



**QINGDAO
ZENGQIYUN
(ZQY) GROUP**

Zeng Qi Yun(ZQY) Group

Headquartered in Chengyang District, Qingdao, China, the Group consists of Zengqiyun Intelligent Industrial Manufacturing Division and two large-scale smart manufacturing factories covering over 47,000 square meters. Since 2004, we have specialized in the design and manufacturing of three-layer polyethylene (3LPE) pipeline rust removal, internal/external anti-corrosion, bend pipe anti-corrosion, and FBE epoxy powder coating production lines, as well as HDPE pipe, Heat Shrink Tubes, Extruders, Expanders (Continuous/Sectional), Coating Machines, Breakout Systems, Rainsheds, End Caps production lines, high/low voltage insulation terminal products, XPE foam board and rubber track production lines, accumulating 21 years of rich industry experience. Notably, we also excel in advanced technologies such as remote-controlled robotic systems for on-site pipeline welding and internal coating, as well as innovative bend pipe 3LPE anti-corrosion production line technologies, demonstrating our leadership in high-end manufacturing within the industry.

Our solutions are trusted by clients in over 30 countries, including renowned industry leaders such as HALCOR (Europe), PERMA PIPE (Middle East), India Gala、Compaq international , and Fusion Bonded, Axalta, Sherwin Williams (South America). We have established long-term strategic partnerships in key sectors: the oil industry in the Middle East and Africa, the natural gas sector in Russia, and the water supply industry in Central Asia.

ZQY boasts four core advantages:

- **Professional Team:** With an elite team averaging over 17 years of industry experience and a dedicated after-sales commissioning and installation team, we provide high-intelligent automated production line solutions tailored to client needs.
- **Cost Advantage:** Owning self-owned production facilities and an in-house mold factory (designing and manufacturing all molds for heat shrink tube expansion and extrusion), we achieve cost leadership in production, ensuring highly cost-effective products.
- **Technological Barrier:** Mastering core design, R&D technologies, and advanced production line manufacturing processes, we have developed world-leading innovations such as remote-controlled robots for on-site pipeline automatic welding and internal coating, as well as fully automated bend pipe and special-shaped steel pipe rust removal + FBE/3LPE production lines (currently the world's only provider of this technology), often imitated but never surpassed by peers.
- **Flexibility and Efficiency:** We flexibly assist clients in customized product upgrades, ensuring efficient collaboration processes that exceed expectations and deliver worry-free, satisfying partnerships.

Zengqiyun Group – Combining 21 years of industrial expertise with global innovation to smart power tubing lines.

Factories & Branch



Zengqiyun(ZQY) Group



ZENGQIYUN INTELLIGENT INDUSTRIAL TECHNOLOGY

- Research and development of new products
- Production process management
- After-sales service
- Supply chain management
- Export business of raw materials and auxiliary materials



Manufacturing Factory of Large-scale Anti-corrosion & Thermal Insulation Production Lines

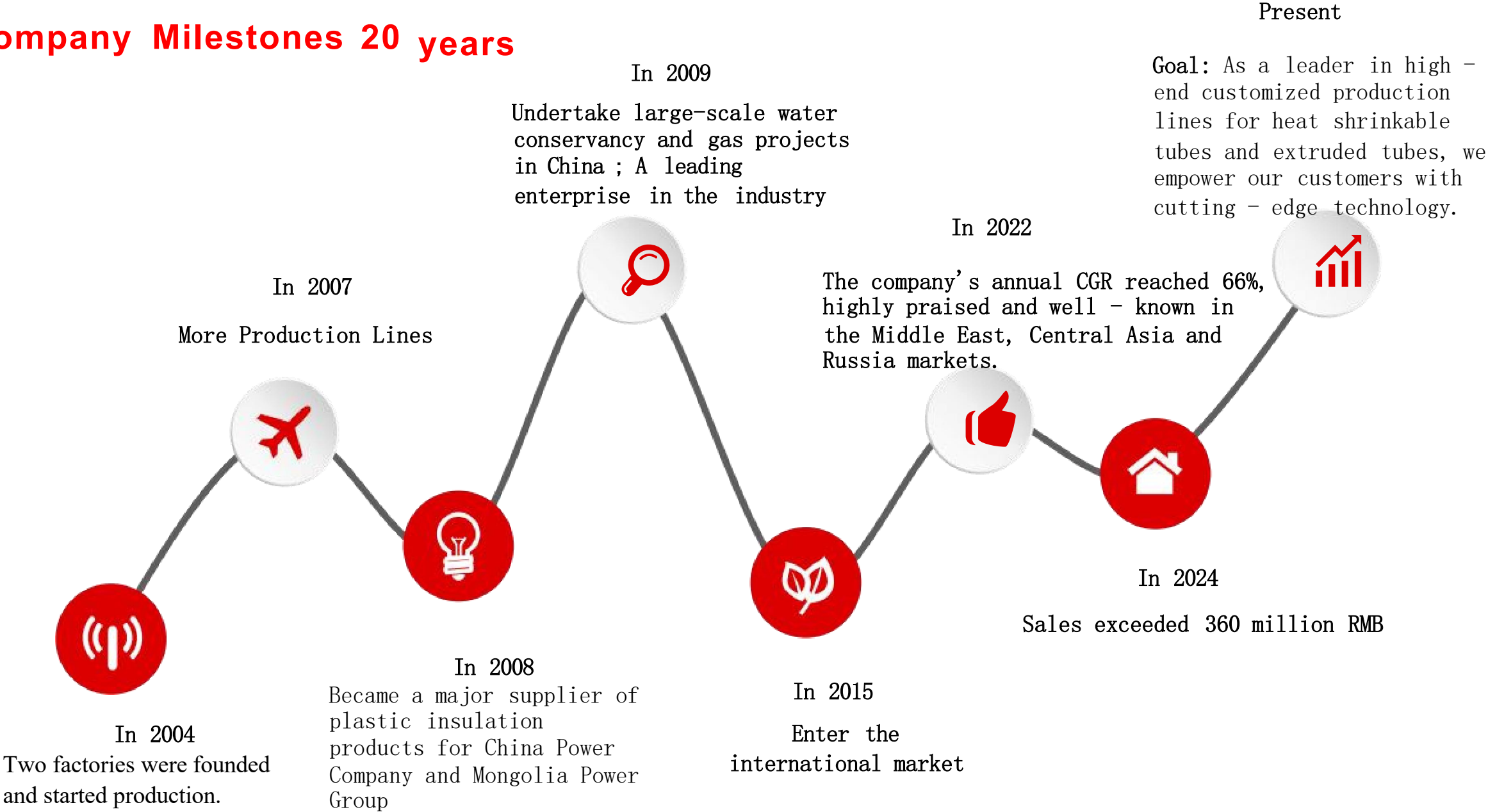
- Plastic extrusion pipe production lines
- Anti-corrosion lines
- 3PE - Three-layer polyethylene lines
- Heat preservation pipe production lines



Shrink tube production lines and high - voltage insulation products

- Production lines: Heat shrink tube extrusion, expansion and adhesive coating.
- Finished products: High - voltage insulation items (heat & cold shrink terminals, joints, etc.). Provide standard & customized insulation expansion products.

Company Milestones 20 years



Zengqiyun Group
Three Factories

Factory 1
Anti-Corrosion & Insulation Pipes Factory

- 三层聚乙烯 (3LPE) 防腐生产线 3LPE Anti-Corrosion Production Lines
- FBE 环氧粉末喷涂生产线 FBE Epoxy Powder Coating Lines
- 弯管防腐系统 Bend Pipe Anti-Corrosion Systems
- 钢管防腐设备 Steel Pipe Anti-Corrosion Equipment

Factory 2
Heat Shrink Tube & Extrusion Factory

- 热缩管挤出生产线 Heat Shrink Tube Extrusion Lines
 - Single-wall heat shrinkable tube extruder
 - Double-wall heat shrinkable tube extruder
- 连续 / 分段扩张生产线 Continuous/Sectional Expansion Lines
 - Continuous Heat Shrink Tube Expander
 - Sectional Heat Shrink Tube Expander
 - Final-stage Heat Shrink Tube Expander
 - Rainshed Expander
 - End Cap Expander
 - Breakout Expander
 - Heat Shrink Tube Adhesive Coating Equipment
- Plastic Sheet and Foam Board Extrusion Lines
 - Plastic Sheet Extrusion Line
 - XPE Foam Production Line
 - Plastic Plate Extrusion Line
- Plastic Pipe Production Lines
 - Pre-insulated Pipe Jacket Production Line
 - HDPE Water Supply Pipe Production Line
 - PPR Pipe Production Line
 - Rubber-Plastic Foam Insulation Pipe Production Line

Factory 3
Insulation Terminal Finished Products Factory

- 绝缘管终端 Breakout Systems
- 雨帽 Rainsheds
- 端帽 End Caps
- 高低压绝缘终端 High/Low Voltage Insulation Terminals

ZQY High-Tech Intelligent Solution Equipment

- Bend Pipe Anti-Corrosion Specifications
- Remote-Controlled Pipeline Welding & Internal Coating Robot

Heat shrinkable tube extrusion line

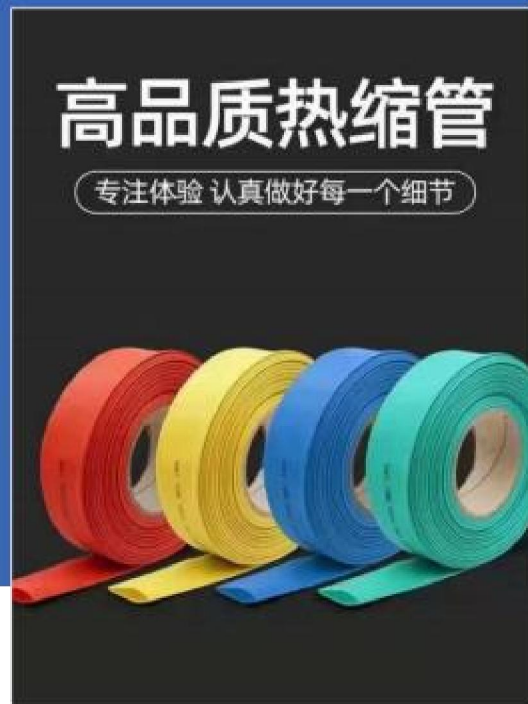


Mainly used to produce heat-shrinkable material pipes (heat-shrinkable tubes)



Heat shrinkable tube expansion machine

- The heat-shrinkable tube expansion machine is mainly used for the production of heat-shrinkable tubes, using glycerol as the heat-conducting medium, vacuum expansion, mainly heating system, expansion system, unique flushing system
- High production efficiency (can run 6 lines at the same time) . It can be customized and developed according to product requirements.



Heat shrink tube

Heat shrink tubes

热缩中间接头

Heat shrink intermediate joint

热缩母排盒

Heat shrink busbar box

冷缩终端

Cold shrink terminal

冷缩中间接头

Cold shrink intermediate joint

绝缘护罩

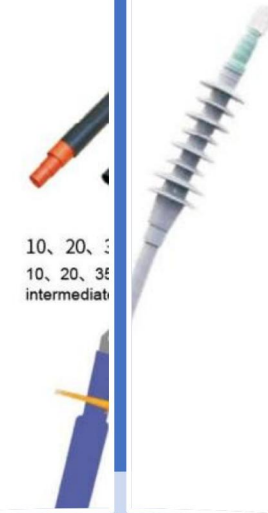
Insulation shield



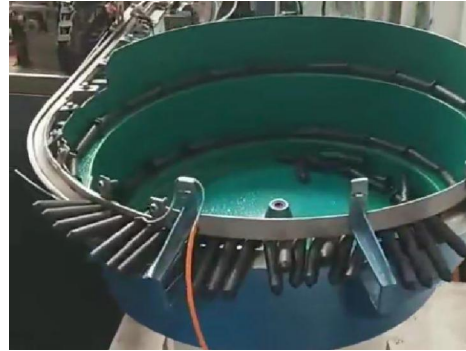
管径 Diameter	管长 Pipe
20	φ25
20	φ30
20	φ40
20	φ50
20	φ60
20	φ70
20	φ80
20	φ90
20	φ100
20	φ120
20	φ150



10、20、30
10、20、30
intermediate



Positive pressure expansion, adhesive coating, special-shaped terminal insulation tube equipment & finished products, high-end medical infusion tube expansion equipment





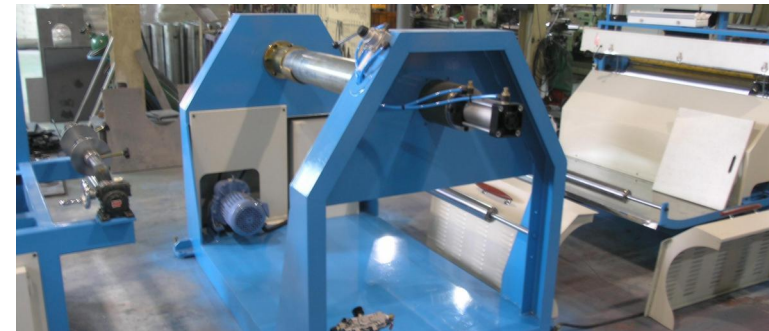
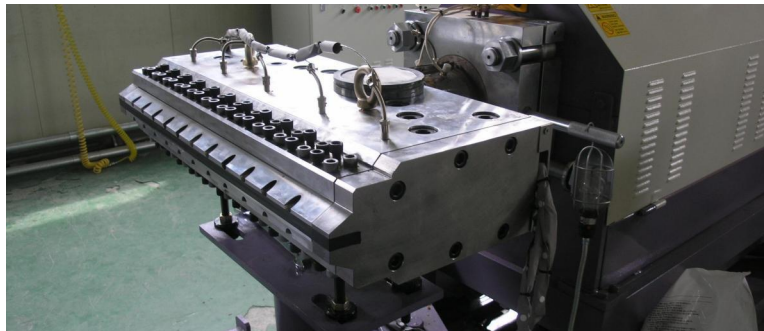
The company's core products

- 1 . HDPE jacket pipe for pre-insulated pipe Production Line
- 2 . Pre-insulated pipe Production Line
- 3 . Flexible pre-insulated pipeproduction line
- 4 . Steel pipe FBE/2LPE/ 3LPE anti-corrosion coating line
- 5 . Steel pipe derusting line
- 6 . PE pressure pipe/Water Gas supply pipe production line
- 7 . PP/PE plastic board/sheet/geomembrane production line
- 8 . NBR PVC Thermal insulation tube/plate production line
- 9 . Heat shrink sleeve production line
- 10 . Pipeline anti-corrosion materials and instruments : Heat shrink joint coating sleeve , electro-fusion weldable joint sleeve , portable welding gun(extruder) , PE PP welding rod.



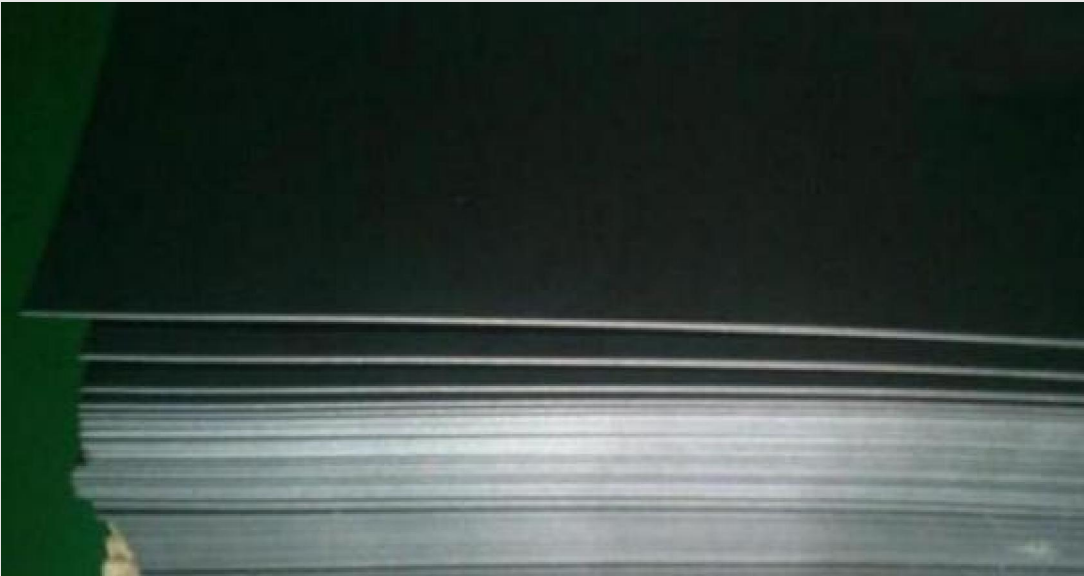
XPE Foaming Production Line

- Main Equipment Components: Pelletizing unit, mixing unit, masterbatch extrusion unit, foaming unit, etc.
- Raw Materials: LDPE and other materials;
- Cases: In Europe, Russia, the Middle East; Overseas Customer Cases: Automotive soundproofing materials, copper pipe manufacturing industry, yoga mat and sporting goods companies.



- PP/ PE Sheet/ Board/Plate Extrusion Line

The PP/PE Sheet/Board/Plate Extrusion Line is a high-efficiency energy-saving line independently researched and developed by our company. It has low energy consumption, high output and it is very easy to operate.



Insulation pipe winding production line



Connection entanglement protection

High-efficiency and energy-saving extruder for continuous extrusion
Mechanical clamping device for dense winding



Automatic online tracking

Automatic tube tracking on line, end-to-end connection
The transportation and management trolley is on line to protect the foam



Automatic cutting

Automatic cutting when in place, three-cut anti-corrosion layer
Automatic tube removal when off-line, accelerated disconnection
Automatic off line

► Spraying & winding insulation pipe

High speed& efficiency, energy saving, environmental protection

With energy saving as the concept, we pursue high efficiency, improve product production capacity and meet national environmental protection requirements.

High degree of automation

- PLC intelligent control system to collect statistics on position, speed, efficiency, and energy consumption to prevent damage to the product caused by human error.

Reliable and stable product quality

- Automated and efficient production requires a set of high-precision and stable production lines. The steel plates on the equipment are cut by a 15KW laser cutting machine to ensure the accuracy of the product and design.
- Hydraulic height adjustment and hydraulic pipe removal ensure that the insulation layer is not damaged



1 中国工业防腐技术协会会员单位
China's industrial anticorrosion technology association member units

2 中国石油工程建设协会管道设备与防护技术会员单位
Chinese petroleum engineering construction association

Anti-corrosion production line for steel tube 3 PE 钢管3PE防腐生产线



φ 800-φ 3200 钢管内壁环氧粉末、外壁三层PE生产线 (TPEP)
800-3200 the outer wall of steel pipe wall epoxy powder, three layer PE production line (TPEP)



钢管大口徑单组螺旋输送线
Large diameter single spiral conveying line for steel pipe

3PE防腐钢管母材包括无缝钢管，螺旋钢管和直缝钢管。三层结构的聚乙烯(3PE)防腐涂层以其良好的抗腐蚀性、抗水气渗透性以及力学性能等，在石油管道行业得到了广泛应用。3PE防腐钢管一防腐层对于埋地管道的寿命来说是至关重要的，同样材质的管道，有的埋在地下几十年不腐蚀，有的几年就发生泄露。就是因为它们采用了不同的防腐层。

The base material of 3PE anticorrosive steel pipe includes seamless steel pipe, spiral steel pipe and straight steel pipe. The three-layer polyethylene (3PE) anti-corrosion coating has been widely used in the petroleum pipeline industry for its good corrosion resistance, water-gas permeability and mechanical properties. An anti-corrosion layer of 3PE corrosion-resistant steel pipe is crucial for the life of buried pipes. Some pipes of the same material are buried underground for decades without corrosion, while others leak in a few years. That's because they use a different coating



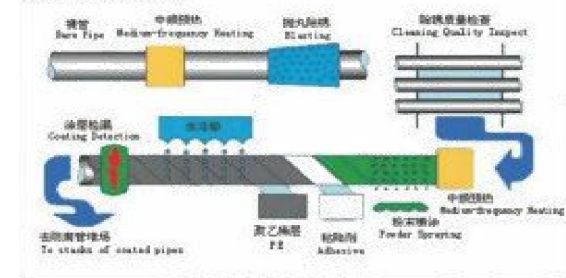
φ 159-φ 1020 钢管3PE防腐生产线
φ 159-φ 1020 pipe 3PE anticorrosive production line



φ 426-φ 1620 钢管3PE防腐生产线
φ 426-φ 1620 steel pipe 3PE anticorrosive production line



φ 800-φ 2800 钢管内壁环氧粉末、外壁三层PE生产线 (TPEP)
φ 800-φ 2800 pipe internal wall epoxy powder, external wall three layer PE production line (TPEP)



三层PE防腐生产流程
Three layers of PE anticorrosive production process



200/33:1高产量挤出系统
200/33:1 high yield extrusion system



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大口径TPEP成品管



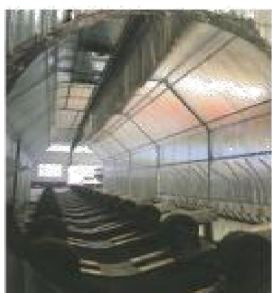
Large diameter TPEP finished pipe



φ 2600TPEP坡口机



φ 2600 TPEP groove machine



φ 800-φ 3200TPEP冷却喷淋房
φ 800-φ 3200TPEP cooling spray room



φ 800-φ 3200TPEP螺旋输送系统
φ 800-φ 3200TPEP screw conveyor system



直行输送线
Straight conveyor line



包覆3PE机头
Cover 3PE head



包覆3PE150挤出机 (φ 32-φ 325)
Coated 3 pe150 extruder (φ 32 - φ 325)



钢管包覆3PE生产线 (φ 32-φ 325) Steel pipe coated 3 PE production line (φ 32 - φ 325)





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3PE成品管 3PE Finished Tube



环氧粉末静电发生器
Epoxy powder electrostatic generator



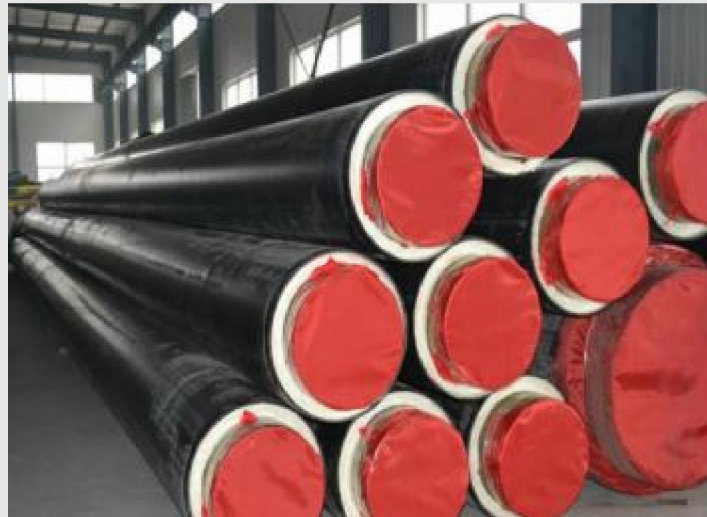
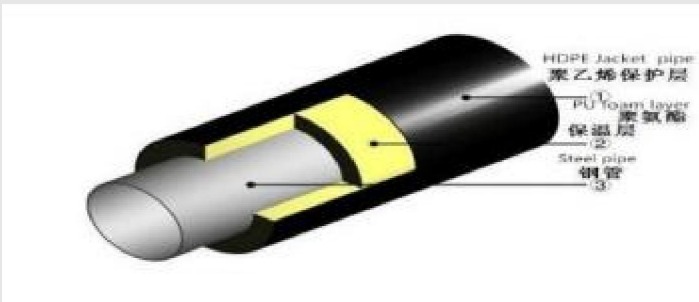
环氧粉末回收系统
Epoxy powder recovery system



内壁粉末喷涂
Powder Spraying on Inner Wall



环氧粉末静电喷涂设备
Electrostatic Spraying Equipment for Epoxy Powder



HDPE jacket pipe production line

Outer protective casing of PUF thermal insulated pipe, which is widely used in central heating, cooling oil&gas transmission and other industrial area .

Remote-Controlled Pipeline Welding & Internal Coating Robot



Core Highlights: Remote-Controlled Pipeline Welding & Internal Coating Robot

The specific pipe size that can be used by the robot

1	2	3	4	5	6	7	8
Two inches	Three inches	Four inches	Six inches	Eight inches	10 inches	12 inches	14 inches
50.8mm	76mm	114mm	159mm	219mm	273mm	323.9mm	355mm
Never done that	Never done that	A whole machine covers it		A whole machine covers it			
9	10	11	12	13			
16 inches	18 inches	20 inches	22 inches	24 inches			
406mm	457mm	508mm	559mm	610mm			
A whole machine covers it							

- ZQY Exclusive Patent – The world’s first intelligent device integrating welding + internal coating in one system:
- Dual-Function Automation: Efficiently auto-welds pipeline joints and repairs damaged internal coatings onsite to meet the highest anti-corrosion standards in one operation.
- Smart Remote Control: Real-time computer monitoring of welding quality with wireless precision positioning, rust removal, and spraying – 100% human-free operation.
- Industry-Unique Solution: Eliminates traditional complex inefficiencies, cuts labor costs by 60%+, and achieves coating precision of $\pm 0.05\text{mm}$ for full pipeline corrosion protection.
- Applications: Large-scale welding projects for oil, gas, and water pipelines, ensuring lifelong anti-corrosion integrity.

Bend Pipe Anti-Corrosion Specifications



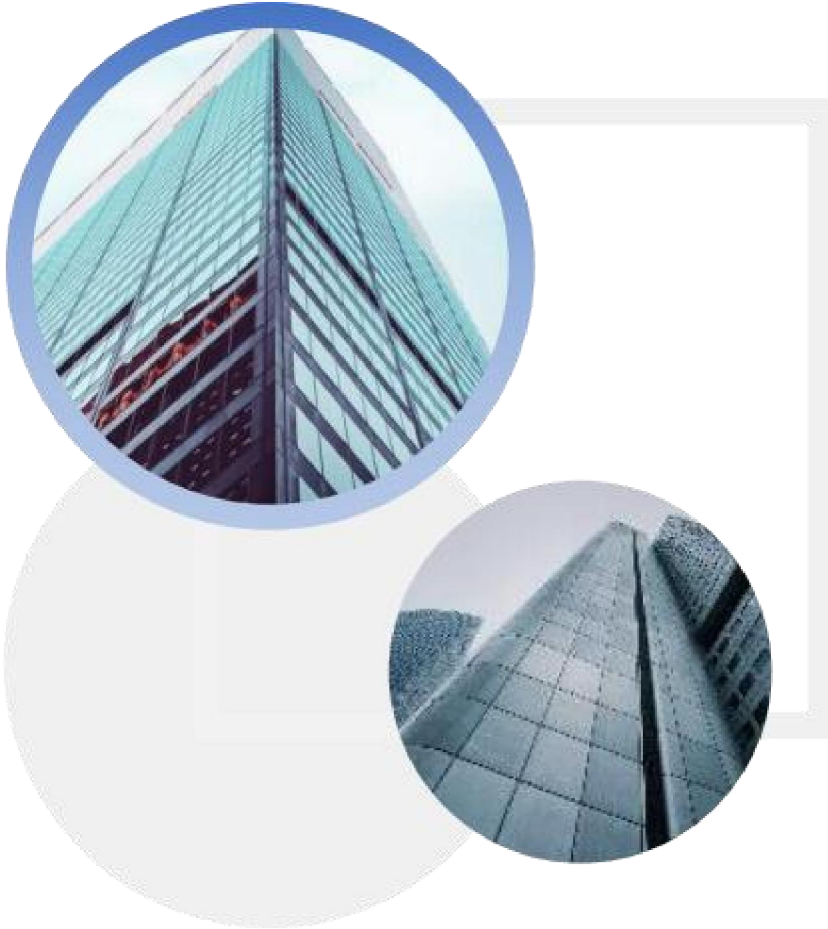
Bend Pipe Anti-Corrosion Specifications

- Bend pipe corrosion protection (DN100–1500mm, 10°–90°) was a global hurdle.
- Patented: Automated FBE/3LPE coating for bend pipes.
- Dual-use: On-site/factory modular lines.
- Precision: Wireless control, 60% labor savings.
- Tech Lead: World's first, uniform coating for complex bends.

Category	Technical Details
Anti-Corrosion Types	<ul style="list-style-type: none">- External: 3PE (Three-Layer Polyethylene)- Internal: Solvent/Solventless Epoxy Paint
Bend Pipe Dimensions	<ul style="list-style-type: none">- Pipe Diameter: 6" - 60"- Angles: 15°, 30°, 45°, 90°, 180°- Bend Radius: 3D, 4D, 5D- Wall Thickness: 6.4 - 39 mm- Maximum Length: 7 m
3PE External Coating	<ul style="list-style-type: none">- 1st Layer (Epoxy Powder): 150 - 600 µm- 2nd Layer (AD Adhesive): 200 - 450 µm- 3rd Layer (PE): 1.6 - 4.5 mm
Internal Epoxy Painting	<ul style="list-style-type: none">- Solvent-Based or Solventless Epoxy Coating



Overseas customer cases



Russia

Nigeria

Armenia

Columbia

Kazakhstan

Ethiopia

Korea

Slovakia

Saudi

Other african countries



**ZQY will exceed
your expectations**



Smart Powers Tubing Lines