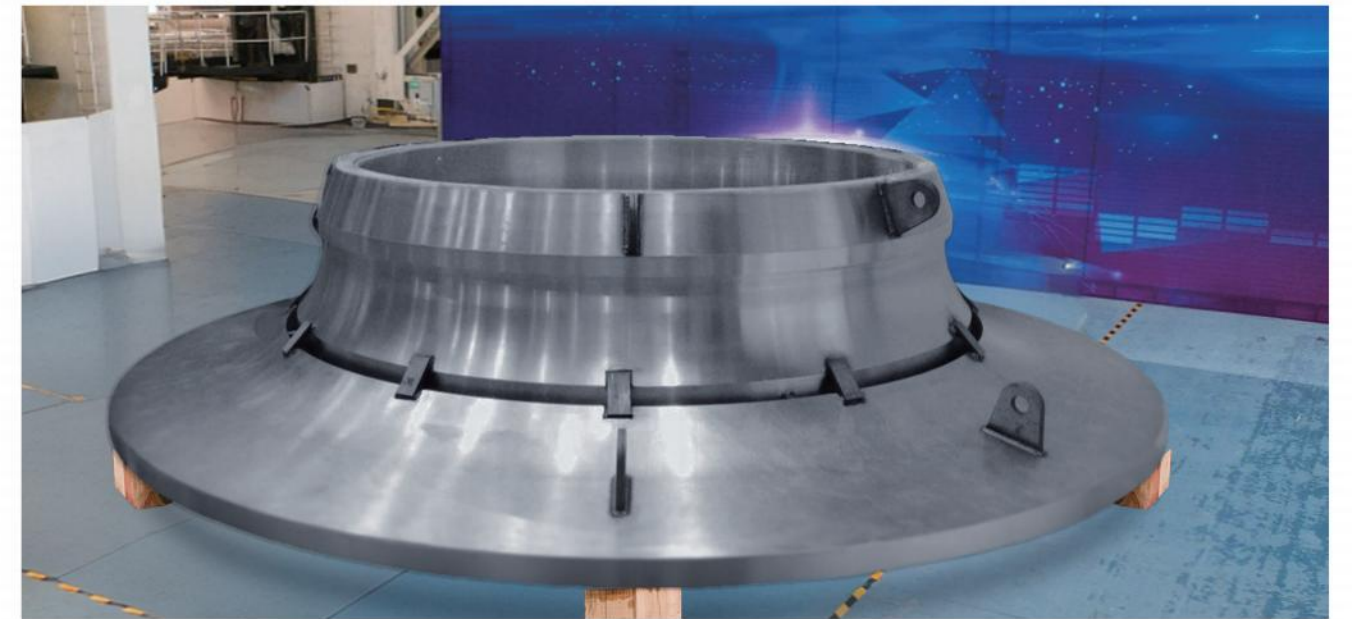
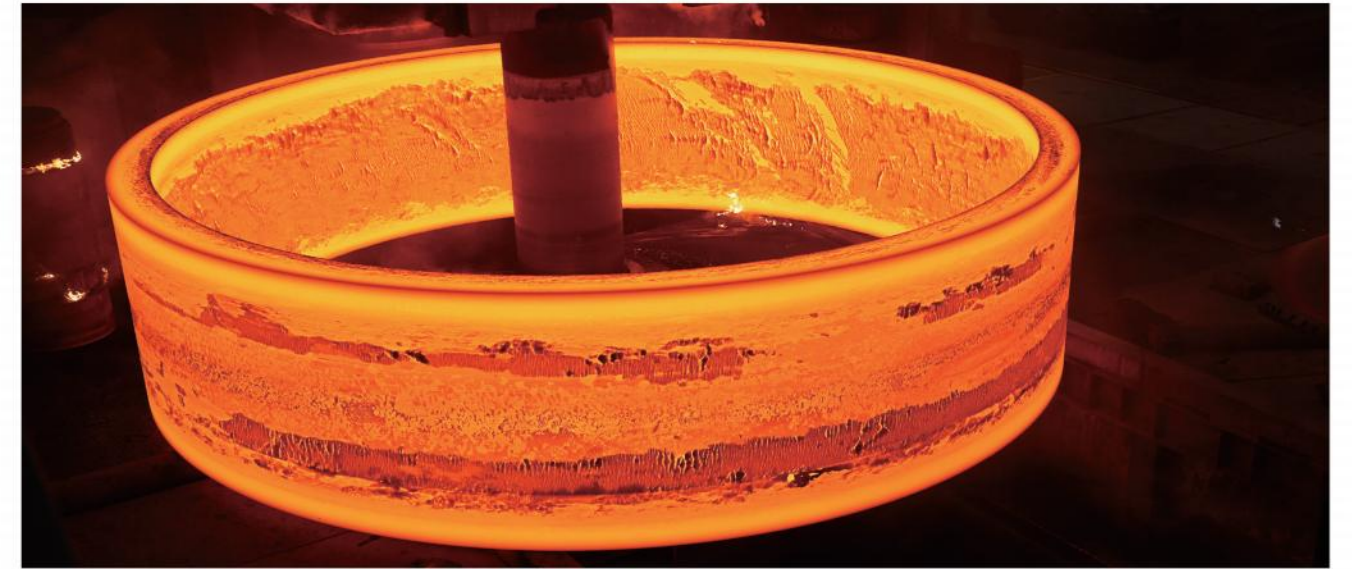
OUTSIDE DIAMETER/
INSIDE DIAMETER/HEIGHT:
4695/3340/300 mm

顶盖法兰

外径/内径/高度:
6950/5700/410 mm

磁轭圆盘/环板

外径/内径/高度:
4695/3340/300 mm





Forgings of Engineering machinery and Mining Metallurgical Machinery

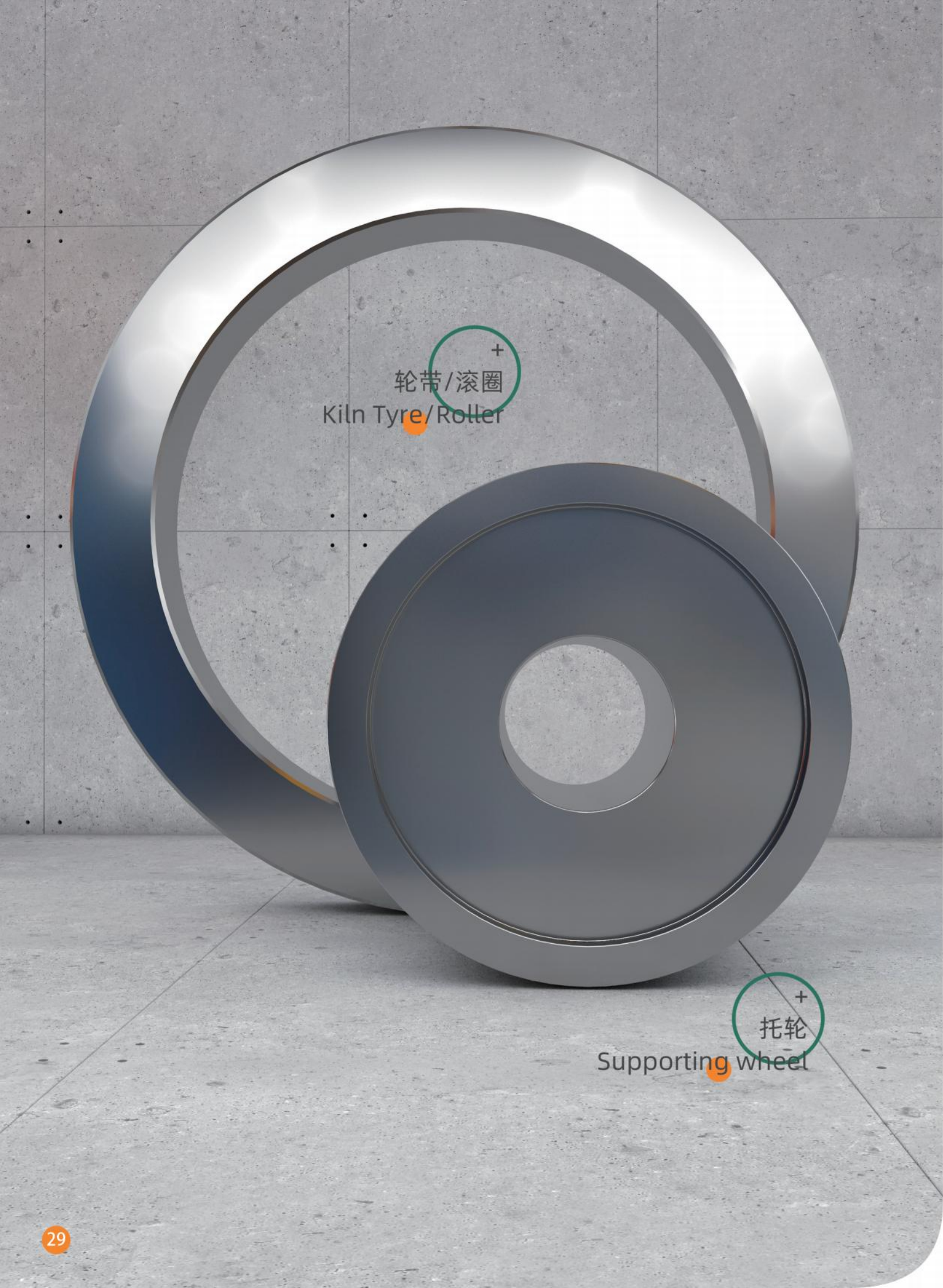
工程机械及矿山冶金机械锻件

Selected cases and clients:

ThyssenKrupp
Jiangsu Pengfei Group
Chaoyang Heavy Machinery
Sinoma Technical Service
China National Building Materials Group
CEMEX

部分案例及客户：

蒂森克虏伯
江苏鹏飞
朝阳重型
中材机电备件有限公司
中国建材集团
西麦斯

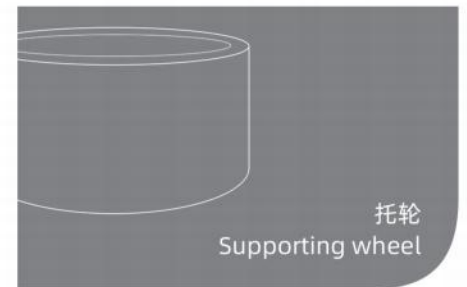


轮带/滚圈
Kiln Tyre/Roller

托轮
Supporting wheel



轮带/滚圈
Kiln Tyre/Roller



托轮
Supporting wheel



KILN TYRE/ROLLER

OUTSIDE DIAMETER/
INSIDE DIAMETER/HEIGHT:
8170/6712/1069 mm

SUPPORTING WHEEL

OUTSIDE DIAMETER/
INSIDE DIAMETER/HEIGHT:
2508/842/1158 mm

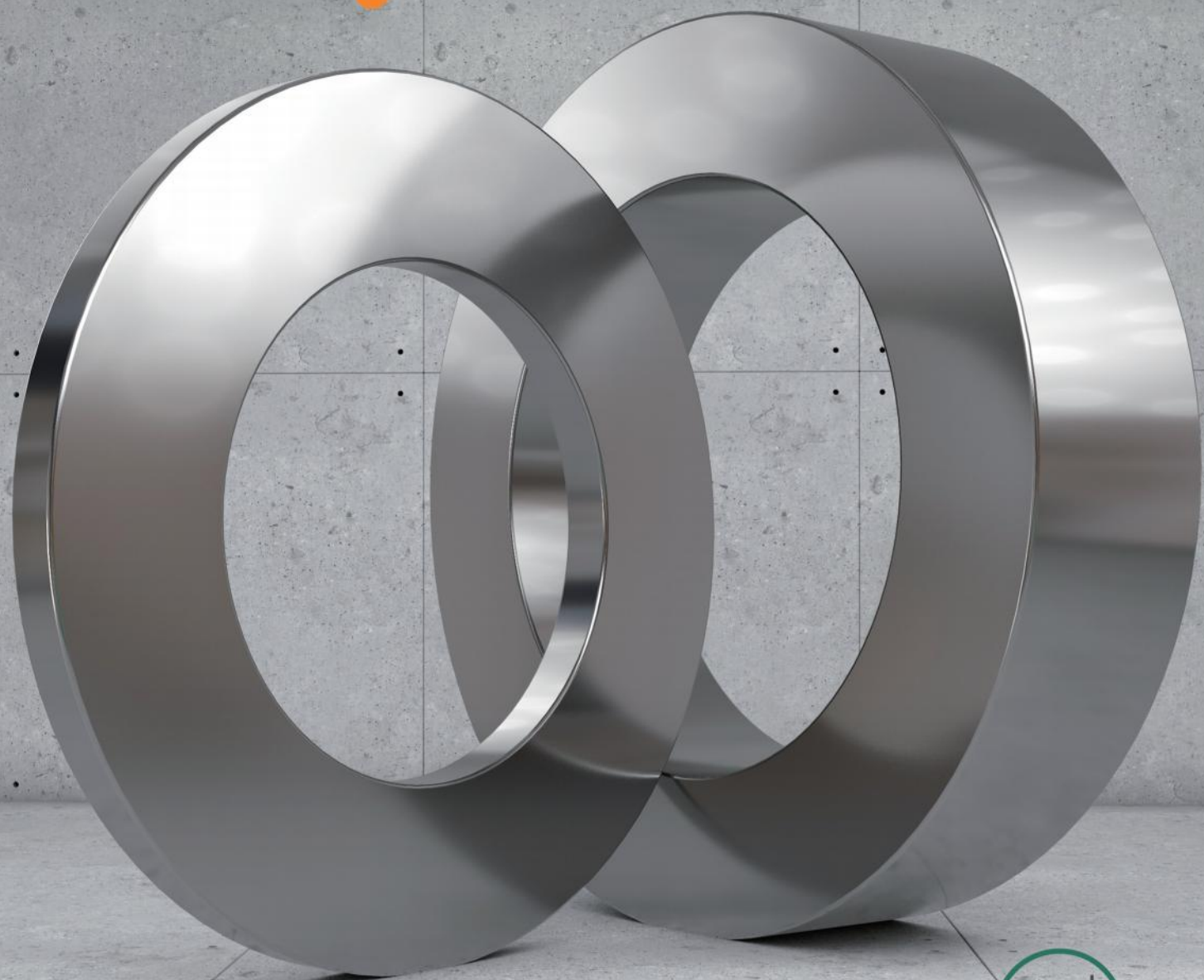
轮带/滚圈

外径/内径/高度:
8170/6712/1069 mm

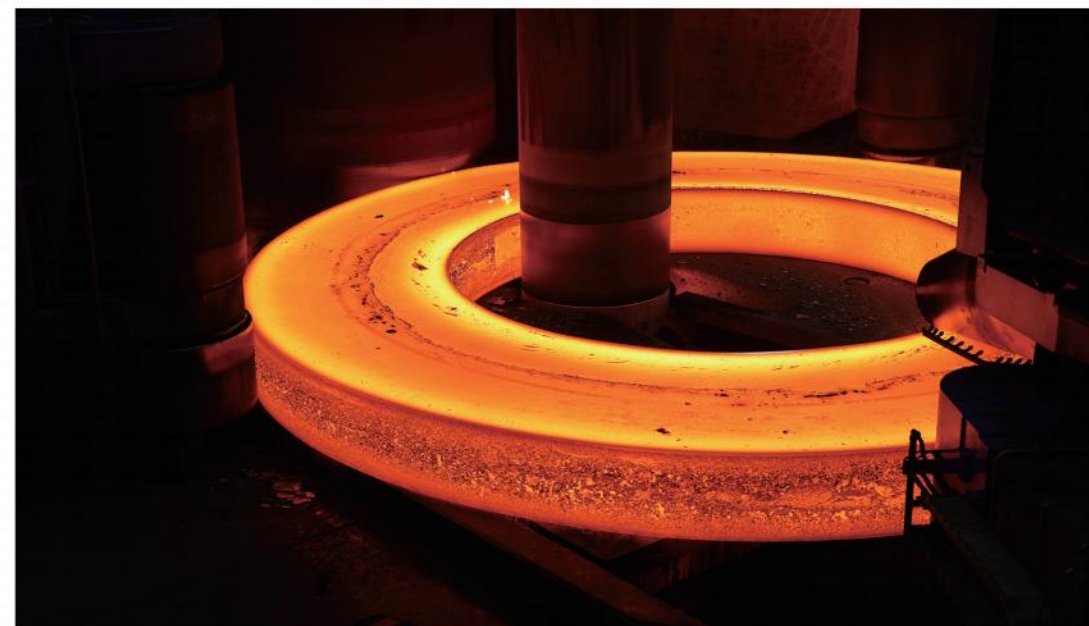
托轮

外径/内径/高度:
2508/842/1158 mm

刀盘法兰
shield machine cutter flange



驱动法兰
Driving disc flange



CUTTER FLANGE

OUTSIDE DIAMETER/
INSIDE DIAMETER/HEIGHT:
2910/1990/155 mm

DRIVING DISC FLANGE

OUTSIDE DIAMETER/
INSIDE DIAMETER/HEIGHT:
6601/3258/220 mm

刀盘法兰

外径/内径/高度:
2910/1990/155 mm

驱动法兰

外径/内径/高度:
6601/3258/220 mm



Forgings of Marine engineering equipment and offshore wind power

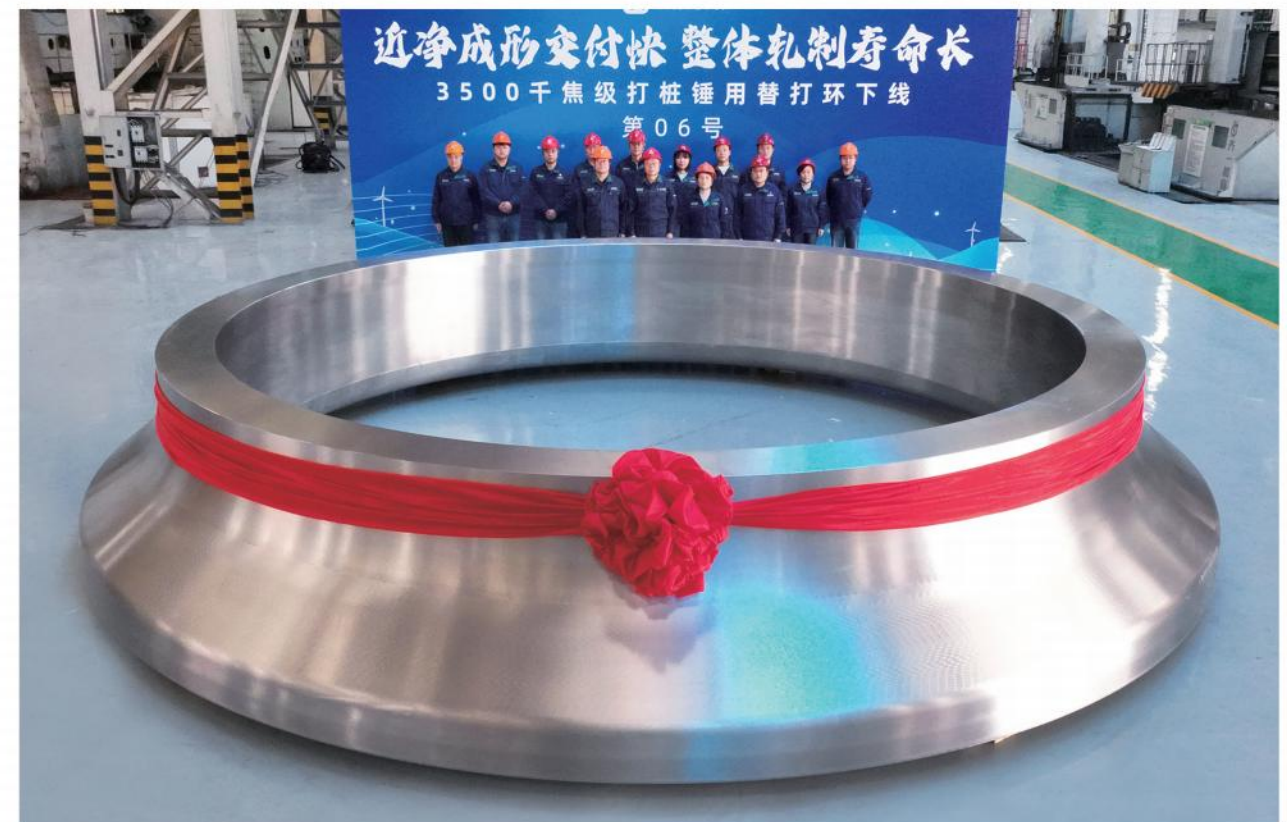
海工装备及海上风电锻件

Selected cases and clients:

Guangdong Jingyin 3500KJ super large hydraulic pile hammer
UK EA1 project
Fujian Pinghai Bay project
Borssele project in Netherlands

部分案例及客户:

广东精钢3500KJ超大型液压打桩锤
英国EA1项目
福建平海湾项目
荷兰Borssele项目



ANVIL RING

OUTSIDE DIAMETER/
INSIDE DIAMETER/HEIGHT:
7580/5800/1200 mm

PILE FEEDER FORGING

OUTSIDE DIAMETER/
INSIDE DIAMETER/HEIGHT:
7530/6670/785 mm



替打环

外径/内径/高度:
7580/5800/1200 mm

送桩器锻件

外径/内径/高度:
7530/6670/785 mm

· · 风电法兰
Wind tower flange



+ 齿圈
Gear ring

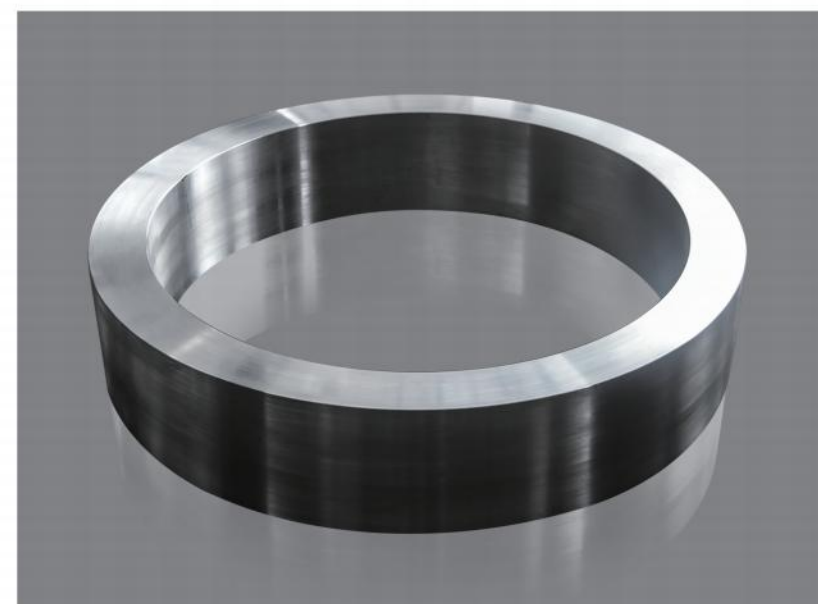


WIND TOWER FLANGE

OUTSIDE DIAMETER≤16m

GEAR RING

OUTSIDE DIAMETER/
INSIDE DIAMETER/HEIGHT:
5794/5480/203 mm



风电法兰

外径≤16m

齿圈

外径/内径/高度:
5794/5480/203 mm

可控·可靠·可追溯

品质保障/QUALITY ASSURANCE



The stock ground is fixed management, and the raw materials can enter the site after double inspection (customer demand standard, internal control standard)

料场定置化管理，原材料经双重检验（客户需求标准、内部控制标准）方可进场。

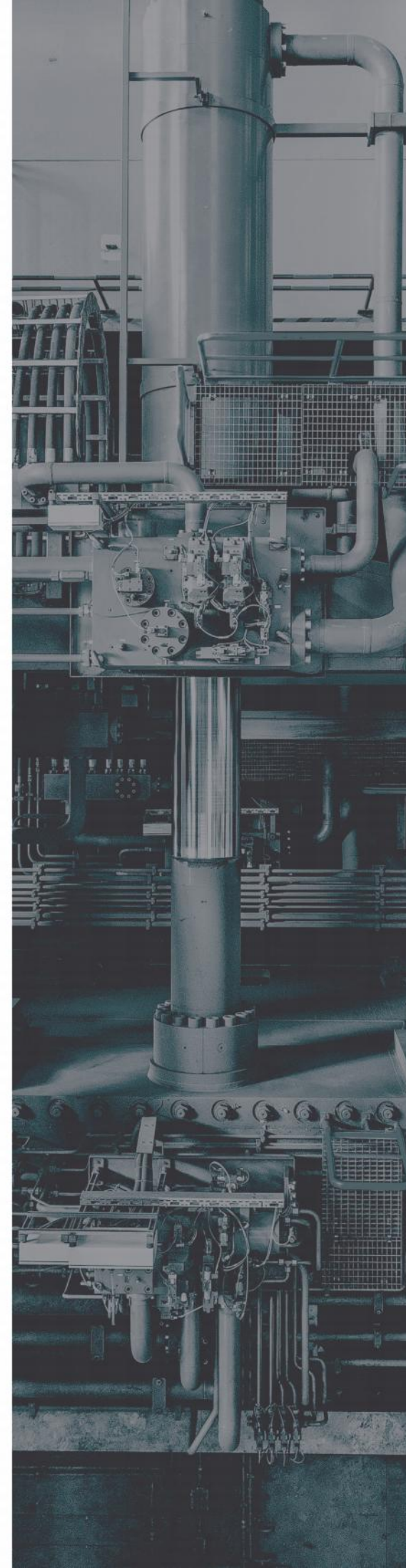




1.35万吨油压机
13,500 t oil press machine



- High-level precision control: German Bosch Rexroth hydraulic system, Siemens electronic control system
- Great operational capability: Max. pressure: 13500 t, total height: 18.5 m, Travel of movable beam: 3.5 m, clearance: 7 m, width of movable table: 5 m, stroke: 10 m.
- 高精度控制：德国力士乐液压系统、西门子电控系统
- 强作业能力：最大压力13500吨，总高度18.5米，活动横梁行程3.5米、净空7米，移动工作台宽5米、行程10米

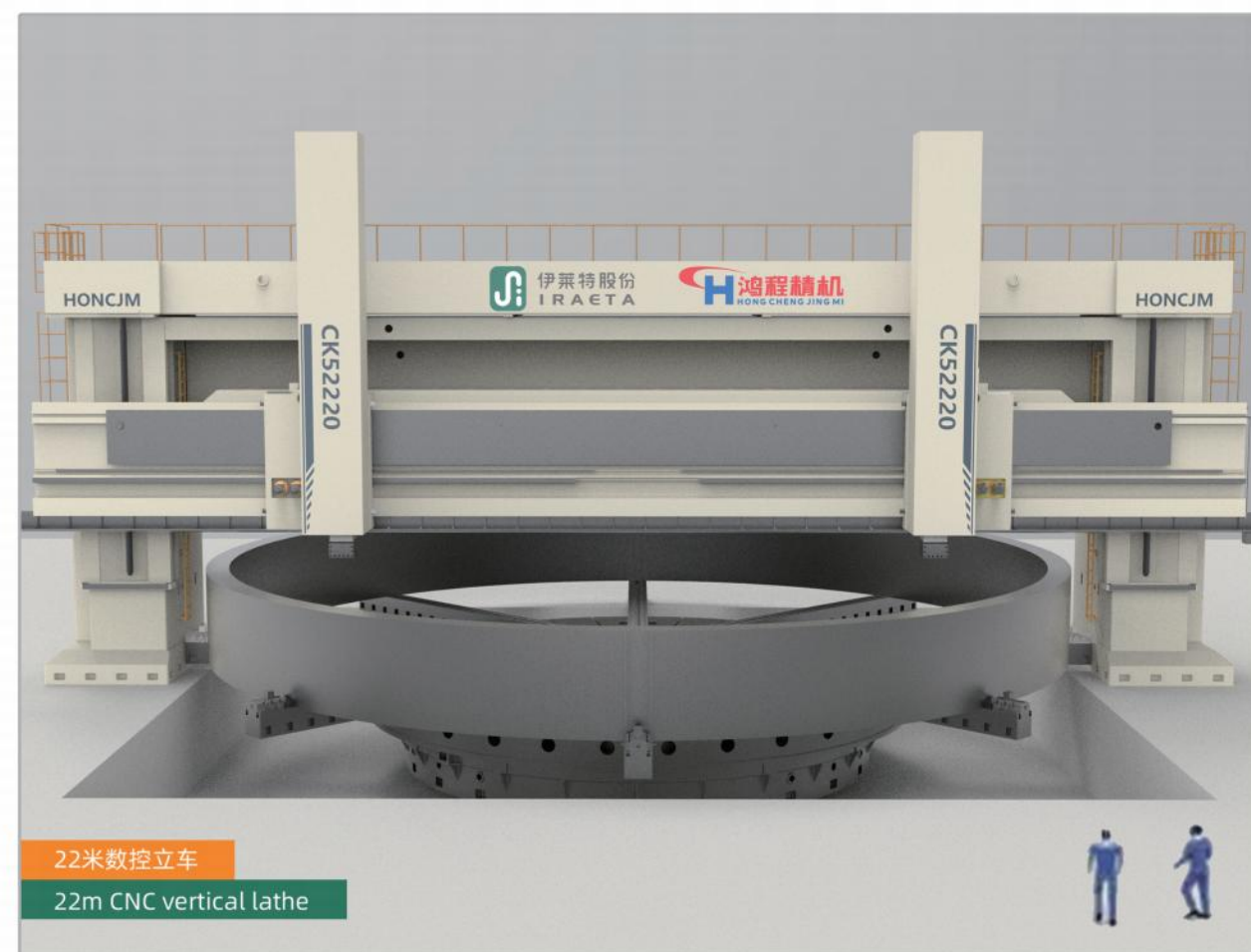
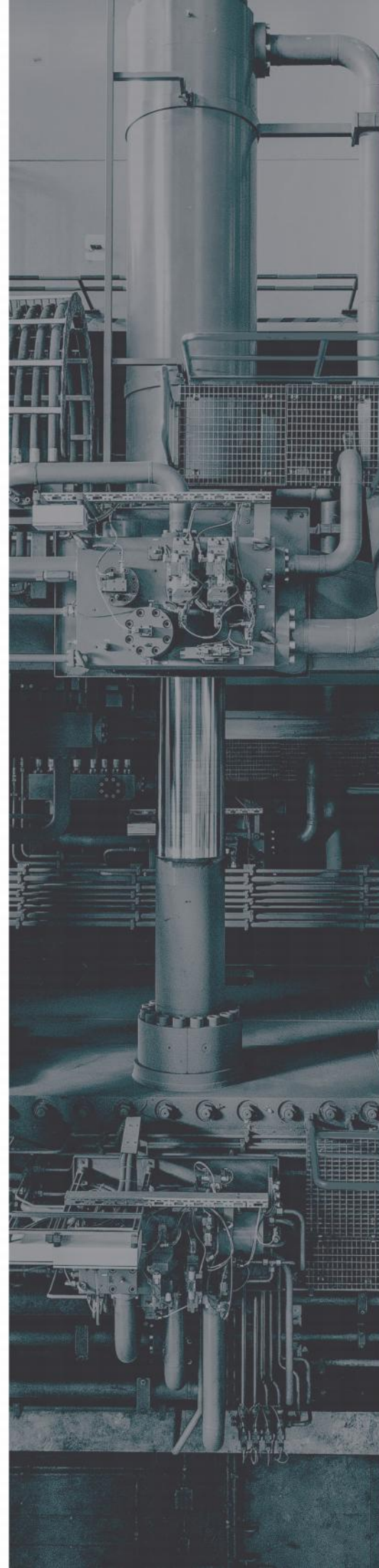


超级轧环轧筒机
Super rolling machine for rings and shells



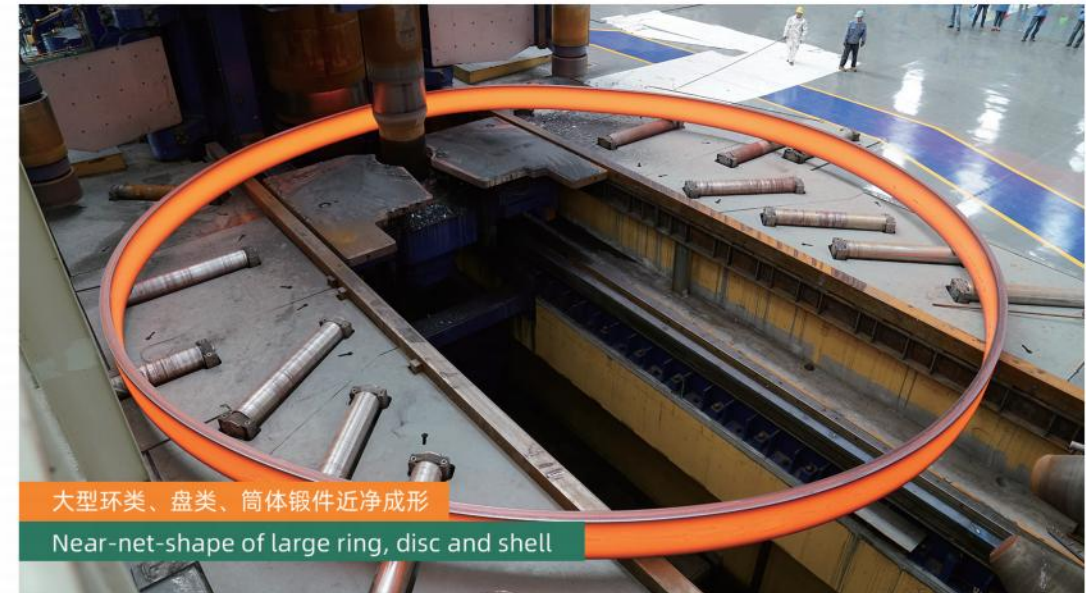
- Max. rolling diameter: 16 m, max. height: 3 m
- Max. rolling unit weight: 200 t
- Max. radial rolling force: 2500 t, max. axial rolling force: 1250 t
- Custom made by SMS Group, Germany
- 最大轧制直径16米、高度3米
- 最大轧制单重200吨
- 最大径向轧制力2500吨、轴向轧制力1250吨
- 德国西马克集团特别定制

在建项目 projects under construction

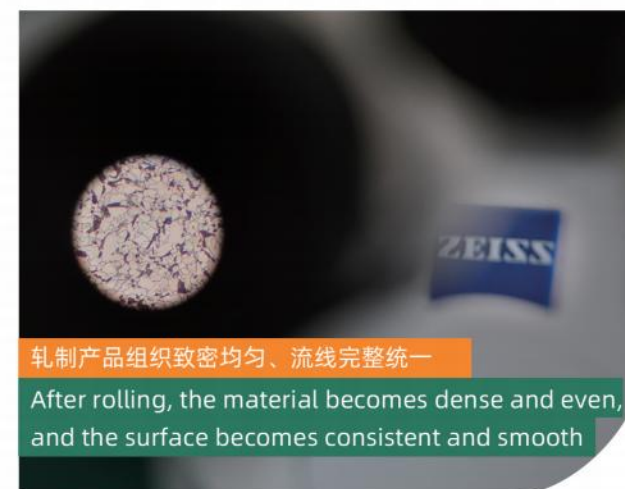
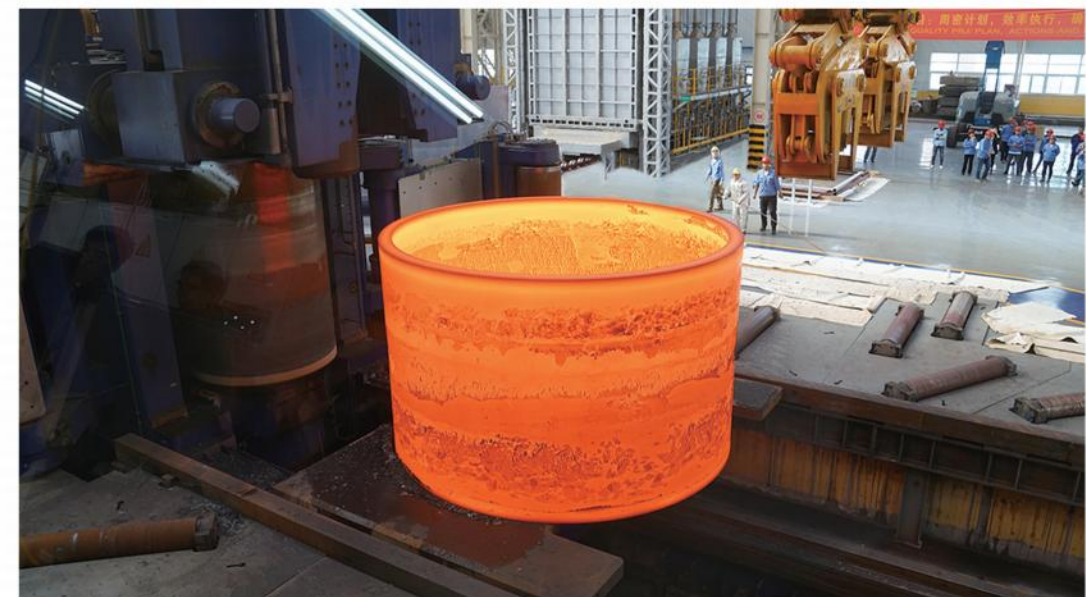




径轴向轧制工艺
RADIAL-AXIAL ROLLING TECHNOLOGY



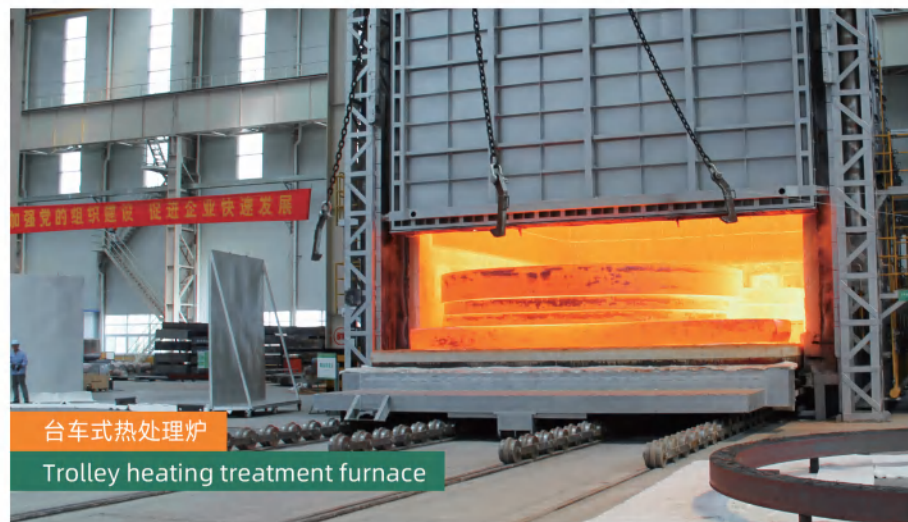
大型环类、盘类、筒体锻件近净成形
Near-net-shape of large ring, disc and shell



轧制产品组织致密均匀、流线完整统一
After rolling, the material becomes dense and even, and the surface becomes consistent and smooth



极大缩短成形时间，实现绿色锻造的同时，更快完成交付
This technology greatly reduces processing time, achieve green forging, at the same time, faster delivery



台车式热处理炉
Trolley heating treatment furnace

Regularly testing of furnace temperature uniformity, equipment accuracy, etc., ensures strict control over heating, holding and cooling procedures of the heat treatment

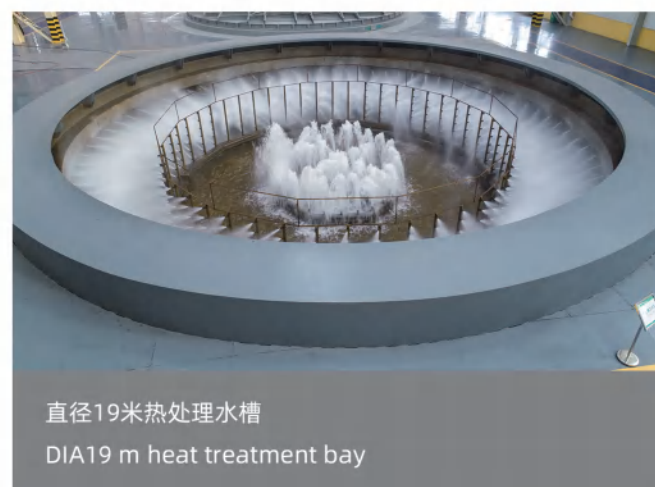
定期检测炉温均匀性、设备精度等，严格控制热处理环节中的升温、保温、冷却。



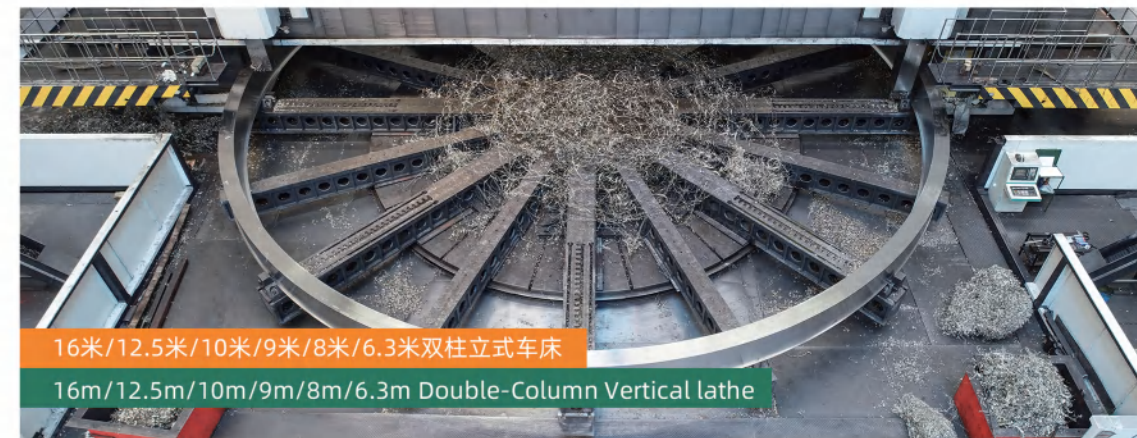
内径7.5米罩式对开热处理炉
ID7.5 m bell type split heat treatment furnace



内径17.5米井式热处理炉
ID17.5 m bore type heat treatment furnace



直径19米热处理水槽
DIA19 m heat treatment bay



16米/12.5米/10米/9米/8米/6.3米双柱立式车床
16m/12.5m/10m/9m/8m/6.3m Double-Column Vertical lathe



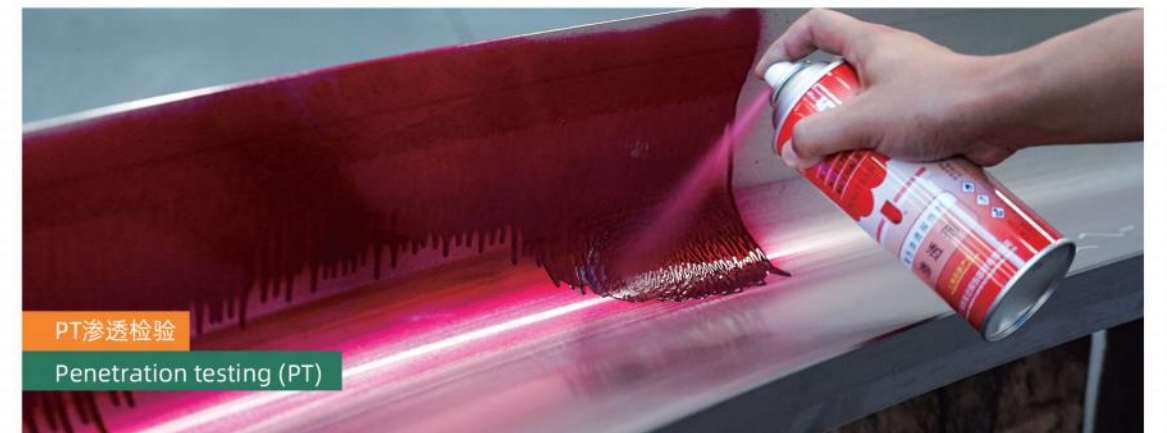
10米高速钻床
10 m high-speed drill machine



双头钻床加工中心
Dual head drill machine machining center



试样留存
Sample retention



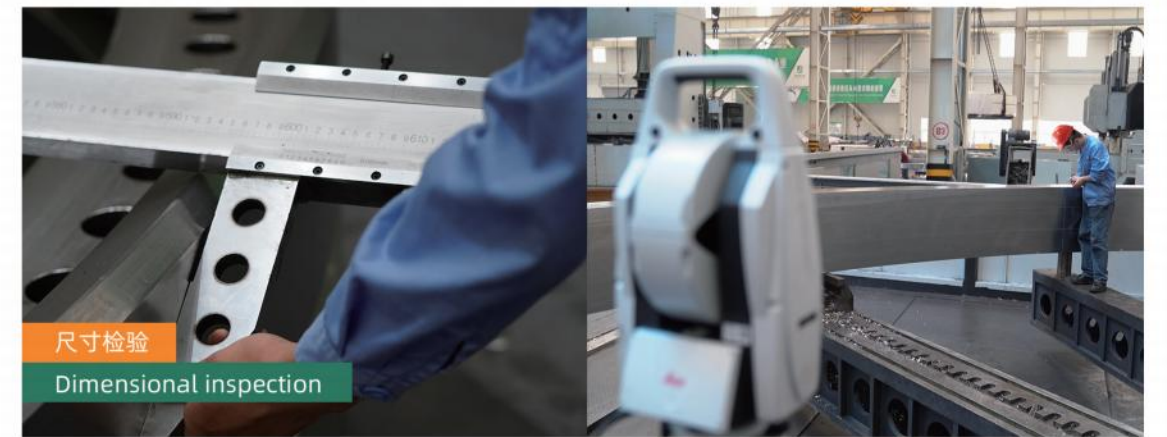
PT渗透检验
Penetration testing (PT)



高温拉伸试验
High temperature tensile test



冲击试验
Impact test



尺寸检验
Dimensional inspection



金相检验
Metallographic test



硬度检验
Hardness test



粗糙度检验
Roughness testing



表面硬度检验
Surface hardness testing



UT超声波检验
Ultrasonic testing (UT)



MT磁粉检验
Magnetic particle inspection (MT)



包装
Packaging



全程可追溯完工资料
Complete data is traceable throughout the project

Cooperation with Two Academicians Ensures More Reliable Materials

双院士合作，材料更可靠

我们携手中国科学院李依依、李殿中两位院士，依托其在金属材料领域的权威造诣，深耕稀土钢研发与金属构筑成形技术，专攻特殊原材料定制。稀土钢研发通过精准调控稀土元素，显著增强材料耐腐、强韧等性能；金属构筑成形技术实现异种金属高效连接，适配大型装备需求并降本。这些技术已深度服务多领域：为核电设备提供耐辐射保障，延长水电站叶片寿命，助力风电机组抗极端气候，为海洋平台构建防腐体系，满足高端炼化装置要求。我们以技术赋能产业，致力于为全球客户创造可持续价值。



Together with two academicians from the Chinese Academy of Sciences, Yiyi Li and T.C. Li, and relying on their authoritative attainments in the field of metal materials, we are deeply engaged in the research and development of rare-earth steels and metal construction and forming technology, and specialize in the customization of special raw materials. rare-earth steel research and development through the precise control of rare-earth elements, significantly enhance the corrosion resistance, toughness and other properties of the material; metal construction and forming technology to achieve the efficient connection of dissimilar metals, to adapt to the needs of large-scale equipment and cost reduction. These technologies have been used in a variety of fields: providing radiation resistance for nuclear power equipment, extending the life of hydro-electric blades, helping wind turbines resist extreme weather, building anti-corrosion systems for offshore platforms, and meeting the requirements of high-end refining and chemical plants. We are committed to creating sustainable value for our global customers by empowering industries with our technologies.



Tackling complex challenges
alongside our clients

与您并肩应对复杂挑战

售前/Pre-sales

01
技术沟通
Technical Communication



02
定制方案
Customized solution



03
商务合作
Business cooperation



售中/In-sales

01
跟踪每个生产环节
Tracking each production process



02
与客户保持密切沟通
keeping close communication with clients



03
及时反馈产品进度
Timely feedback on the progress of products



售后/Post-sales

01
交付后持续关注
Ongoing attention after delivery



02
收集产品工作信息
Collect product work information



03
内部讨论，优化方案，以便下次提供更好的产品
Internal discussions, solution optimization,
In order to provide better products next time

