



济南未来化工有限公司

Jinan Future Chemical Co., Ltd.

企业介绍



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View of Factory



PART 01

About us

Business Sectors

01 Water Treatment Chemicals

- Phosphonates scale and corrosion inhibitors, chelating agents
- Polycarboxylic acid dispersants, water-based dispersants
- Biocides
- Green chelating agents, etc
- Phosphorus Trichloride(PCl_3), Phosphorous Acid (raw materials)

02 Chlor-Alkali Series Products

- Liquid caustic soda 32% & 50%
- Liquid chlorine
- Hydrogen

03 New Energy Series Products

- Lithium Iron Phosphate (LFP)
- Chloroethylene Carbonate(CEC)
- Vinylene Carbonate(VC)

04 Electronic Chemicals

- Phosphonates & Salts
- Electronic Grade Polymers
- Other Products

PART 02

Products & Applications

Main Application



Water Treatment Chemicals



**Annual Capacity
793,000 MT**

**Phosphonates & Salts
367,500 MT**

Polymers 218,500 MT

Biocides 40,000 MT

Green Chemicals 95,000 MT

Electronic Grade Products

Phosphonates & Salts



1 . Liquid form

- HEDP 160,000 MT
- ATMP, DTPMP(Na), BHMTMPMA, etc. 100,000 MT
- PBTC 40,000 MT

2 . Solid form

- HEDP.NA₄ granule 20,000 MT
- HEDP crystal 12,500 MT
- ATMP solid 12,500 MT

Polymers



3 . Liquid form

- PAA(S) 70,000 MT
- AA/AMPS Copolymer 30,000 MT
- HPMA 20,000 MT
- TH series (TH-1000, 2000, 3100 etc.)
Homopolymer/Copolymer/Terpolymer
- Customized and OEM production of various polymers with different molecular weights

4. Solid form

- PAAS granule & powder 10,000 MT
- MA-AA.Na granule & powder 10,000 MT

Biocides & Green Chemicals



5 . Biocides

- BKC/DDBAC 40,000 MT
- CMIT/MIT 1.5%, 5%, 14%

6 . Green Chemicals

- GLDA.NA₄ Liquid/ Granule
- MGDA.NA₃ Liquid/ Granule
- PASP Liquid/ Granule
- PESA Liquid/ Granule

Electronic Grade Products



7. ppb Grade Electronic Products

- Electronic Grade HEDP
- Electronic Grade EDTMPA
- Electronic Grade HCL
- Customized R&D and production of various grades of electronic chemicals

8 . Other Products

- Phosphorous Acid and crystal 60,000 MT
- Acetyl Chloride 60,000 MT

Blending and OEM services

01

Implement unique code management for each product formula of each customer in ERP system, automatically transmit it to the production control system, achieve automatic feeding and reporting, accurately meet the personalized needs of customers.

02

Sign NDA with customers, and sign the same with all relevant personnel internally to ensure the security of customer and formula information.

03

Information management is adopted. Information isolation is carried out among sales, R&D, production, testing, storage and logistics through access control during internal circulation.



PART 03

Our Advantages

Our Advantages



Sustainable supply capability



R&D technical strength



Information & intelligent management

Our Advantages

- The continuous intelligent production has less investment and manpower, low energy and material consumption, which makes the cost of general products low.
- Continuous R&D of new products and improvement of the process, the personalized needs of customers can be quickly met, high-end products continue to produce.
- The company has thousands of customers, with the top 10 customers account for 20%. The concentration of major customers is low, and it has a large number of high-quality small and medium-sized customers, which brings the company strong ability to resist market fluctuations risk.

Sustainable Supply Capability

- We have accumulated rich experience over the years, which enable us to predict market trends accurately, react quickly, and make prompt decisions. When the market experiences abnormal fluctuations, we can quickly grab RM to ensure market supply.
- We maintain a good, stable & long-term cooperative relationship with suppliers. When shortage or extreme situation of RM happens, the suppliers will guarantee Taihe's supply in priority.
- The Management Decision-Making Committee makes overall arrangements for supply, production and sales to ensure customer needs can be quickly responded to at the corporate level.
- We have good government and public relations resources. When facing emergencies, we can mobilize all available social forces to ensure production and logistics smoothly.

R&D and Technical Strength

R&D Team

We have an R&D team with more than 120 members, incl. 5 Postdocs, 2 Ph.D., 60% Masters, have established an innovative talent team led by technical leaders and supported by core research staff.



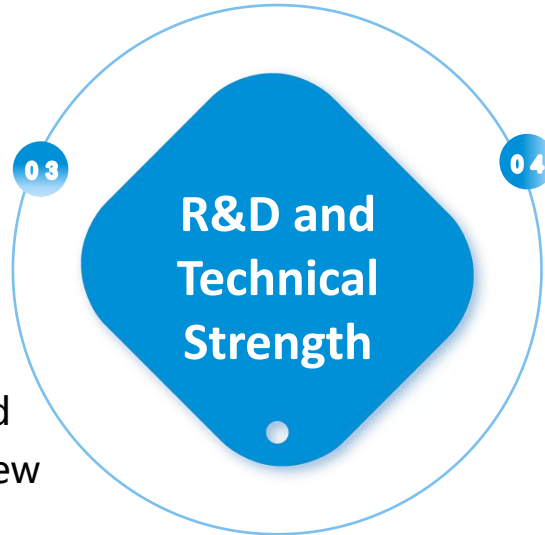
Research Scope

Research scope covers green products and processes, new energy materials, flow redox cell, biological fermentation, electronic chemicals, etc. In 2023, there were 117 ongoing projects, 89 newly approved projects, and 47 completed projects.

R&D and Technical Strength

Rapid Innovation

The chairman serves as the chief engineer, who can mobilize various resources, supervise research and development progress, accelerate the output of innovative achievements, and realize rapid acquisition of new products and technologies.



Customer Demands

Organize meetings with relevant dept. & technicians to discuss customers' demands promptly, determine product analysis & process route, which can meet market needs accurately and efficiently.

Advanced and Well-equipped Instruments

As a **National Enterprise Technology Center**, main experiments and testing instruments are as follows:



500 Megahertz



400 Megahertz

**2 Sets of Full Digital Superconductivity NMR
(Nuclear Magnetic Resonance Spectrometer)**

Advanced and Well-equipped Instruments



Mass Spectrometer
(Two Dimensional Liquid
Phase Quadrupole Flight Time)



Mass Spectrometer
(Two Dimensional Liquid
Phase Triple Quadrupole)



Mass Spectrometer
(Gas Chromatography Quadrupole)

3 Sets of Mass Spectrometer

Advanced and Well-equipped Instruments



ThermoFisher Apreo 20
FESEM
(Field Emission Scanning Electron
Microscope)



Fischione Model 1061
Ion beam cutting polishing system



Bruker Micro-Raman

Advanced and Well-equipped Instruments



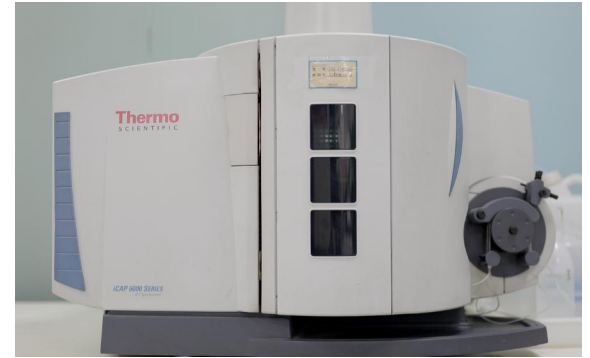
ICP MS

(Detection of metal ions in PPB grade)



ICP OES

(Detection of metal ions in PPM grade)



ICP OES

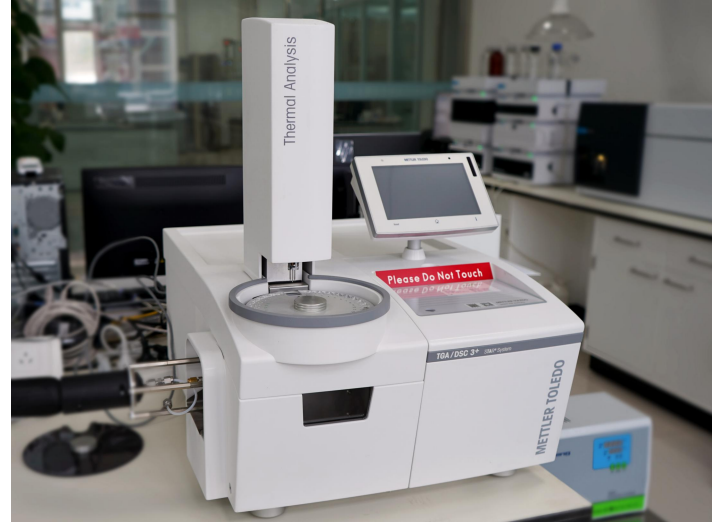
(Detection of metal ions in PPM grade)

**3 Sets of ICP
(Inductively Coupled Plasma)**

Advanced and Well-equipped Instruments

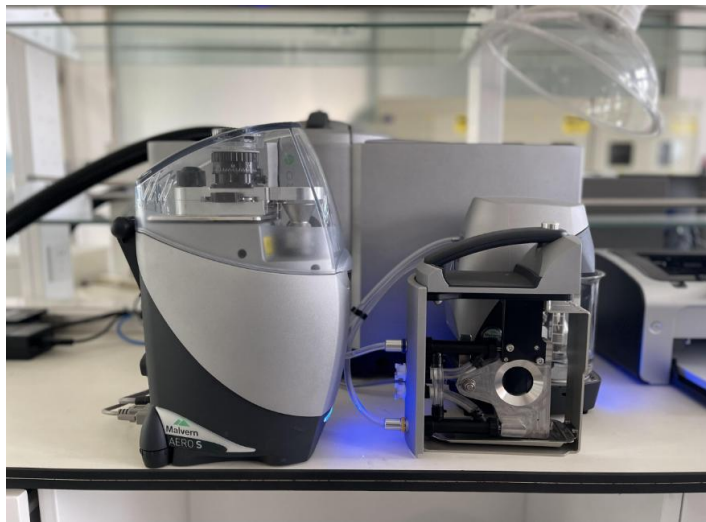


Ion Chromatograph



Simultaneous Thermal Analyzer

Advanced and Well-equipped Instruments



Laser Partical Analyser

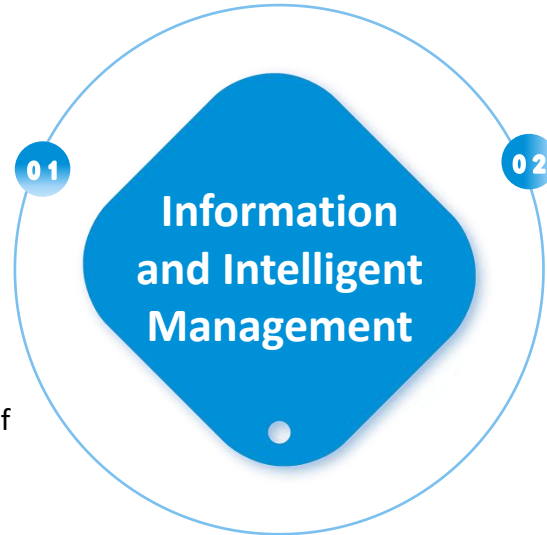


8 sets of HPLC &
15 sets of GC

Information and Intelligent Management

Whole-process Information Management

Combined ERP with production Auto-Control System to realize automatic ordering, production scheduling, feeding, reporting, inspection and checking out of products, achieved whole-process information and intelligent management of the entire business flow from customers' demands to goods delivery



Intelligent Control System

The continuous production process, combined with nearly 5,000 sensors and advanced algorithms, realized the automatic, intelligent and unmanned production

PART 04

Enviroment, Social, Governance

ESG

Safety

01

We adhere to the concept of intrinsic safety, utilizes automation, unmanned, and intelligent methods to achieve intrinsic safety design.

02

The Safety Information System has realized AI dangerous behavior analysis & alarm, personnel location, special work permission, risk grading control and hazards assessment & management.

03

We have built its own fire station, with 8 fire engines and 18 full-time firefighters.



Environment Protection



Hundreds of thousands of tons of fine chemical achieved zero water discharge for more than ten years.



Green Production Process: Green & environmental friendly process is considered at the stage of pilot production, dedicate to the R&D of bio-based, readily & easily biodegradable products.



Green Energy:

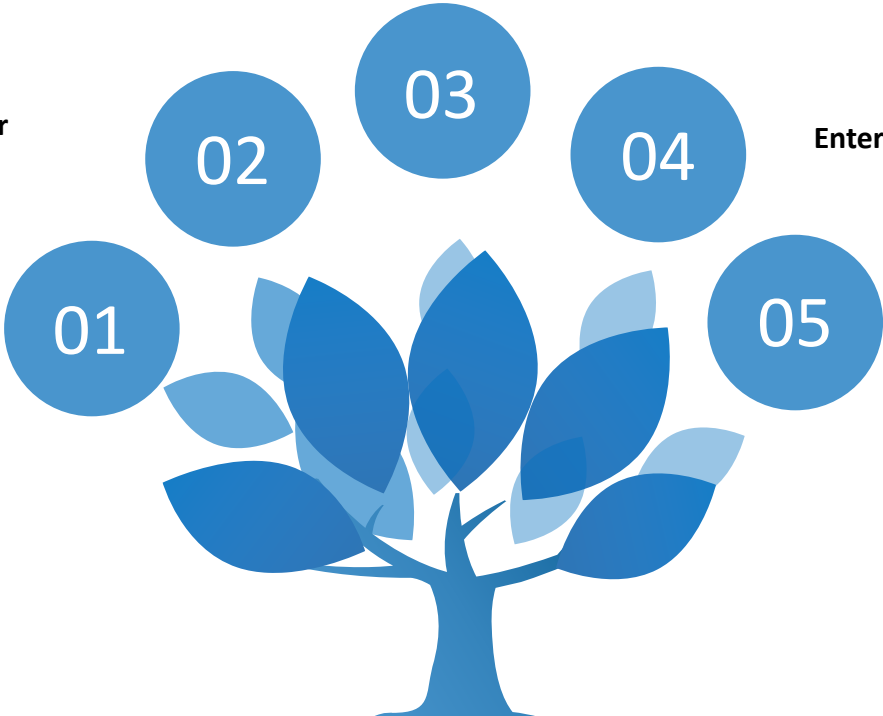
- ✓ Utilizing photovoltaic and hydrogen in power & heat generation;
- ✓ Using green electricity in some production;
- ✓ Product Carbon Footprint Certificates available;
- ✓ Rated as provincial-level green factory;
- ✓ Provincial Model Unit for Clean Production.

Honors and Certificates

**National Champion
of Single Project Manufacturing**

**National Enterprise
Technology Center**

Enterprise Standard Forerunner



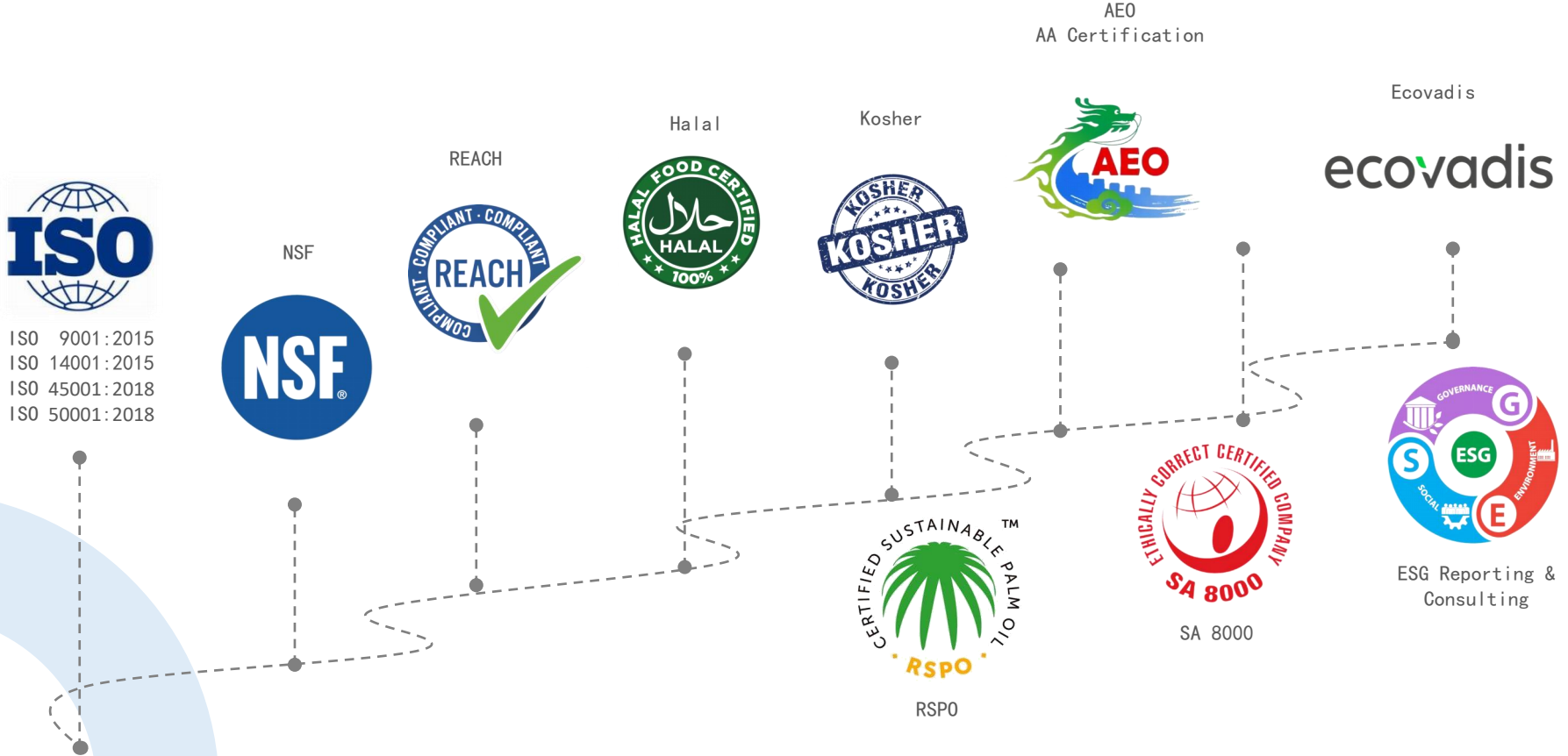
181 National Patents

27 International Advanced Achievements

12 National Leading Achievements

Of which, 10 filled domestic gaps

International certification





PART 05

Plant View



Plant View



Plant View



Plant View



Plant View



Plant View of Taihe and Qingli(Chlor-alkali)



40,000MT PBTC workshop



160,000MT HEDP workshop

80,000MT

80,000MT

HEDP车间

安全 从我做起



160,000MT PCI3 workshop



Vinylene Carbonate(VC)



R & D Center





Beijing
640km

Qingdao port
350km

Shanghai port
650km

Our Location

- 350km/ 218 miles to Qingdao port
- 650km/ 406 miles to Shanghai port