



包头科发高压科技有限公司

*BaoTou KeFa High Pressure Technology Co., Ltd*

**K F H P P**

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## 一、 Company brief

BaoTou KeFa High Pressure Technology Co., Ltd . started to design, manufacture and markets high pressure equipment for food and New materials processing since 2001 years. we are apply oneself to open and innovate our Fresher Food Technology High Pressure Processing and New materials Isostatic press HPP/CIP/WIP ( CIP-Cold Isostatic Press / WIP-Warm Isostatic Press at 90-150 C°) . we are the China even Asia leader in High Pressure Processing, CIP, WIP technology and high pressure metal parts. We have a team of professionals in High Pressure Processing technology, research and development, technical support and customer service, engineering, sales, and marketing. Our mission, very simply, is to help the Food industry and New material technology providing safe, high-quality, innovative HPP/CIP/WIP/CIP/WIP products. Our High Pressure Processing (HPP/CIP/WIP) product line includes small lab presses for testing and large commercial-scale systems with pressure vessel capacities from Volume 5 liters up to nearly 800 liters ( Inner Diameter 100-400mm, Length 400-5000mm, Temp 90-150 C° ) for college, institute ,food factory and **New materials** Powder metallurgy, ceramics, New energy technology solid state electrical core material etc application fields. Usable with water medium maximum standard operating pressure at 87,000 psi (600 MPa). Our vessel structure three layers heat-shrink sleeve or heat-shrink+winding structure and autofrettage technology assures the maximum in pressure vessel safety at lower weights, thus reducing facility and low costs. Up to now , we have already designed and manufactured different spec HPP/CIP/WIP machine more than 1000 sets for customer.

We can supply and provide HPP/CIP/WIP machine specification as follows:

### 1、 Small model test spec and main parameters :

**HPP/CIP/WIP600MPa/IDØ130mm-200mmXH400-500mm/ Vertical or Horizontal mode**

**2、 The pilot middle-sized production spec and main parameters:**

**HPP/CIP/WIP600MPa/IDØ200mm-300mmXH500-2000mm Vertical or Horizontal mode**

**3、 The large-scale production spec: Horizontal Mode / IDØ300mm--400mm :**

**(1) the single (Mono) vessel spec: HPP/CIP/WIP600MPa/100-500L;**

**(2) the parallel 2 (Duo) vessel spec: HPP/CIP/WIP600MPa/2×100L—2×500L**

**At present, we have already obtained Europe "CE" and "PED" certificate and American "ASME-U3" certificate. And our machines have been exported to more than 20 countries and regions, including South Korea, Japan, Thailand, Vietnam, Philippines , Malaysia, Egypt, Israel, Saudi-Arab, India, Canada, Mexico , American , Poland, Hungary, Greece , Austria, New zealand and China Taiwan, HongKong etc.**



**CERTIFICATE OF AUTHORIZATION**

The named company is authorized by The American Society of Mechanical Engineers (ASME) for the scope of activity shown below in accordance with the applicable rules of the ASME Boiler and Pressure Vessel Code. The use of the ASME Single Certification Mark and the authority granted by this Certificate of Authorization are subject to the provisions of the agreement set forth in the application. Any construction stamped with the ASME Single Certification Mark shall have been built strictly in accordance with the provisions of the ASME Boiler and Pressure Vessel Code.

COMPANY:

**BaoTou KeFa High Pressure Technology Co., Ltd.**  
No. 19, Alatanhan Street,  
Rare-Earth Hi - Tech Zone  
Baotou, Inner Mongolia 014030  
People's Republic of China



SCOPE:

**Manufacture of pressure vessels at the above location only  
(This authorization does not cover welding, brazing or fusing)**

AUTHORIZED: **May 04, 2023**

EXPIRES: **May 04, 2026**

CERTIFICATE NUMBER: **41346**

  
Board Chair, Conformity Assessment

  
Managing Director, Standards & Engineering Services

The American Society of Mechanical Engineers





## SERTİFİKA / CERTIFICATE

97/23/AT DİREKTİFİNE GÖRE SON DEĞERLENDİRMENİN İZLENMESİYLE  
İÇ ÜRETİM KONTROLÜ(MODUL A1)  
INTERNAL MANUFACTURING CHECKS WITH MONITORING OF THE FINAL ASSESSMENT (MODULE A1)  
ACCORDING TO DIRECTIVE 97/23/EC

Sertifika No. : PED-C-021/18  
Certificate Nr.  
Onaylanmış Kuruluş Tanıtım Numarası : 2138  
Identification No of the Notified Body  
Rapor No. : PED-R-021  
Report Nr.

Üreticinin Adı / Adresi  
Name and Address of the Manufacturing Plant

BAO TU KE FA HIGH PRESSURE  
TECHNOLOGY CO. LTD.  
No. 11, Campus Road, Park East Hi-Tech Zone, Baotou, Inner  
Mongolia, China

Değerlendirme Kapsamı  
Scope of Examination:

: High pressure processing equipment  
PS: 6000 Bar  
Volume (V): 1500L  
Medium: Water  
TS: 0 to 50°C  
Model: HPP600MPa/30L, HPP600MPa/15L, HPP600MPa/30L,  
HPP600MPa/150L, HPP600MPa/100L, HPP600MPa/200L,  
HPP600MPa/300L

Üretici veya bayisi temel gereksinimlerinin muayenesinden sonra muayene kapsamındaki basınçlı ekipman üretimi için aşağıda gösterilen şekilde CE işaretini onaylanmış kuruluş numaramız ile sağlanması için yükümlüdür.

The manufacturer is obliged to examine the pressure vessels – authorized to provide his pressure equipment manufactured within the scope of the examination with the CE mark and identification number illustrated as:

CE  
2138

Sertifika Düzenleme Tarihi: 22.05.2018  
Certificate Issue Date:

Sertifika Geçerlilik Tarihi: 22.05.2019  
Certificate Validity Date:

ALBARK QA ULUSLAR ARASI TEKNİK  
KONTROL VE BELGELENDİRME LTD. ŞTİ.  
Futuşpaşa Cad. No:59 Kandıra Plaza  
E-8 D-4 K. Sakaklıbaşı/İstanbul/ TÜRKİYE  
Tel : 0216 572 49 10-11-12  
Fax : 0216 572 49 14 www.ataktchbil.com

Latif Murat YILMAZ  
Genel Müdür / General Manager





## **二、 The company provides the technical advantages of Ultra-High Isostatic Pressure machines HPP/CIP/WIP**

The ultra-high pressure machine ( HPP/CIP/WIP ) above 600MPa is not ordinary mechanical equipment, which involves safe and reliable operation and requires a high technical threshold. Baotou Kefa High pressure Technology Co., Ltd. was established more than 20 years of professional focus, continuous innovation, the use of military technology advantages, R & D, design and manufacture of different specifications of high pressure equipment has been exported to more than 20 countries and regions, reliable quality, stable performance, widely praised by customers at home and abroad. The company has obtained the high-tech enterprise and Inner Mongolia Enterprise Research and Development Center certificate, and obtained the export of the United States "ASME-U3" and the European Union "CE-PED" highest pressure grade certificate, is currently the only manufacturer in China and even Asia to win this honor.

Ultra-high pressure equipment ( WIP /CIP warm and cold isostatic press can achieve real-time temperature control of  $\geq 90^{\circ}\text{C}$  - $150^{\circ}\text{C}$ , temperature  $\leq 90^{\circ}\text{C}$  using water medium; Temperature  $\geq 90^{\circ}\text{C}$  - $150^{\circ}\text{C}$  Special medium oil is used. According to the use of the maximum pressure can be achieved 1000MPa) . The main high pressure parts are ultra-high pressure vessel (chamber) and frames ( yoke ) and some high pressure connection parts. The ultra-high pressure vessel of this machine adopts three layers of special steel structure heat shrinkable sleeve or heat shrinkable jacket+steel belt wound composite structure to form a complete continuous body, and uses the principle of heat expansion and cold shrinkage to form uniform prestress between each layer of the vessel, so that each layer is bound to each other. Even if the inner layer is damaged by fatigue, inter-layer leakage warning will occur during the pressurization process, and the collapse of the whole vessel will not occur. This

three-layer hot-jacketed structure or hot-jacketed+steel belt wound composite structure ensures safe and reliable operation of the vessel under high pressure. At the same time, the composite structure of this ultra-high pressure vessel also has the function of repairable reuse, which greatly saves the cost of replacing the entire vessel. The frame adopts high-strength steel plate composite lamination superposition or steel belt wound composite structure, according to the safety design of more than 3 times the pressure capacity, to meet the ultra-high pressure vessel to withstand the axial binding force during the pressurization process, and the real-time deformation warning of the pressure frame is installed to ensure the safe and reliable operation. Other high pressure connection valves such as three-way, four-way, check valve, pressure relief valve using the company's unique technology design to ensure long-term safe and reliable operation. Automatic control using PLC programmable program design, can automatically control the equipment pressurization, pressure relief and vessel plug automatic opening and closing, to realize the processing of pressure, temperature, holding time freely setting and data recording, and the printing output, remote monitoring, fault diagnosis and other functions. The pressure gauge and the high pressure sensor detected by the third party work together to display the pressure to ensure the accuracy of the pressure. The program design presets the automatic relief protection of overpressure overload and sudden operation power failure to ensure the safety protection of the operation of the ultra-high pressure equipment. The equipment is equipped with visual stainless steel protective cover to further strengthen the safety protection of ultra-high pressure equipment and provide a safety barrier for long-term operation of the equipment. The equipment has no emission of three wastes and belongs to the high-tech green technology of low carbon, environmental protection and energy saving.

### 三、 Part of foreign customers to visit the company

Our different specifications HPP/CIP/WIP machines have been exported to more than 20 countries and regions, and only in Thailand there are more than 20 sets of different specifications HPP/CIP/WIP machines.





四、 The company provides the main series of different specifications of HPP/CIP/WIP machines as follows:

1, Small experimental type , Vessel Volume : 3-15 liters ( HPP/CIP/WIP : 600MPa/3-15L, internal diameter ID is 130-200 mm, 3-15L specifications are mainly 3L, 5L, 10L and 15L; Length 400-2000mm, Vertical or Horizontal mode ).

2, Pilot production model : 30-100 liters ( HPP/CIP/WIP600MPa/30-100L, inner diameter ( ID ) of 200-300mm, 30-100L specifications are mainly 30L, 50L, 60L and 100L; Length 1000-2000mm, Vertical or Horizontal installation mode) .

3. Production type

(1) Single system type 100-500L ( HPP/CIP/WIP600MPa/100-500L, inner diameter ID300 -400mm), 200 L (inner diameter ID300 mm), 300 L and 400 L (inner diameter ID300-350 mm), 500L (inner diameter ID400 mm), length 2000-5000mm.

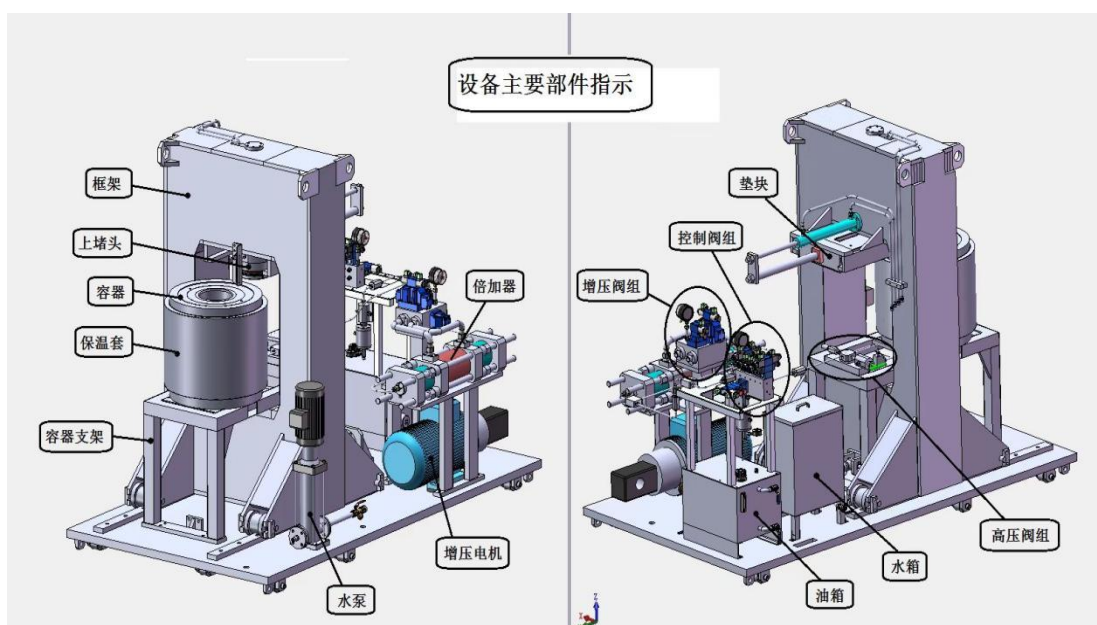
(2) Dual system 2×100 liters (inner diameter 300 mm), 2×200 liters (inner diameter 300 mm), 2 x 300 (inner diameter 300 mm), 2X500 L (inner diameter 400 mm). length 2000-5000mm. the best installation mode is the Horizontal..

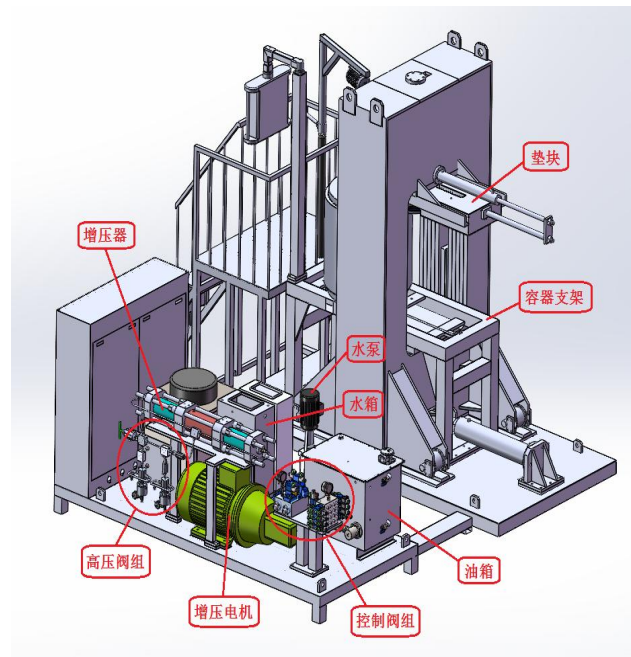
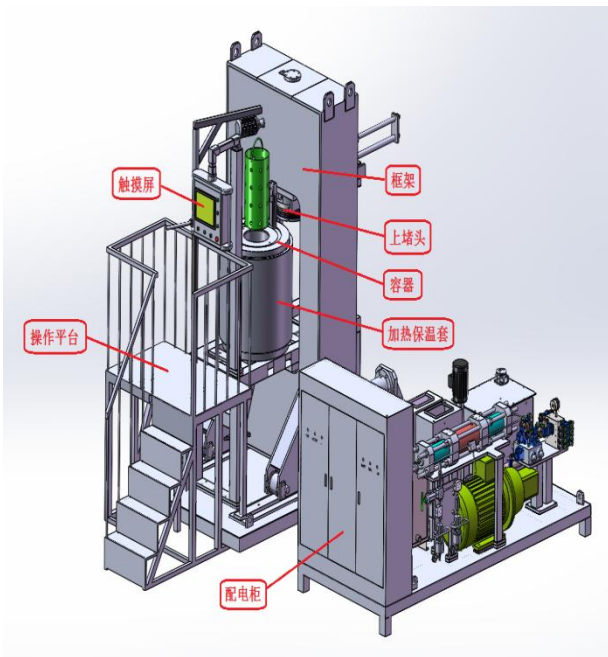
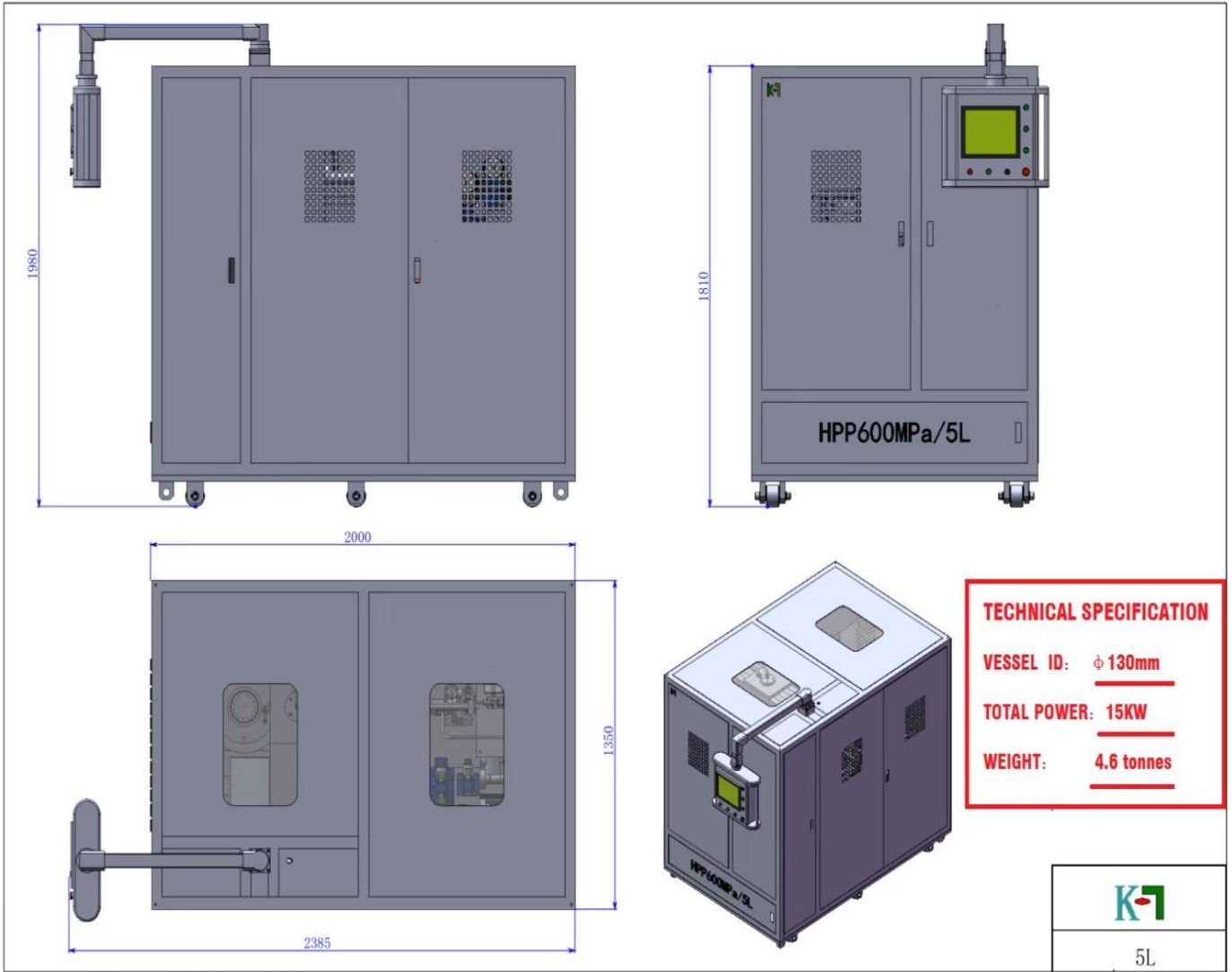
五、 Layout and pictures of different specifications HPP/CIP/WIP machine

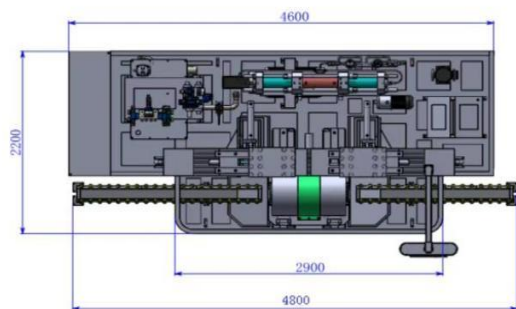
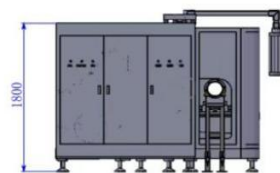
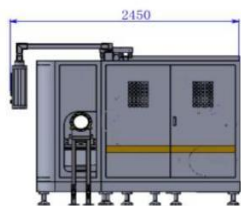
1、 Small type Press HPP/CIP/WIP machine( test and experimental):

**HPP/CIP/WIP600MPa/ID130-200XH400-600mm**

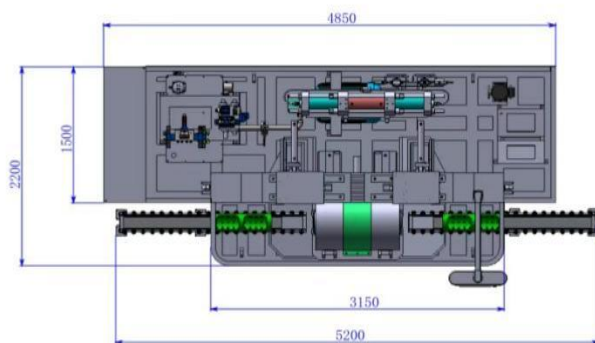
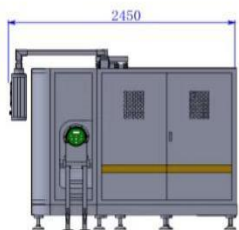
**Installation mode : Vertical and Horizontal**







 包头科发高压科技有限公司	
设备总装配	
10L	
组件号	



 包头科发高压科技有限公司	
设备总装配	
20L	
组件号	



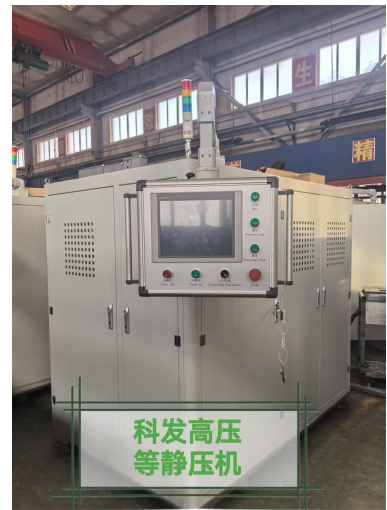
HUAWEI Mate60 Pro+

27mm F2 1/100 ISO125 XIMAGE



HUAWEI Mate60 Pro+

27mm F2 1/100 ISO125 XIMAGE

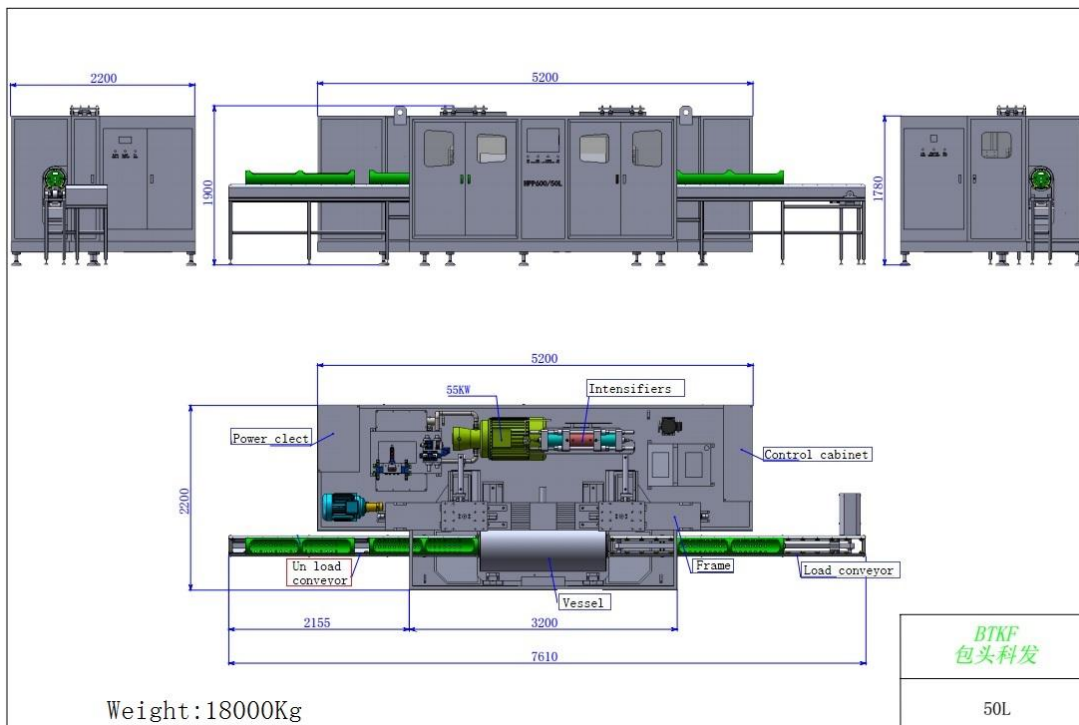
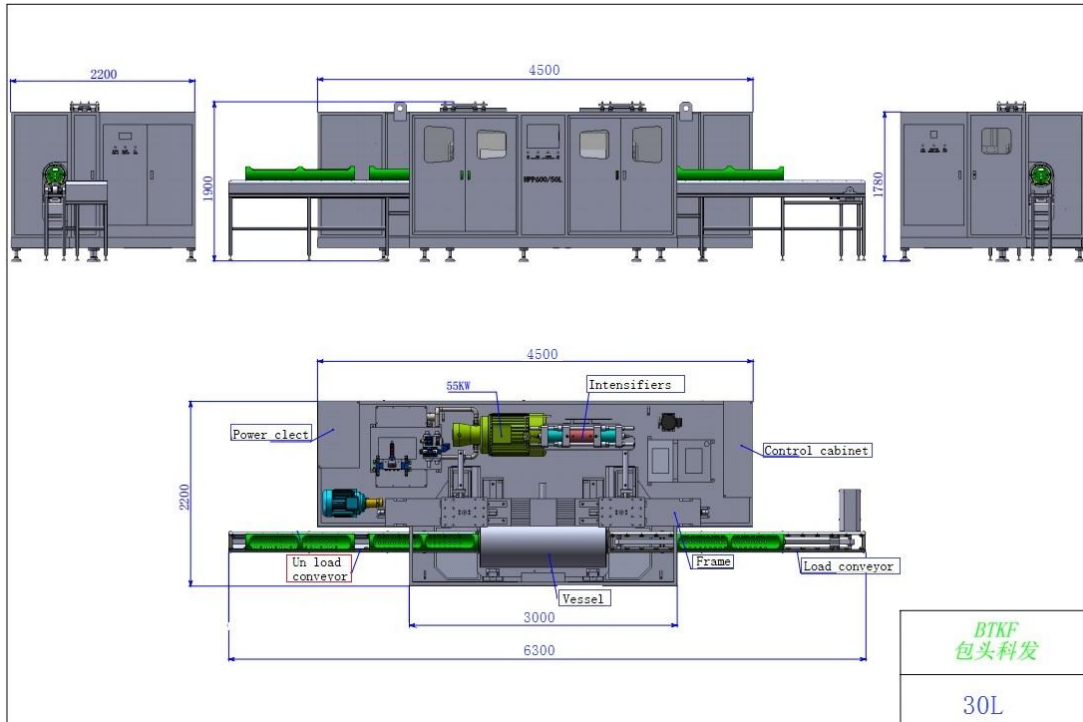


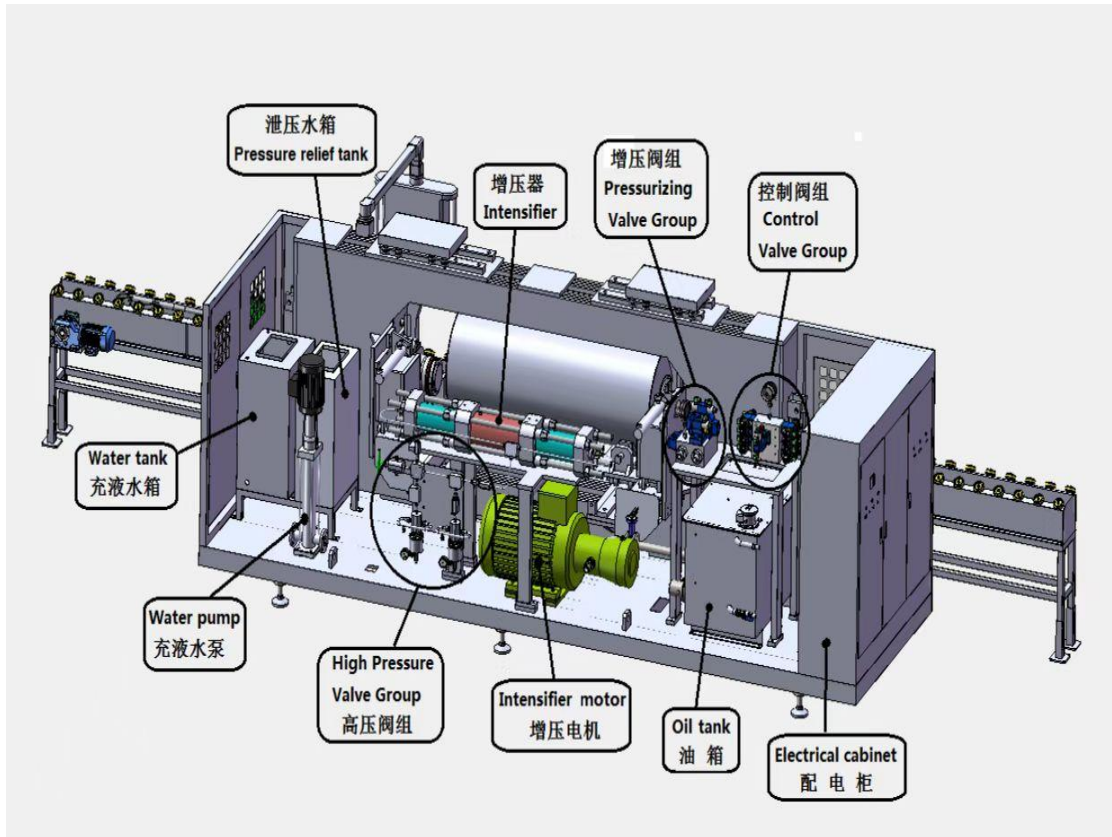
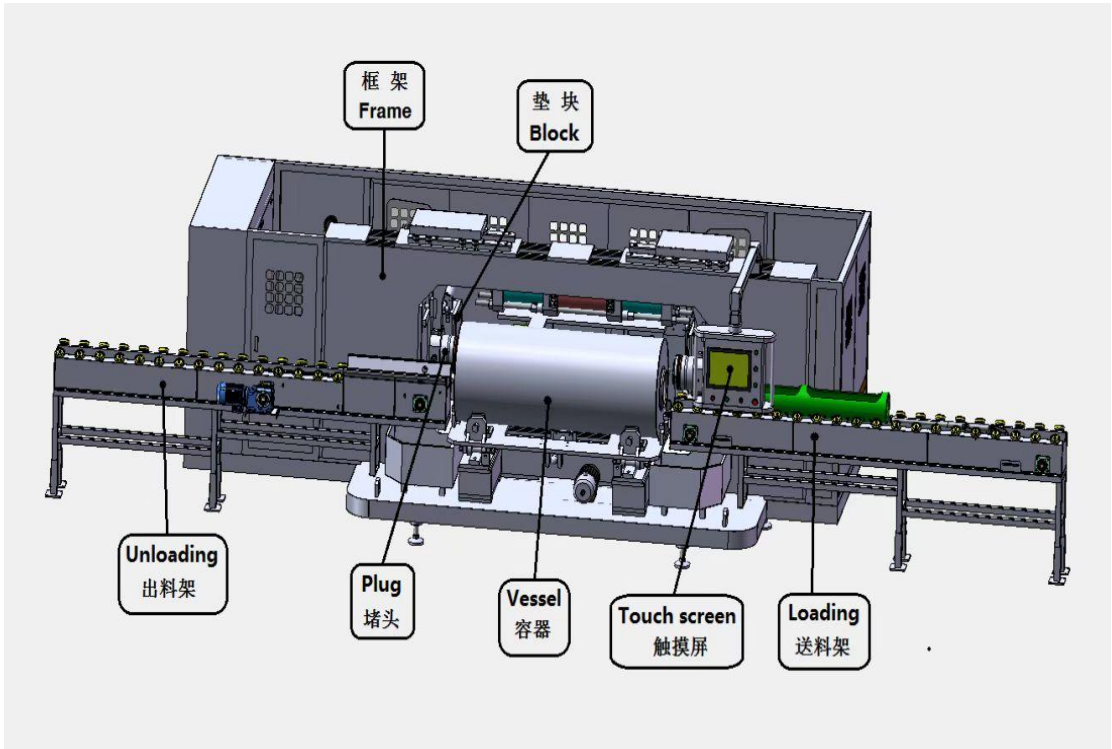
HUAWEI Mate60 Pro+

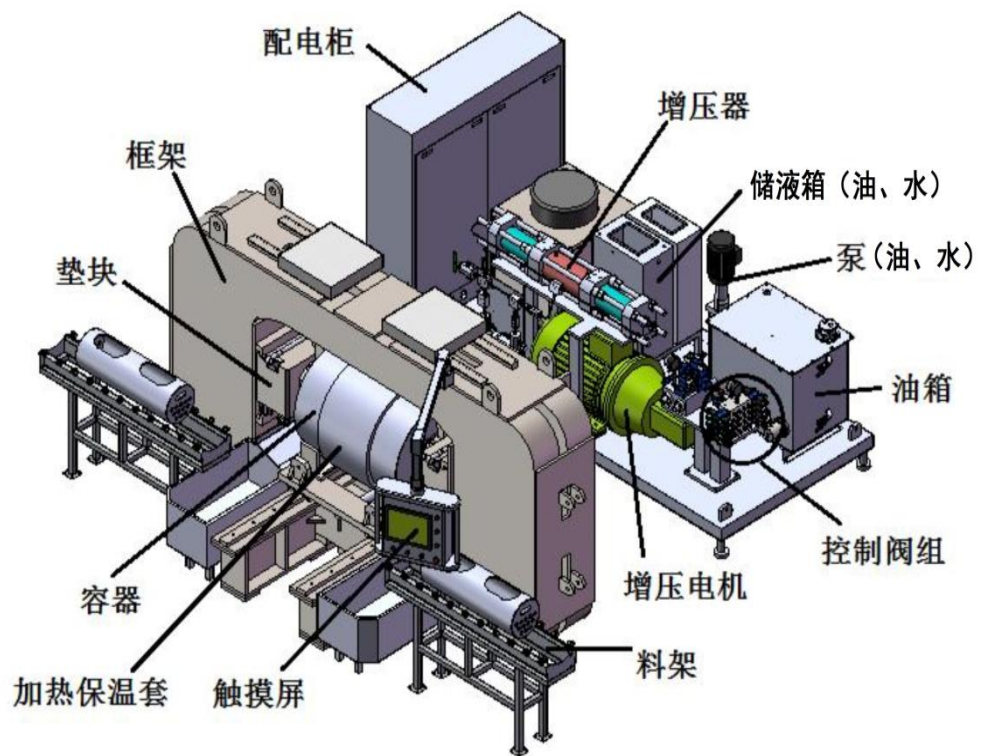
27mm F2 1/100 ISO125 XIMAGE



2、 pilot production model: 30-50 liters: HPP/CIP/WIP600MPa/30-50L  
HPP/CIP/WIP600MPa/ID200-300XL1000-2000mm

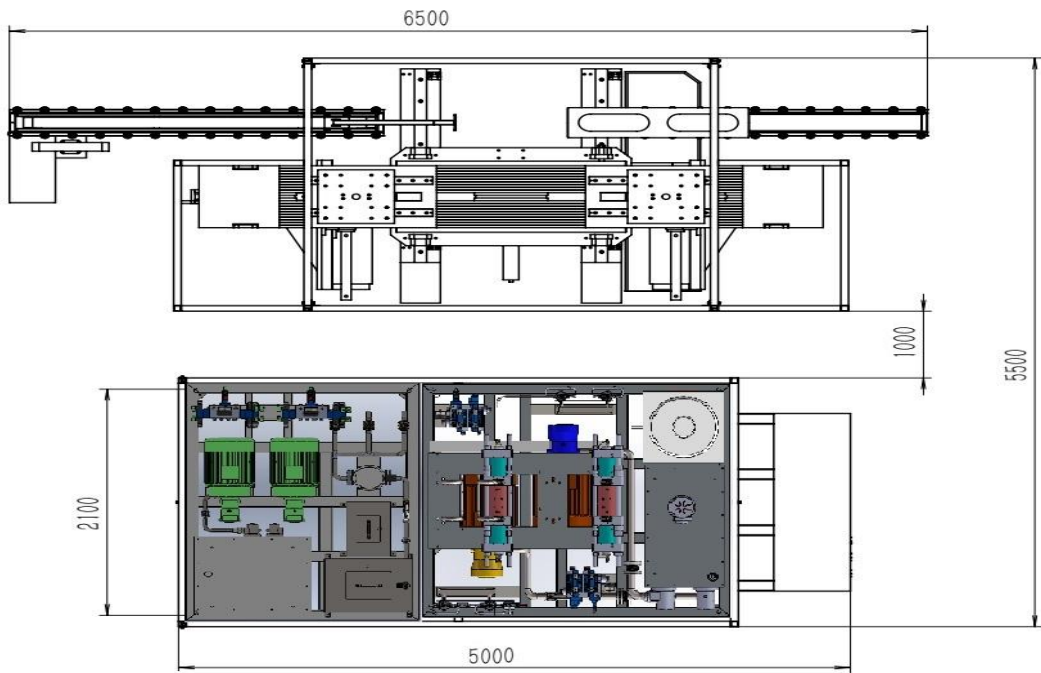






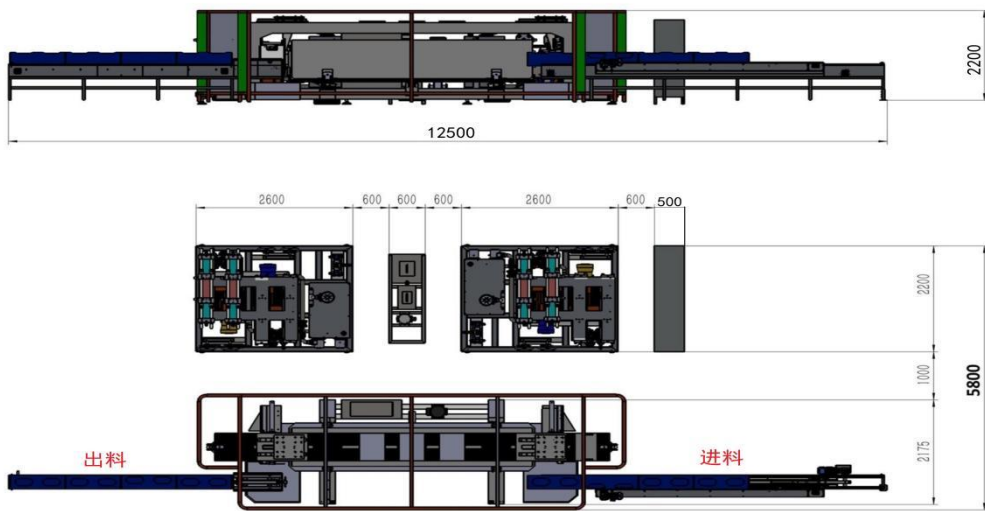


3、 Production type : Single system model:HPP/CIP/WIP600MPa/100-300L  
 Dual system model :HPP/CIP/WIP600MPa/2X200L-2X300L  
 HPP/CIP/WIP600MPa/ID300-400XL3000-5000mm

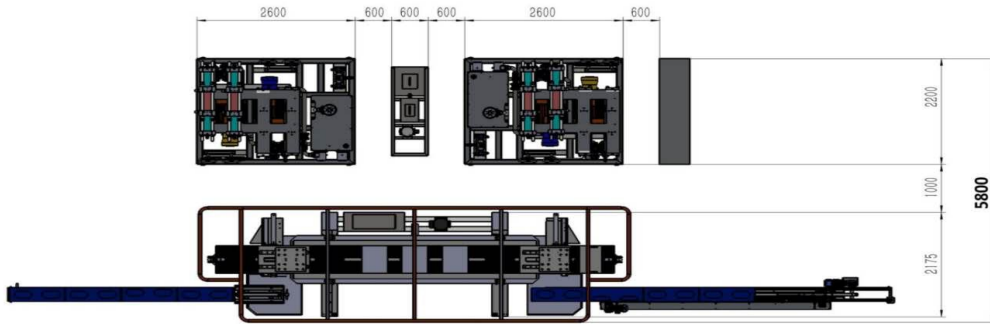


注： 设备功率：110KW  
 设备总重：35吨  
 设备高度：1900  
 设备周围需要提供动力电源、水源以及地面排水沟

100L设备

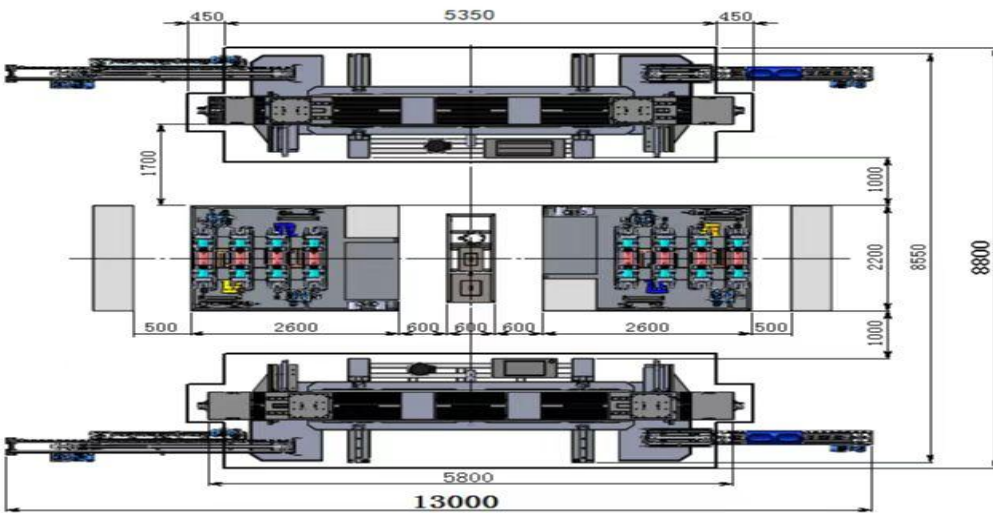
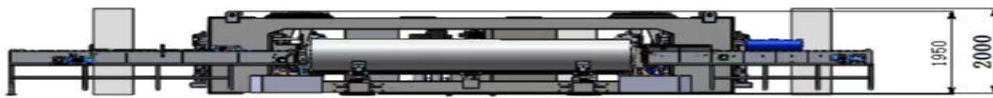


200L



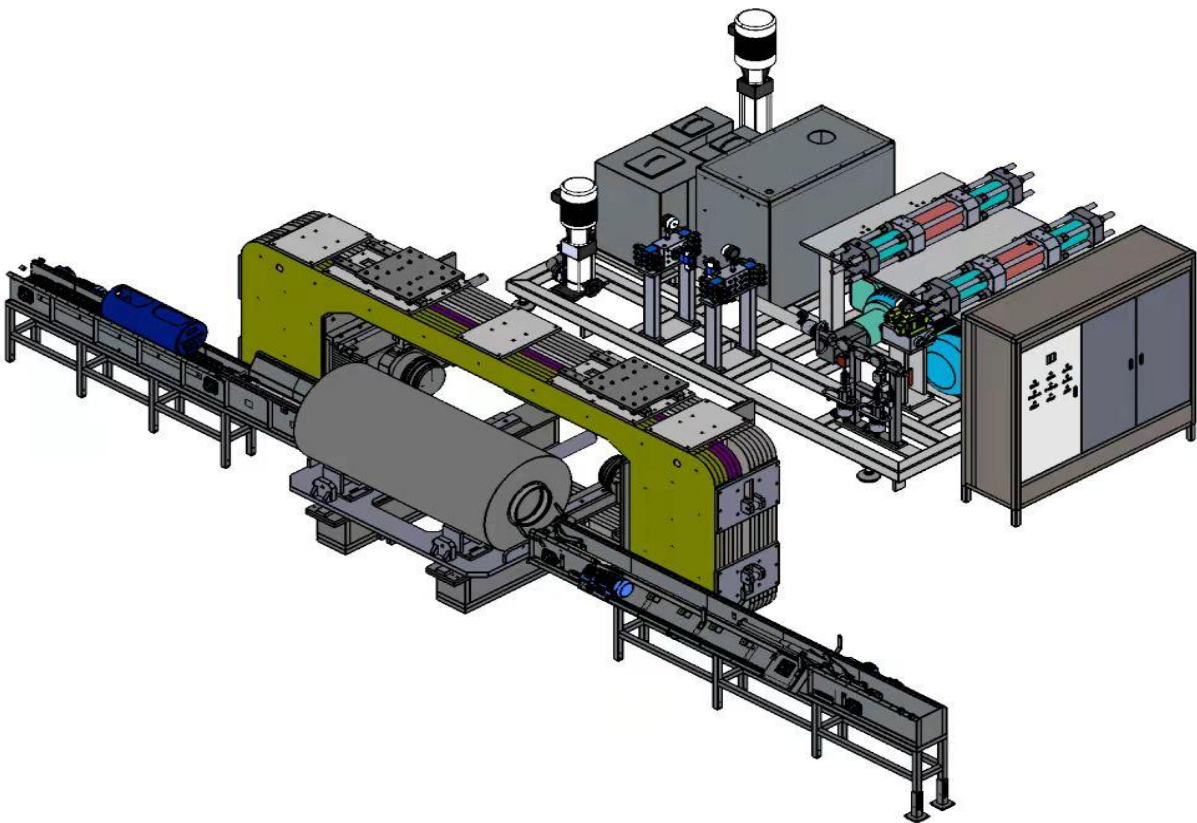
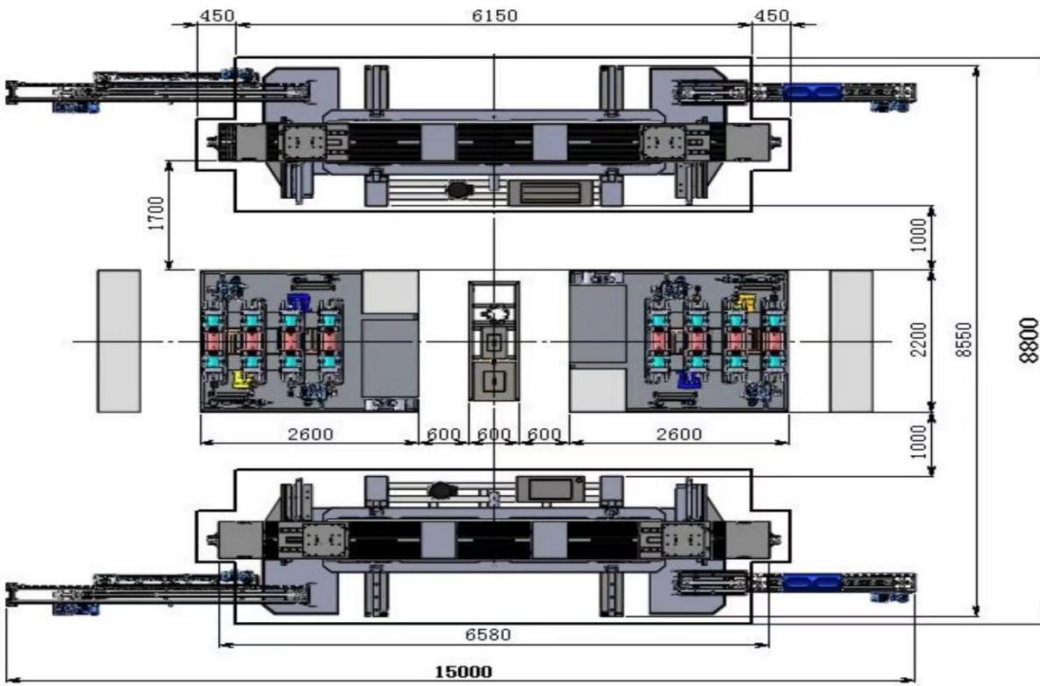
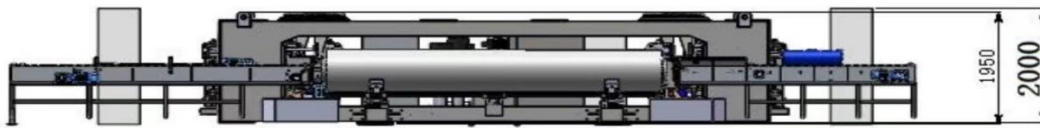
1.VESSEL INNER DIAMETER:300mm;  
 2.POWER:220KW;  
 3.WEIGHT:53T.

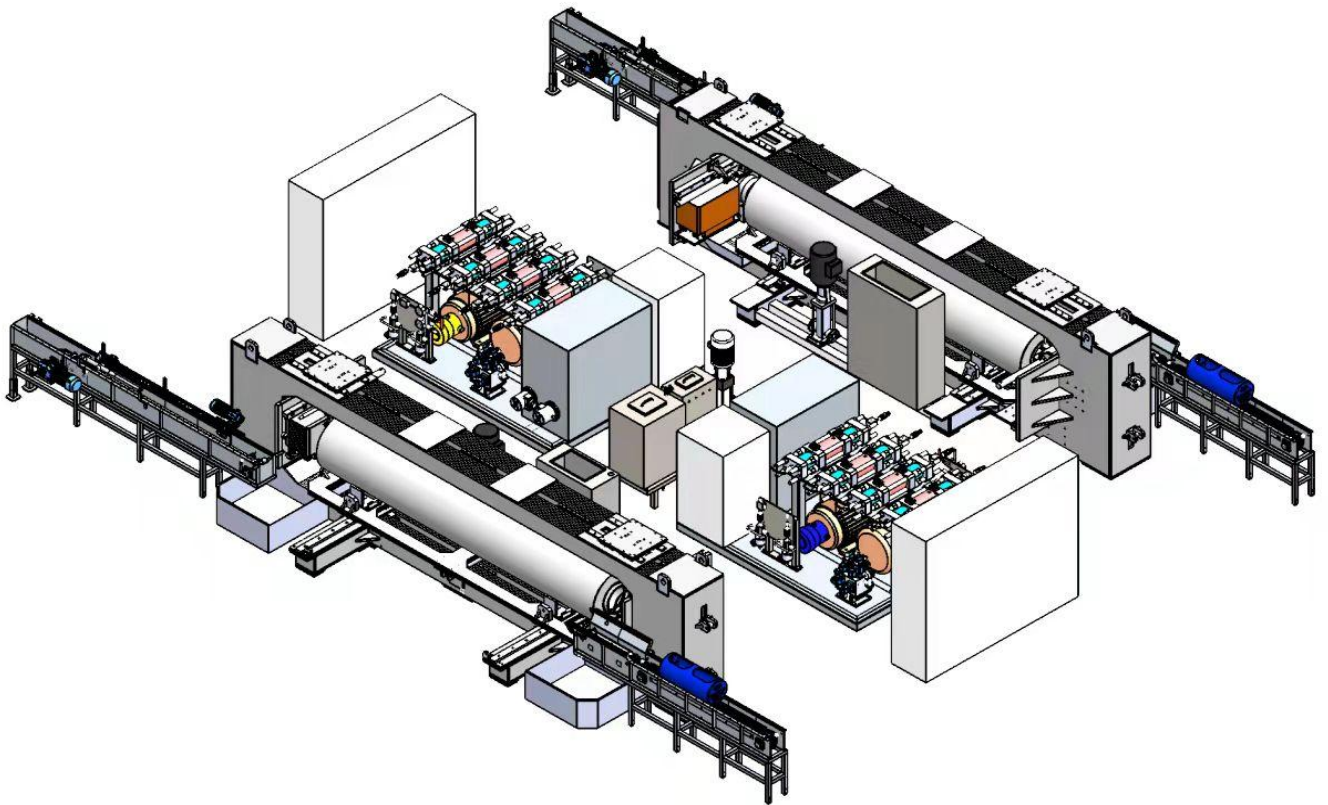
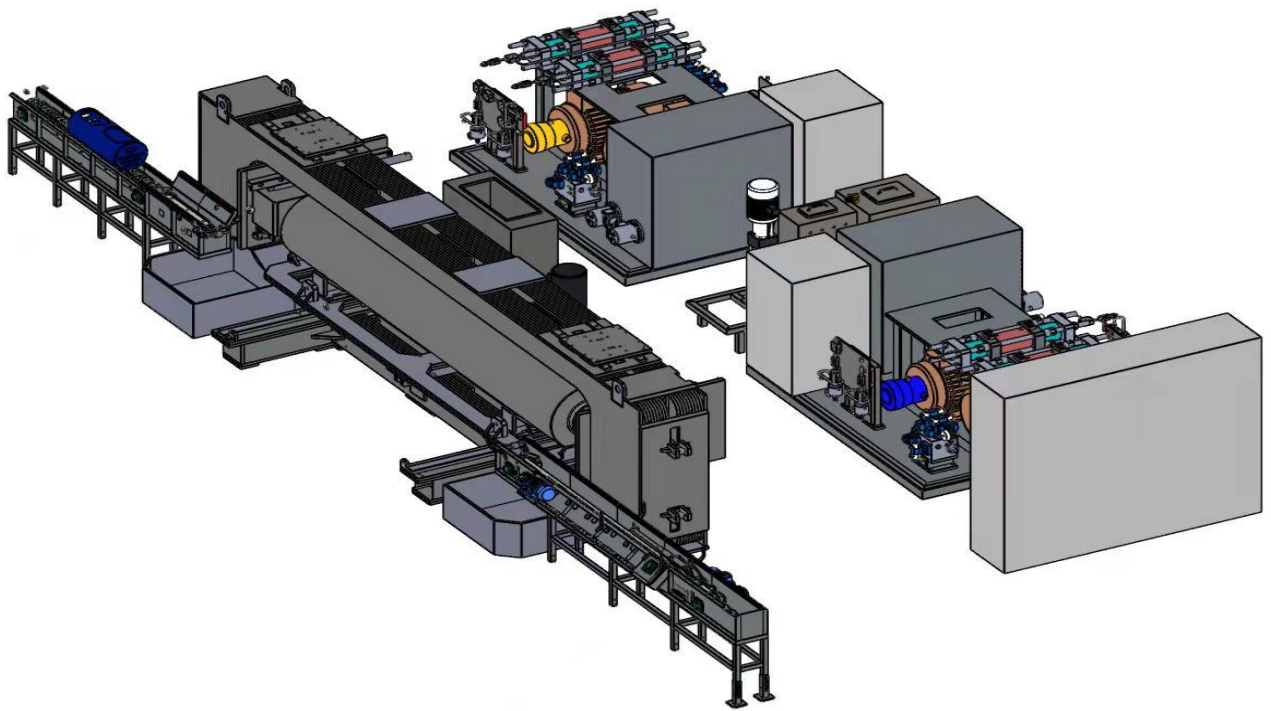
**300L**



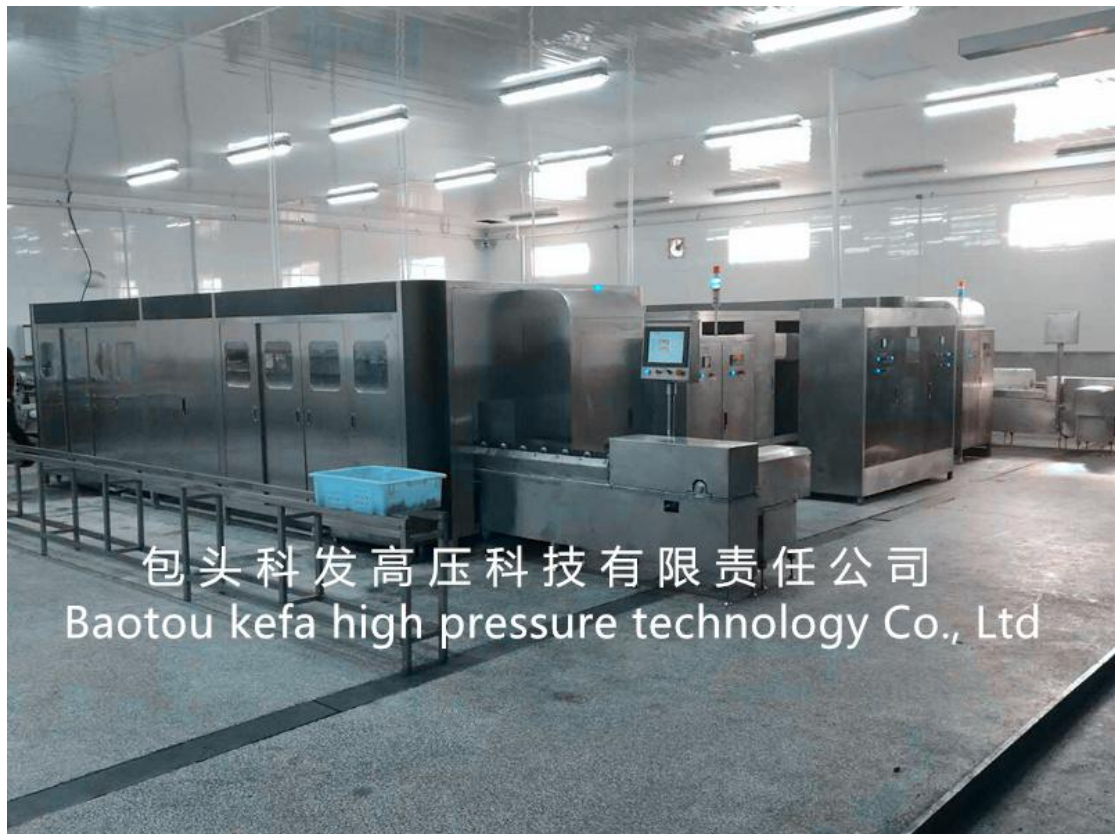
1.VESSEL INNER DIAMETER:300mm;  
 2.POWER:220KW;  
 3.WEIGHT:88 T.

**2-200L**

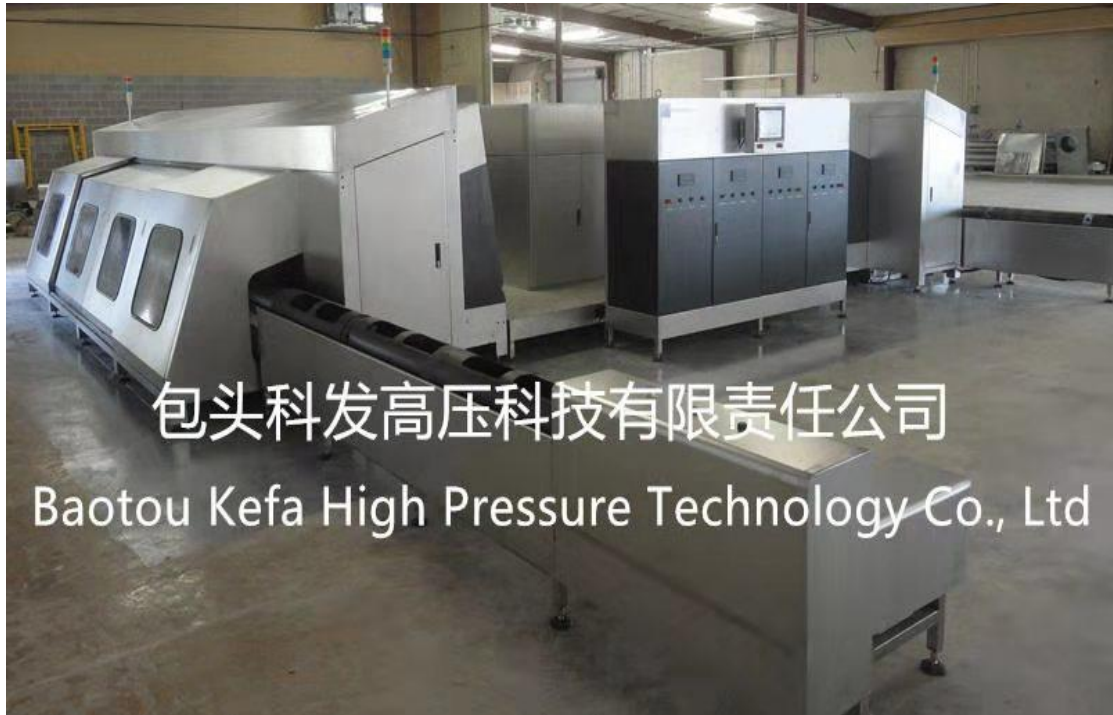




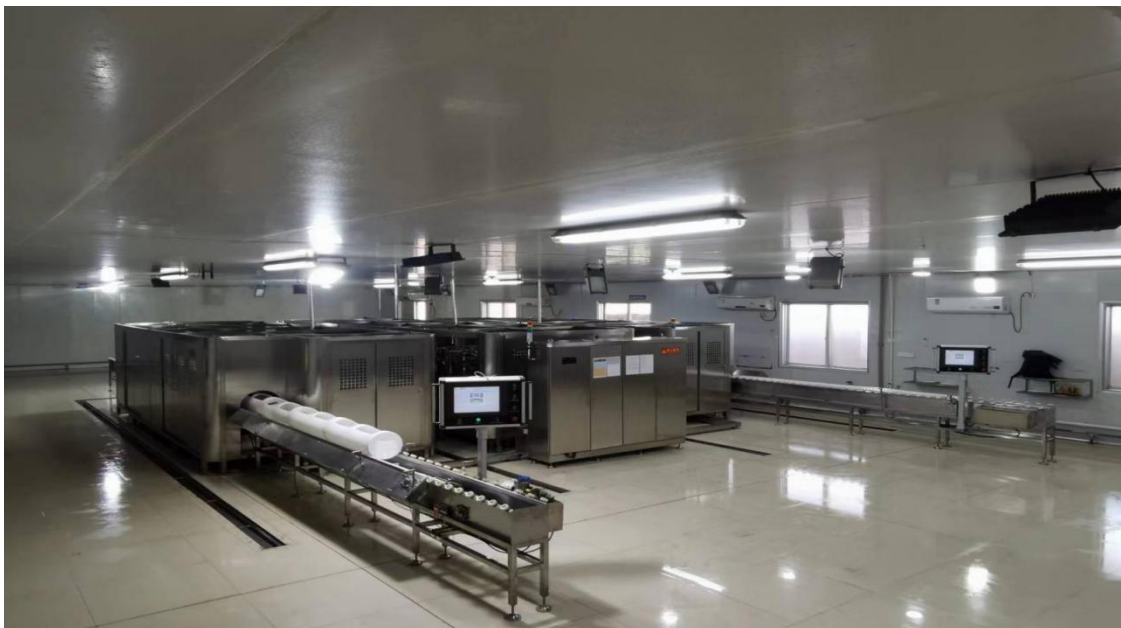




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Baotou kefa high pressure technology Co., Ltd



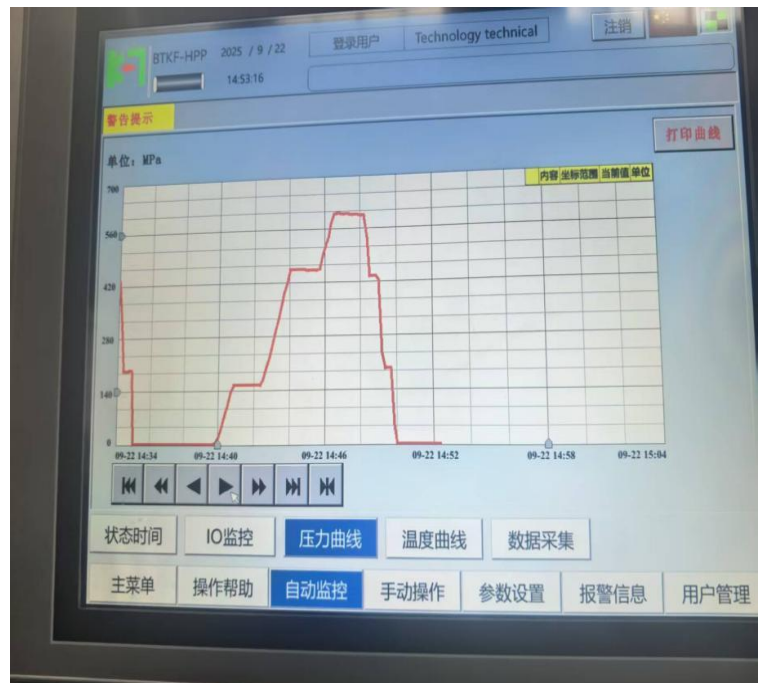
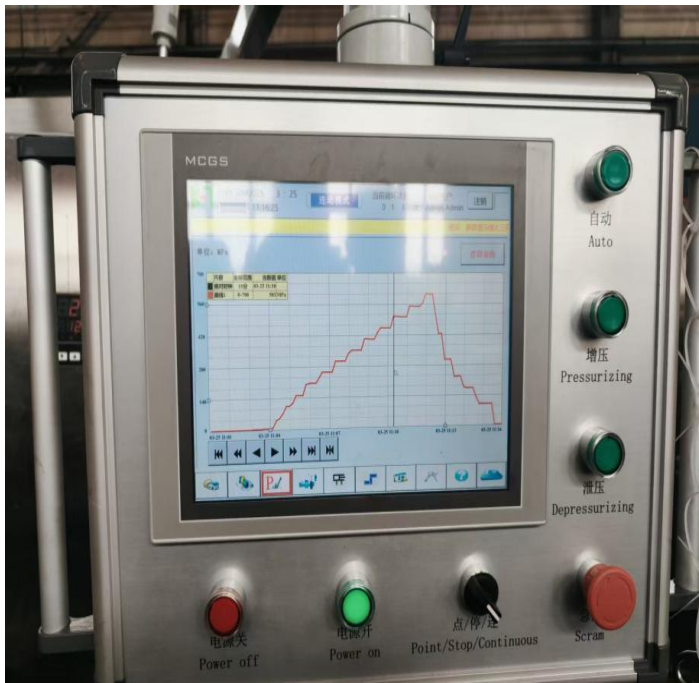
包头科发高压科技有限责任公司  
Baotou Kefa High Pressure Technology Co., Ltd







ID400XH600mm and ID800XH1500mm Isostatic Press Machine



OPPO Find X6

HASSELBLAD

24mm f/1.8 1/100s ISO64

Real Picture of step-by-step staged pressurization and staged unloading for the cold-warm isostatic press

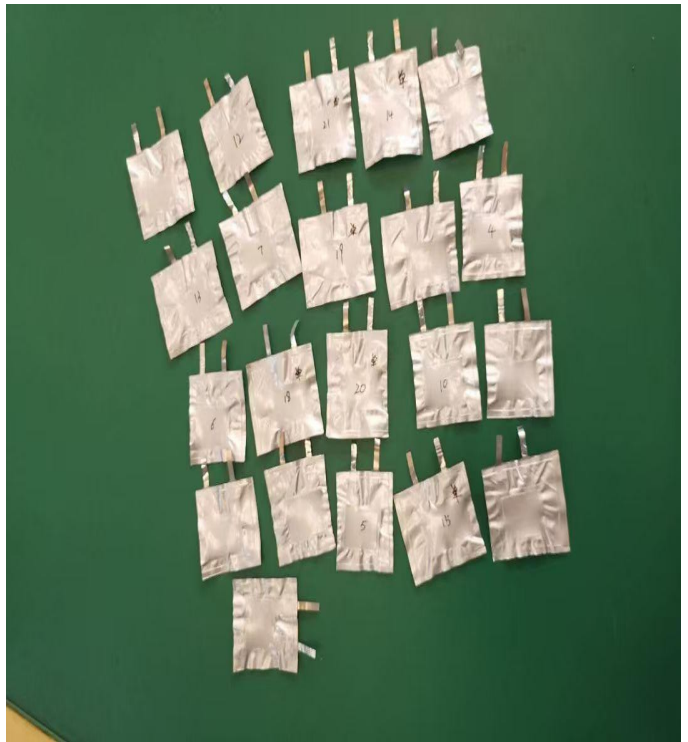
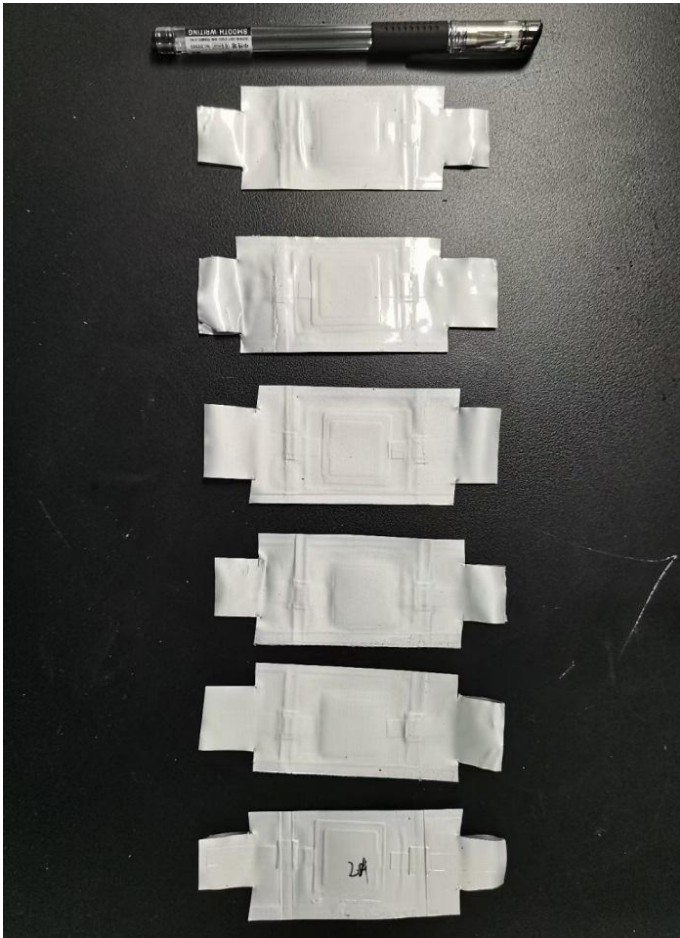


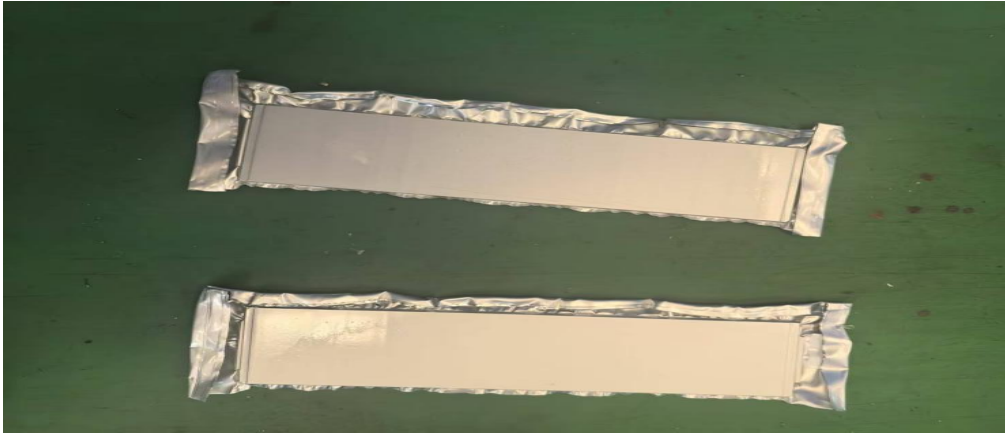














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