

# Pingxiang Rongjian

Pingxiang Rongjian Environmental Protection Chemical  
Packing Co., Ltd

enterprise propaganda

product presentation



# CONTENTS

CONTENT



COMPANY  
INTRODUCTION



BUSINESS  
INTRODUCTION



PRODUCTION SCALE



CUSTOMER CASE





# PART 01

## Company Introduction

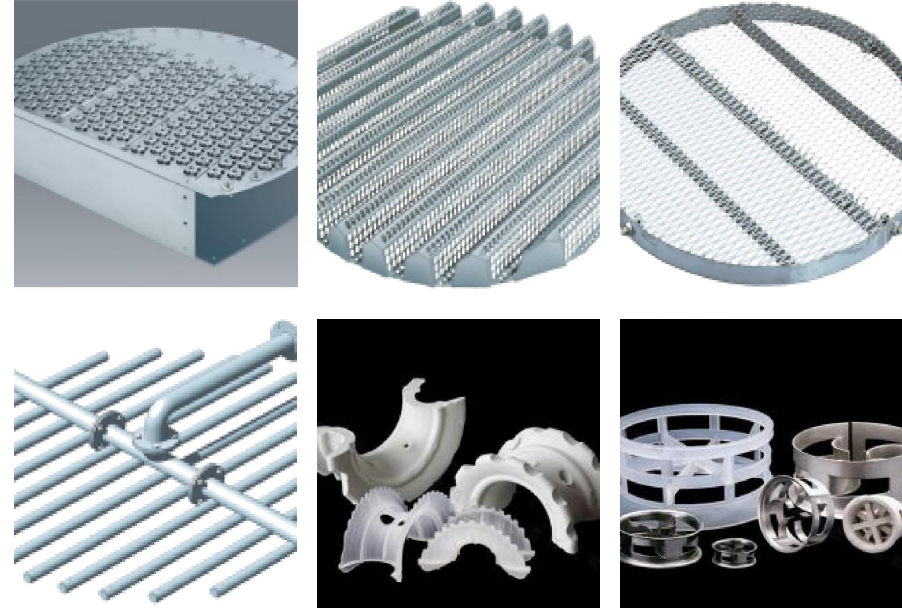


## Company Profile

### Pingxiang Rongjian Environmental Protection Chemical Packing Co., Ltd

Established in 2010, Pingxiang Rongjian Environmental Protection Chemical Packing Co., Ltd. is a high-tech enterprise specializing in the R&D, production, and sales of chemical packing and environmental protection materials. After 14 years of rapid development, the company has become a leading global supplier of industrial packing materials, with products exported to over 100 countries and regions. We employ more than 300 staff, including nearly 100 technical professionals, forming a highly skilled and experienced R&D and production team.

## Production Workshop



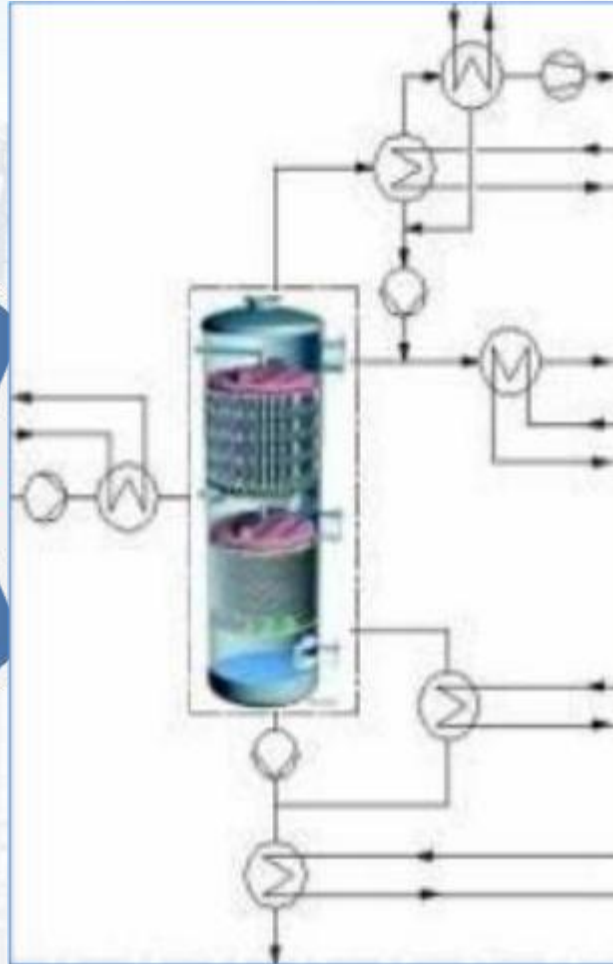
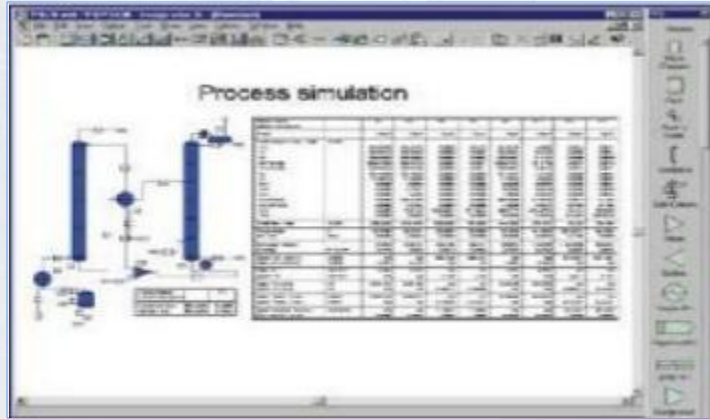
## Proof of Qualification





# PART 02

## Business Introduction



### Customer's earnings

Higher Quality

More stable quality

Lower Energy Consumption

Smaller Tower Diameter

Optimized Process

Flexible operability

Reduce operating personnel

ProcessTechnology

Basic Design

Detailed design

final design

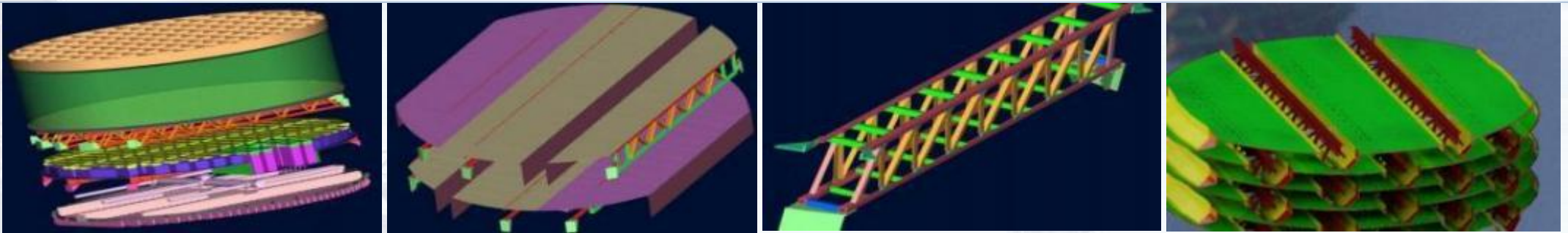
key equipment

integrated device

driving instructions

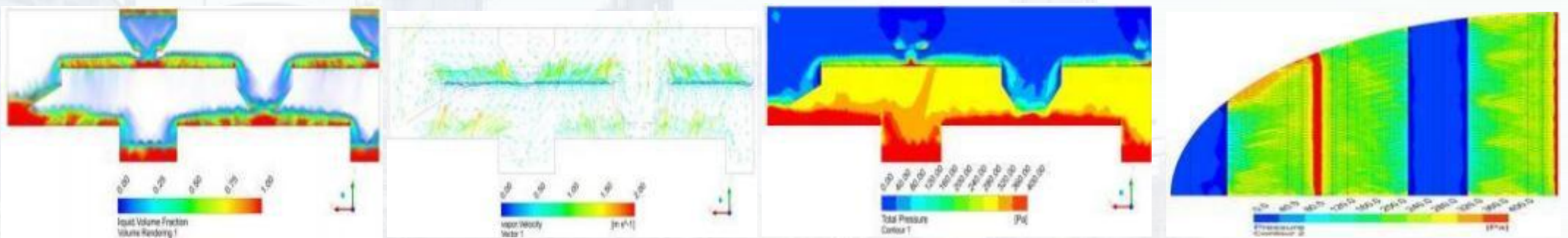
Acceptance

Visualization of structural design



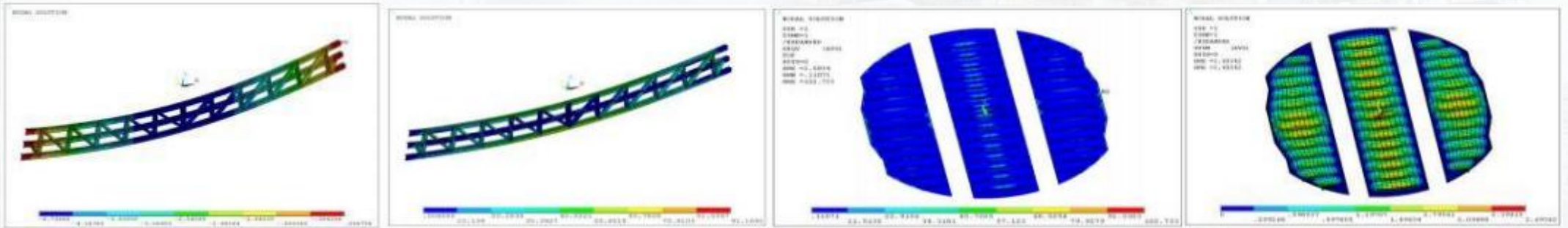
Utilizing 3D design technology, we achieve visualization in structural design, thereby enhancing the level of design

Visualization of flow field distribution

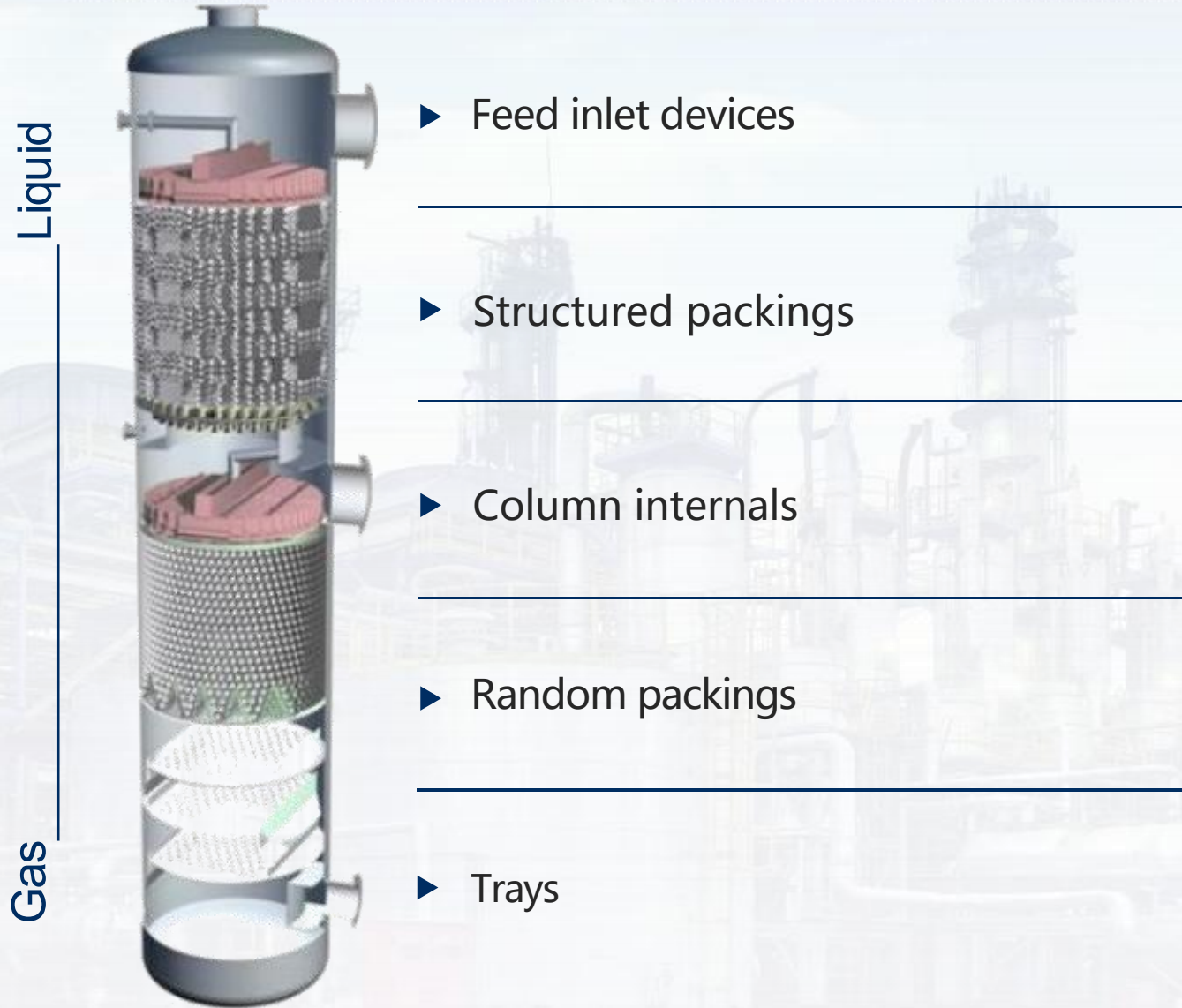


Utilizing Computational Fluid Dynamics (CFD) technology to visualize flow field distribution and pressure distribution

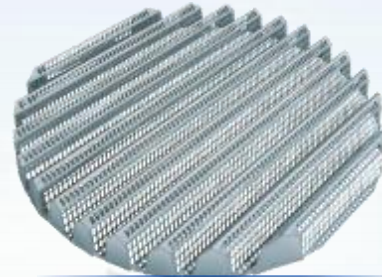
Visualization of mechanical properties and micro-deformation



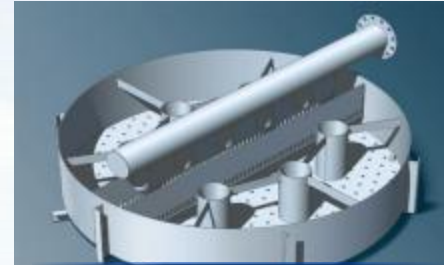
Utilize finite element software technology to achieve visualization of internal mechanical properties and micro-deformations



- Packing bed limiter
- Liquid distributor
- Liquid redistributor
- Liquid collector
- Gas distributor
- High-performance packing support
- Other high-performance tower internals
- All pre-weldments inside the tower



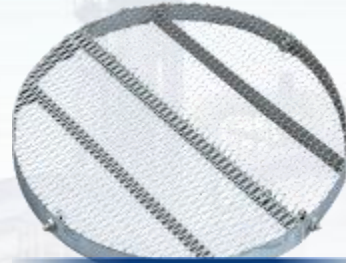
camel support



disk distributor



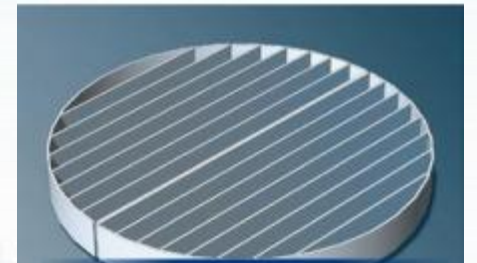
Double-row vane air intake distributor



filler pressing grid



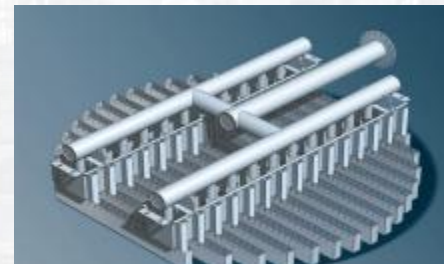
collector



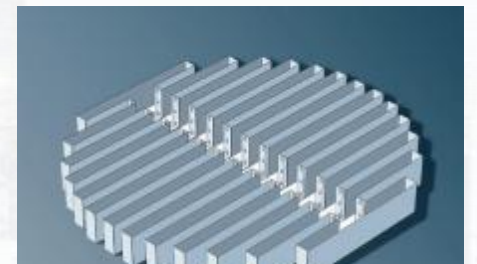
packing support



Tube array distributor



trough distributor



trough distributor

\*We can select the most suitable internals based on user needs and provide tailored optimal solutions. For other types of tower internals, please consult our technical engineers.

## Mass transfer tray with misaligned flow

- valve tray
- fixed valve tray
- sieve tray
- bubble cap tray

## Three-dimensional mass transfer tray

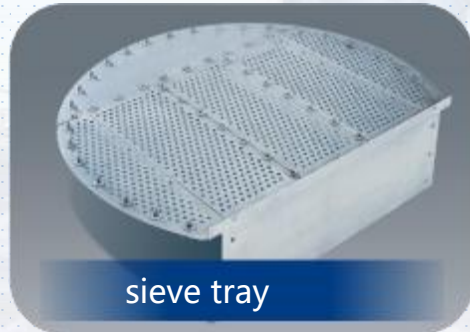
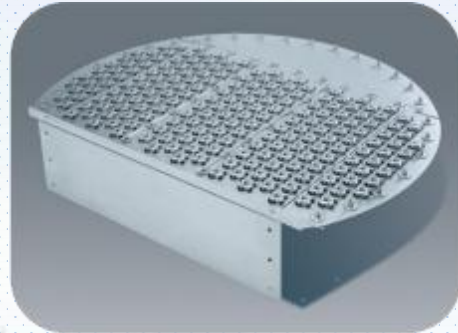
- Vertical sieve tray

## Countercurrent mass transfer tray

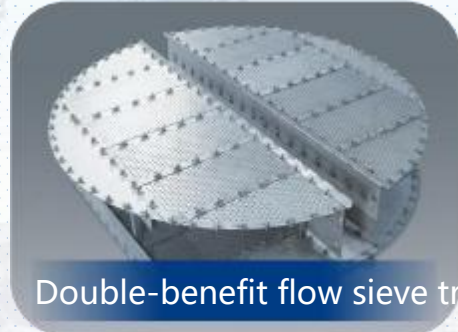
- tray with crossflow ripple screen



F1 Float Valve Tray



sieve tray



Double-benefit flow sieve tray



guided float valve



F1 float valve



blister



bubble cap tray



fixed valve tray



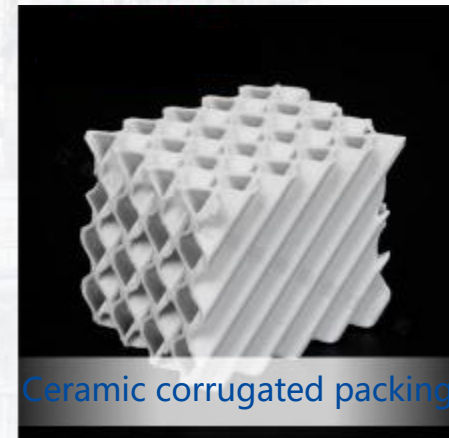
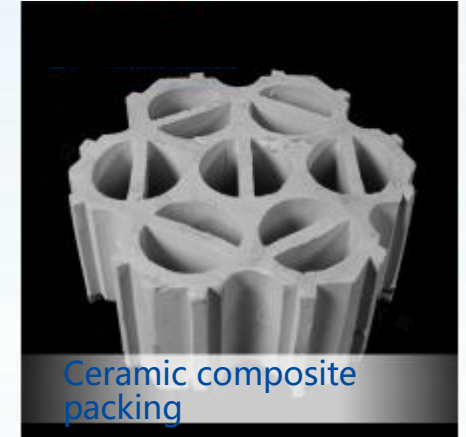
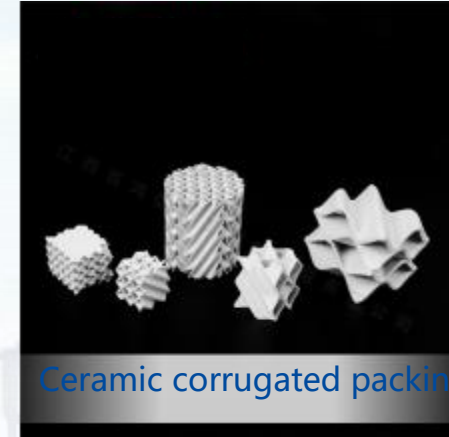
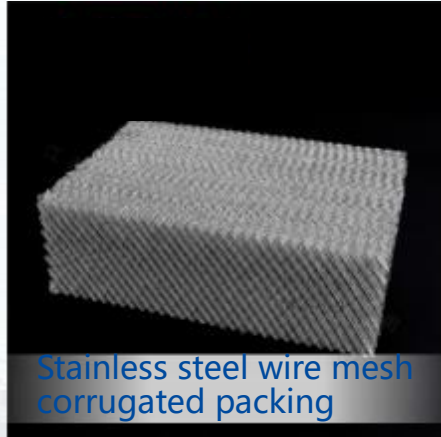
fixed valve



Tray components

\*According to customer requirements, we can design (single overflow/double overflow/quadruple overflow/sextuple overflow)

- Orifice plate packing
- Wire mesh packing
- Grating packing
- Double-layer wire mesh packing
- Perforated packing
- Calendering hole filler
- Direct current packing



\*We can provide the latest Plus high-efficiency structured packing. We are also willing to accept products made of different materials and with different thicknesses as required by customers.

# Random packing

- Raschig ring
- Pall ring
- Ladder ring
- Common rail ring
- Saddle ring
- Flat ring
- Hetero-saddle ring
- Flower ring
- Haier Ring
- Multi-faceted hollow sphere
- Hollow floating ball



Pall ring packing



Intalox saddle packing



saddle ring packing



Raschig ring packing



Raschig ring packing



\*We can manufacture corresponding random packing materials according to customer requirements, meeting the manufacturing needs of various materials, such as metal, plastic, and ceramics.



Wire mesh demister



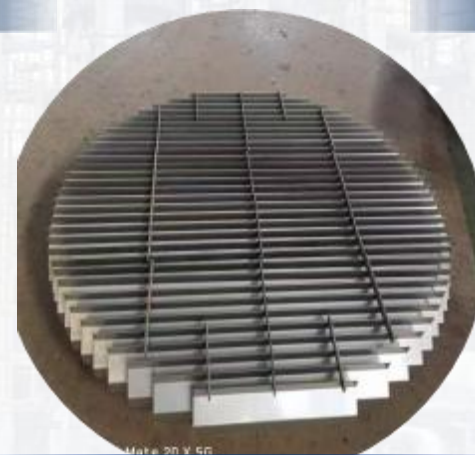
Maze-type demister and skimmer



Plastic wire mesh skimmer



Cyclone plate skimmer



Baffle plate demister



# PART 03

## Production Scale

production scale

# Raw Material Storage Area



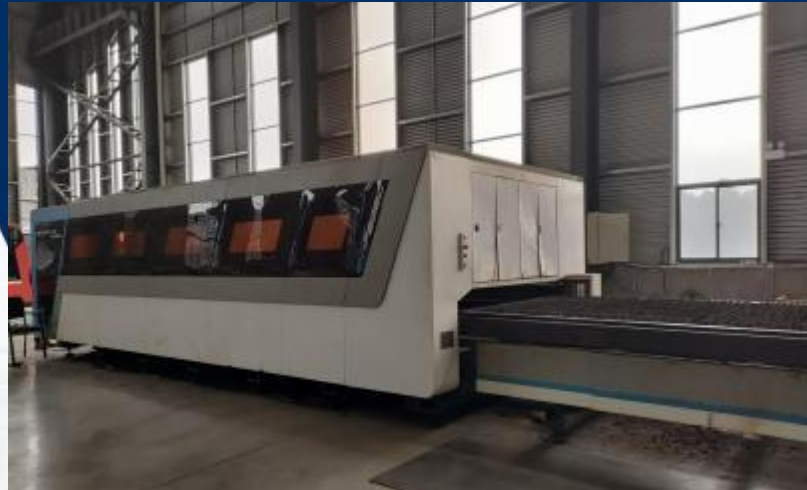
Flange accessory storage area



Raw material storage area

All tower internals products of the company are cut and blanked using fiber laser. The advantages of fiber laser in the manufacturing of tower internals are as follows:

1. High cutting accuracy through computer programming
2. The laser cutting machine cuts with a narrow slit
3. The laser cutting incision surface is smooth
4. Laser cutting does not cause thermal deformation of the workpiece
5. Do not damage the workpiece and ensure no scratching occurs
6. It can process any pattern without being affected by the shape of the workpiece



production scale

Product Cutting Area



CNC high-speed punching machine



200KW fiber laser pipe cutting machine

production scale

Clean workshop (PTFE internal parts workshop)



Clean tower internals workshop



PTFE packing production line



production scale

# Structured packing production line



production scale

Structured packing



# Separator test



The hydraulic testing platform for distributors can measure diameters up to 9 meters.

production scale

ceramic workshop



Mud making

Enameling workshop

Hollow sphere blank





Kiln waste heat drying

kiln firing



production scale

ceramic workshop



finished product packaging



kiln firing







## production scale

## Plastic filler workshop



## warehousing



# Product features



Tower service



1

Professional Planning and preparation for Column Turnarounds

2

Hardware provision service-organized and packed in Lockers at site

3

Field inspection service

4

Emergency replacement and repairment

5

Full installation service for column internals



# PART 04

## Customer Case

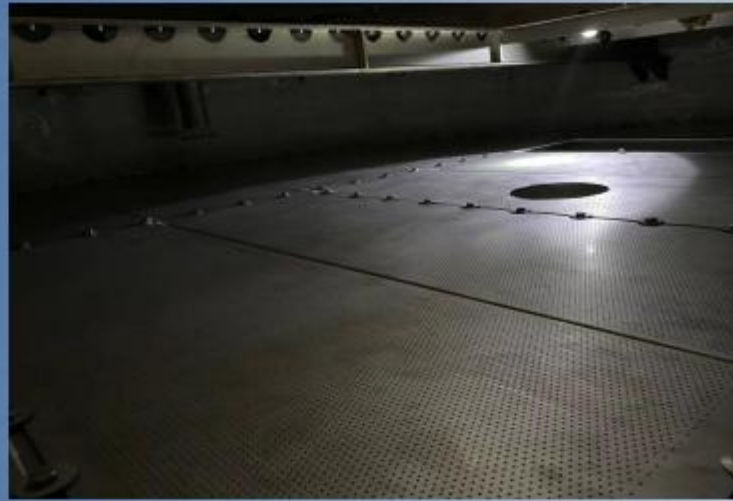




Installation of internals and packings for desulfurization tower, regeneration tower, and benzene scrubber in the 3.6 million tons/year 6.78-meter coking project.



Installation of tower internals for hydrogen peroxide solution project.



## Large Copper Mine Flue Gas Acid Making Drying Tower - Antofagasta Mining Area, Atacama Desert, Northern Chile

**Location:** Antofagasta Mining Area, Northern Chile (the world's largest copper production area)

Mine Type: Copper Mine (owned by Codelco)

**Operating Conditions:** Roasting flue gas with SO<sub>2</sub> content of 10%–12%, containing arsenic and fluorine, high temperature (180–220°C), and strong corrosion.

Tower Internals Supplied by Pingxiang Rongjian: PTFE 250Y Structured Packing + PTFE Tubular Distributor + PTFE Demister

Titanium Support Grid: Imported (matched with our company's PTFE internals for joint operation)

### Operation Effects:

- Service life ≥ 8 years, adapting to high-temperature exposure in the desert environment.
- Moisture content of dried flue gas ≤ 0.1 g/Nm<sup>3</sup>, acid making conversion rate increased by 1.5%.
- Long maintenance-free period, perfectly suitable for remote mining areas with inconvenient transportation and maintenance.

Supplier Statement: Pingxiang Rongjian Environmental Protection Chemical Packing Co., Ltd. is the core supplier of PTFE tower internals for this project. Our PTFE products have the advantages of excellent corrosion resistance, high temperature resistance and long service life, which fully meet the harsh operating conditions of the project and have been stably operated for more than 5 years.

## Copper Smelting Acid Mist Absorption Tower - Copperbelt Mining Area, Zambia

**Location:** Copperbelt Mining Area, Zambia (KCM Copper Mine)

**Mine Type:** Copper Mine

**Operating Conditions:** Sulfuric acid mist,  $\text{SO}_3$ , high-temperature wet flue gas.

Tower Internals Supplied by Pingxiang Rongjian: PVC Pall Ring + Ridge Demister + PP Support Grid

### Operation Effects:

- Low cost and excellent corrosion resistance, especially suitable for budget-sensitive projects in Africa.
- Acid mist removal rate  $\geq 99\%$ , tail gas emission meets the local environmental protection standards.
- Simple installation, low maintenance cost, adapting to the remote and harsh working environment of African mining areas.

Supplier Statement: Pingxiang Rongjian Environmental Protection Chemical Packing Co., Ltd. is the direct supplier of tower internals for this project. As a professional manufacturer from Pingxiang (the global base of plastic packing), our PVC and PP products have the advantages of high cost performance and stable quality, which are widely used in copper smelting acid mist treatment projects in Zambia and have been highly recognized by KCM Copper Mine.