# **Address and Services**

This list shows you where you can find our range of products and servises and our agencies and representatives:

#### **Design and Service**

We can provide full service for customers, including:

- Process simulation
- CFD study
- Feasibility study
- Basic engineering
- Detailed engineering
- Equipment design
- Installation at site
- Commissioning
- Start-up assistance
- Trouble shooting

#### **Main Products**

- Process R&D
- Pilot plant development
- Engineering service
- High efficiency structured packing
- Modified random packing
- Column internals
- Column & vessel
- The whole set of Modular

# EPC Turn-key Project What We Do?

- Engineering consultation
- Process simulation
- Engineering design
- New technology R&D
- Project management
- Equipment technology procurement and integration
- Equipment manufacturing and assembly
- Engineering construction and management
- Systemwide commissioning and trial running
- Operation training & service
- Trouble shooting

#### **Main Direction:**

- Solvent recovery
- Modular crude oil refineries
- Modular LNG device
- Modular GAS plants
- LNG filling station
- Environmental protection and energy saving equipment

### Headquarters

15F, 269# Anshanxi Rd, Nankai District, Tianjin, China. 300192

### **Global Sales Contact**

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www.peiyangchem.com



### PCC new R&D and manufacturing base.



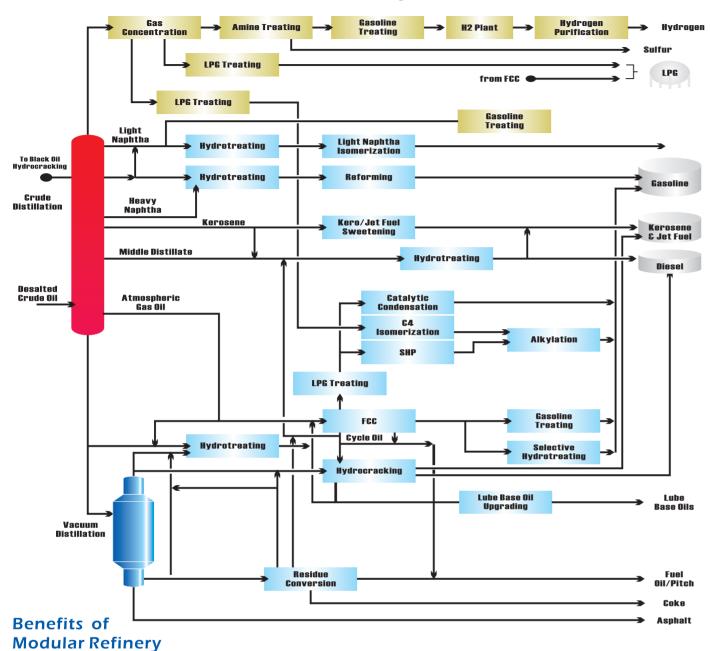


For more information, please scan the QR code.

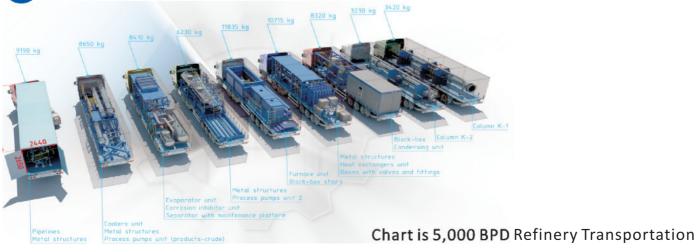
# World Leading Modular Refinery Supplier



# **Technical Solutions & Process Optimization**



Modular Refinery is Movable according to Clients Needs



## **Benefits of Modular Refinery**

A Lower Total Investment than Non Modular Refinery

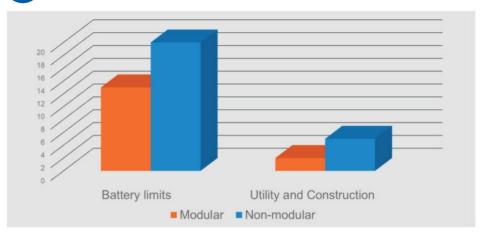
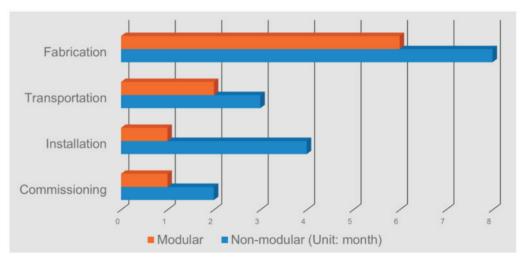


Chart is 10,000 BPD Refinery Comparison in Battery Limits and Utility (Unit: Million US\$)

B Shorter Period than Non Modular Refinery



Above is 10,000 BPD Refinery Comparison in EPC Period

# C Lower Dependence on Utility System

Utility System Main Items	Modular	Non-modular
Electricity	NE	NE
Water	NON	NE
Steam	NON	NE
Instrument Air	NON	NE

Above is 10,000 BPD Refinery Comparison in Utility System Dependence

Necessary---NE

Not Necessary---NON

### **About PCC**

Company Profile



#### **Company Profile**

PCC was founded in 1993 and has 24 years' history. We are the immediate holding company of Tianjin University which is ranking no.1 in chemical engineering field in China. From this point PCC is central government owned company.



# Tianjin University Profile

Tianjin University holds 51% of share of PCC, the rest of share are management's.

■ Tianjin University is the oldest institution of higher education in the modern history of China. Founded in 1895 as Peiyang University, Tianjin University's 121-year history is the epitome of the progress of modern Chinese higher education, embodying the Chinese people's indomitability through challenging times.

## Centuries-old History

Famous Characters of Tianjin University in History.



During our long history, many notable scholars have studied in Tianjin University's halls. We have been lucky enough to see great minds from the fields of engineering, law and education walk through the gates of the university and go out and make an impression on the world, poet Xu Zhimo, the first Chinese judge at the Court of International Justice in the Hague Wang Chonghui, and economist Ma Yinchu.

### **About PCC**

Company Profile

#### Qualification & Honor

National Science and Technology Progress Award is awarded by the State Council to commend the motherland and the people have made outstanding contributions to science and technology workers.

PCC wins National Award for Science and Technology Progress.





### **FRI Member**

FRI is the world's most authoritative distillation mass transfer third-party research and testing institutions. His members are all over the world and almost all well-known chemical companies or equipment manufacturers. We are familiar with Shell, Mobil, Basf, Linde and other well-known companies.



FRI Membership Certificate

# Pressure Vessel Qualification

Through systematic and effective quality, safety and environment management system, PCC creates a sustainable growth momentum.



American Society of Mechanical Engineers (ASME, American Society of Mechanical Engineers) was founded in 1880. ASME is one of the largest art institutions in the world; the development of the industrial and manufacturing sectors of many standard American Society of Mechanical Engineers. Now ASME has industrial and manufacturing sectors and coding standards, these standards are adopted more than 90 countries worldwide.





PCC has acquired ASME Certificate and U/NB Stamp

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### **PCC Advantages for Modular Refinery**



■ We have lots of technology in oil&gas field. These will lead unit much smaller, compact and lower energy consumption.

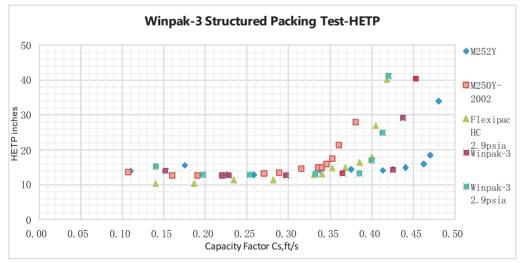
### **New High Efficiency Packing**



### Conclusion

- 1.45 Psia Working Condition:
- Compare Winpak-3 to M252Y, the performances are approximately the same.
- Compare Winpak-3 to M250Y-2002, Winpak-3 has a definite advantage, and the F factor on knee point is 30% higher than that of M250Y-2002.

# **EFRI** Winpak Test Data by FRI:



### 2.9 Psia Working Condition:

- Compare Winpak-3 to Flexipac HC, the performances are appr o-ximately the same.
- Under the same working condition, with the increase of the flow rate, the HETP of Winpak-3 shows a downward trend, while Flexipac HC is on the contrary.

## **PCC Advantages for Modular Refinery**





CCR in Container

- The world leading out sourcing brand keep refinery running always like start up.
- High intelligent automation control system leads daily operation as simple as possible.

- Very competitive price makes clients more margin and less pay back period.
- Much less delivery time leads start up within 10 months.
- Remote monitor and control service help your refinery always keep good health.









WIKA













▼ PCC Remote Support Center



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# **Benefits for Modular Refinery**

# **Modular Refinery Catalogue**

MODE	CAPACITY (BPD)	POWER (KWH/DAY)	AREA (Acre)	CONTROL	PERIOD (Month)	
MR2	200	500	1	PLC	7	
MR5	500	1,000	1	PLC	7	
MR10	1,000	2,000	1	PLC	7	
MR15	1,500	3,000	1	1 PLC		
MR30	3,000	5,000	2	PLC	7	
MR50	5,000	8,500	2	PLC	7	
MR100	10,000	15,000	3	DCS	8	
MR150	15,000	18,000	4	DCS	8	
MR200	20,000	23,000	5	DCS	10	
MR250	25,000	30,000	6	DCS	10	

# **Our Products**



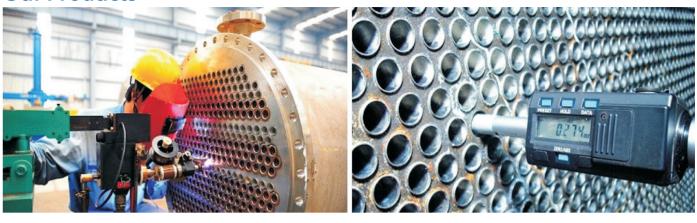


Column Internals

**Packing** 

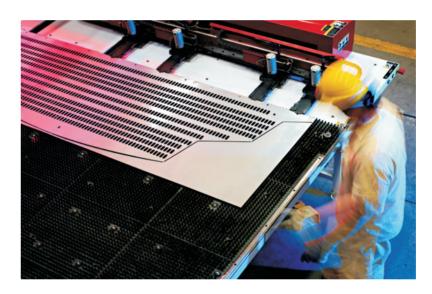
# Manufacture

### **Our Products**



-08-

**Heat Exchanger** 





**Hign Efficient Tray** 



Design

### Column



**NR Raffinate Oil Tower** 



-07-

# **Oil Refining Project**







Taicang Petrochemical 5,000,000 tons of Condensate Oil Processing



Dongying Liyuan Environmental Protection 1,800,000 tons/y DDC Combined Device



Shandong Wantong Petrochemical 6,500,000 tons/y Atmospheric & Vacuum Distillation Plant



Kenli Petrochemical 1,300,000 tons/y Diesel Oil and Wax Hydrofining Plant



Xinjiang Chaoyuan Chemical 300,000 tons/y White Oil Hydrofining Plant

# **Oil Refining Project**



Kenli Petrochemical 150,000 tons/y Half Regeneration Reforming Plant



Kenli Petrochemical 100,000 tons/y Liquefied Gas Mixing Plant

































**MESSER** 



### **Achievements**

NO.	Project Name	Country	Service	Time
1	50,000 BPD refinery in Koko	Nigeria	EPC	2016.11 - now
2	M storage project in Sri Lanka	Sri Lanka	EPCC	2008.06 - 2009.05
3	Petro Sanat Pars Co. 180KT/Y Pentane Plant	IRAN	EP	2015.06 - now
4	Russia Amur – Heihe border oil storage and transportation and refinery project	Amur-Heihe	Feasibility Study	2014.03 - 2014 11
5	Yanchang Petroleum Xiwan Chemical Co. 1.2 Mt/y aromatics project	ShanXi, China	EPC	2015.09 - now
6	Yanchang Yulin Refinery Plant 5,000,000 tons oil refining Extension & Modification project	ShanXi, China	Design	2012.03 - 2014.10
7	500,000 tons of coal tar hydrogenation project	ShanXi, China	EPC	2012.03 - 2014.11
8	Yanchuan County 200000 tons / year LNG LPG Station Project	ShanXi, China	Design	2013.12 - 2014.07
9	Yan'an Coal-Oil-Syngas resource utilization project	ShanXi, China	EPC	2014.02 - 2016.06

**-09**--10-