

# 报价单(Quotation)



编号 (No.) :  
收件人(To): **Mr. Reza Nikkhoo**  
公司(Co.): Tavan Rahe Sanat (TRS)  
Manufacturing Co.  
传真(Fax):  
电话(Tel.):  
发件人(From): Huang Jinshi  
日期(Date): 2023-11-13

厦门维克机械设备有限公司  
**Xiamen Vactec Equipment Co., Ltd.**  
厦门市集美区天凤路 233 号  
No.233 Tianfeng Road, Jimei District,  
Xiamen, P.R.China  
邮编(Zip code): 361021  
电话(Tel): +86 592 5682714  
传真(Fax): +86 592 5682744  
E-Mail: [huangjs@xmvactec.com](mailto:huangjs@xmvactec.com);  
[sales@xmvactec.com](mailto:sales@xmvactec.com)  
Web: [www.xmvactec.com](http://www.xmvactec.com)

内容(Subj.): Quotation for APG Vacuum mixing and injection equipment

Dear Mr. Reza Nikkhoo,  
Thank you for the inquiry!  
Please kindly find following design for the request equipment.

## Scope of supply:

Item	Name	Qty.
1	Vacuum mixing and injection equipment, for indoor products	1set
2	Vacuum mixing and injection equipment, for outdoor products	1set
3	Portable mixer, with 4 portable pots	1set

## Request from user:

### 1. Resin material (for example), indoor and outdoor resin system

	Resin	Silica filler	Flex.	Color paste	Hardener	Silica filler	Acce.
Parts by weight	100	150~180	20	2~4	80~100	150~ 180	0.45
density (g/cm <sup>≥</sup> )	1.15	2.65	1	2	1.18	2.65	1
Degas temperature (°C)	40~70				40~70		
Pre-mixture density(g/cm <sup>3</sup> )	1.8				1.85		
Pre-mixture viscosity at degas temperature (mPa.s)	~5000				~5000		

Preparation vacuum(mbar)	1~3mbar	3~5mbar
--------------------------	---------	---------

Casting compound

Casting temperature (°C)	40~70
Potlife at 60°C	>6 hours

Other material with same properties can be used also.

◆ **Packages of raw material:**

Resin: 200~1000 liters per drum / IBC container

Hardener: 200~1000 liters per drum / IBC container

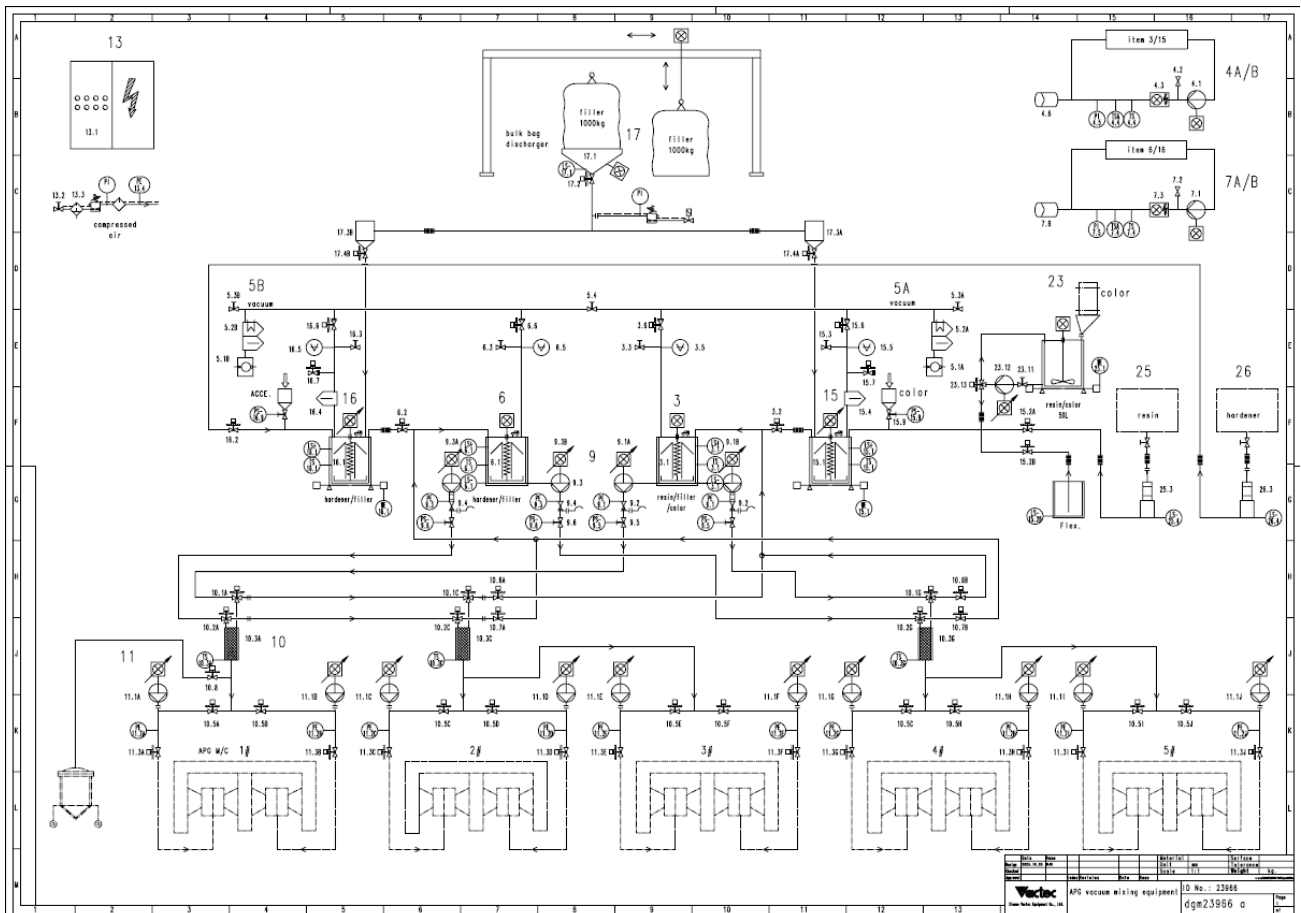
Color paste: 1~10kg per drum

Filler: 1000kg per sack

- ◆ APG double clamping machines: 5 sets, each have two clamping moulds, fixing plates W1000xH1200
- ◆ Future extension: 10 sets APG double clamping machines, each resin system has 5 sets of APG double clamping machines.
- ◆ Moulds injection weight and time: 25~30kg, 5~10 minutes injection, cycle time is 40~60 minutes.
- ◆ working hours: 10hours/shift, 2 shifts per day in rush time.
- ◆ Total casting resin demand per day in two shifts with 5 sets APG machines: about 400kg/hour, 8000kg/day.

◆ **Vacuum mixing and injection equipment, use for indoor or outdoor products**

1. system overview :



## 2. Item specification:

Item	Description	Qty.
3.1	<p><b>Resin dosing mixer</b>, useful volume 400 liters (about 650kg), inside made by stainless steel SUS304, polish surface.</p> <p>Mixer is equipped with thin-film degasser, stirrer and reduce gear motor. The mixer intermittent running/pause timer can set on screen. There is an illuminated sight glass on lid.</p> <p>Mixer is designed with double jackets, using circulation water for heating, from RT to max. 80°C. Mixer body are covered with isolation material and galvanized sheet, outside coated with paint. Lid is unheated design.</p> <p>There is one rotary vane vacuum pump (5A) for evacuating the resin mixer, the pump speed 300m<sup>3</sup>/h, ultimate pressure of mixer is &lt;1mbar, leak rate is &lt;0.05mbar.L/s.</p> <p>The mixer lid and stirrer can be lifted up by workshop crane or forklift for maintenance.</p> <p><b>Option:</b></p>	1

The mixer lid and stirrer can be lifted up by cylinder for maintenance.

**Filling of material:**

From pre-mixer (15.1) by pressure difference.

**Production capacity:**

Two dosing mixers are available total per batch about 1200kg for casting.

The mixing equipment is design for 24 hours continuous production with total casting weight about 8000kg by 5 APG clamping machines, 10 injection moulds.

Design: mixer is flat bottom, dosing pump fixed on side of mixer.



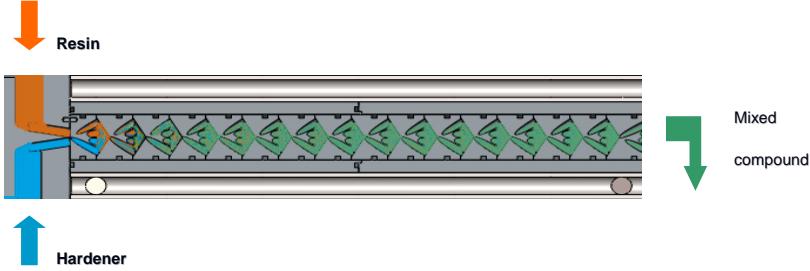

TS3.1	Temperature sensor Pt100 for mixer inside resin material, the value can be show on screen, accuracy 2°C	1
LS+3.1	Max. liquid level sensor	1
LS-3.1	Min. liquid level sensor, there will alarm if lack of material.	1

3.2	Electric-pneumatic controlled valve, for filling resin from pre-mixer (15.1) to dosing mixer (3.1)	1
3.3	Manual operated ball valve, for air admission	1
3.5	Vacuum sensor TTR91, the value can be show on screen, range from 0.1mbar to 1013mbar.	1
3.6	Electric-pneumatic controlled vacuum valve	1
4A/B/C	Forced circulating water heating unit, each using for heating resin pre-mixer (15.1), dosing mixer (3.1) and dosing pipelines from room temperature to max. 90°C, consist of water pump, heater, temperature sensor Pt100, over temperature limiter, pressure gauge, etc. Heater housing material: stainless steel SUS304 Heating medium: water	3
5.1A	rotary vane vacuum pump, max. pump speed 300 m <sup>3</sup> /h, ultimate pressure 0.8mbar, using for evacuating resin mixer (3.1) and (15.1).	1
5.2A	Vacuum filter, with condenser	1
5.3A	Manual operated ball valve	1
5.1B	rotary vane vacuum pump, max. pump speed 300 m <sup>3</sup> /h, ultimate pressure 0.8mbar, using for evacuating hardener mixer (6.1) and (16.1).	1
5.2B	Vacuum filter, with condenser	1
5.3B	Manual operated ball valve	1
5.4	Manual operated ball valve, two vacuum pumps can be backup each other	1
6.1	<p>Hardener dosing mixer, useful volume 400 liters (about 650kg), inside made by stainless steel SUS304, polish surface.</p> <p>Mixer is equipped with thin-film degasser, stirrer and reduce gear motor. The mixer intermittent running/pause timer can set on screen. There is an illuminated sight glass on lid.</p> <p>Mixer is designed with double jackets, using circulation water for heating, from RT to max. 80°C. Mixer body are covered with isolation material and galvanized sheet, outside coated with paint. Lid is unheated design.</p> <p>There is one rotary vane vacuum pump (5B) for evacuating the resin mixer, the pump speed 300m<sup>3</sup>/h, ultimate pressure of mixer is &lt;1mbar, leak rate is &lt;0.05mbar.L/s.</p> <p>The mixer lid and stirrer can be lifted up by workshop crane or forklift for maintenance.</p> <p><a href="#">Hardener dosing mixer type is same as resin mixer (3.1).</a></p> <p><b>Filling of material:</b> From pre-mixer (16.1) by pressure difference.</p>	1

TS6.1	Temperature sensor Pt100 for mixer inside hardener material, the value can be show on screen, accuracy 1°C	1
LS+6.1	Max. liquid level sensor	1
LS-6.1	Min. liquid level sensor, there will alarm if lack of material.	1
6.2	Electric-pneumatic controlled valve, for filling hardener from pre-mixer (16.1) to dosing mixer (6.1)	1
6.3	Manual operated ball valve, for air admission	1
6.5	Vacuum sensor TTR91, the value can be show on screen, range from 0.1mbar to 1013mbar.	1
6.6	Electric-pneumatic controlled vacuum valve	1
7A/B/C	Forced circulating water heating unit, each using for heating hardener mixer (6.1)/ (16.1) and dosing pipelines from room temperature to max. 90°C, consist of water pump, heater, temperature sensor Pt100, over temperature limiter, pressure gauge, etc. Heater housing material: stainless steel SUS304 Heating medium: water	3
9.1/9.3 A/B	Resin and hardener dosing pumps: two sets Driven: by servo motor, reduce gear box and ball screw Volume of per set: 12kg per minute (mixed with hardener) Accuracy: 0.5% of mix ratio  A set dosing pumps: use for APG machine no. 1,2,3, and portable pots if necessary; B set dosing pumps: use for APG machine no. 4,5.  The mix ratio and dosing speed can be changed via the screen, the ratio adjustment range is about 20% (resin pre-mixture to hardener pre-mixture 100:80~100) .  Resin/hardener pumps' material: ceramic (silicon-carbide) piston and sleeve, housing stainless steel.  Dosing accuracy of resin or hardener can be check via non-return valve item (9.2)/(9.4). Mixed ratio accuracy can be check after static mixer.  The pre-mixtures are separately stored in the pipes until they enter the static mixer. Resin and hardener allows a circulation back into the respective mixer (3.1) / (6.1) via by-pass pipelines and valves, and thus a filler sedimentation can be avoided during longer operating interruptions. The circulation strokes and periodic timer can set on screen.	2+2

9.2/9.4	Non-return valve, with rough filter There is a nozzle DN16 for sample dosing.	4
PE9.1/ 9.3	Pressure sensor. In case of over pressure, there will alarm.	4
9.5/9.6	Manual operated stainless steel ball valve, DN25, use for sample dosing or maintenance of non-return valve.	4
PS-9.5/ 9.6	Proximity switch, to check the position of ball valve (9.5)/(9.6). In case of wrong operation or wrong position of valve (9.5)/(9.6), there will alarm message on screen.	4
10.1 A/C/G	Electric-pneumatic controlled 3-way piston valve, DN25, using for resin circulation back to resin mixer (3.1) or casting. Piston head and valve seat are made by ceramic. Driven by Festo pneumatic cylinder.	3
10.2 A/C/G	Electric-pneumatic controlled 3-way piston valve, DN25, using for hardener circulation back to mixer (6.1) or casting. Piston head and valve seat are made by ceramic. Driven by Festo pneumatic cylinder.	3
10.3 A/C/G	Static mixer Material: stainless steel SUS304, consists of inside mixing elements. Heating: by electric heater, max. 60° C.  Static mixer is fixed vertically on side of APG clamping machine.  No. A: use for portable pot, APG machine no. 1 No. C: use for portable pot, APG machine no. 2,3 No. G: use for portable pot, APG machine no. 4,5  Normally no cleaning job is needed during continuous production. In case of the potlife of material is end, the static mixer can be cleaned with resin constituent via the dosing pump.  Schematic drawings:	3



	  <p>Potlife control:</p> <ul style="list-style-type: none"> <li>- Once the hardener valve 10.2 open for casting, resin and hardener is mixed and the potlife starts.</li> <li>- The screen can show the potlife and give alarm if it is over.</li> <li>- The potlife timer can be reset by casting or flushing by resin dosing strokes within certain time, the strokes and timers can be set on screen.</li> </ul>	
TS10.3	Temperature sensor Pt100, to show the compound temperature on screen. If the temperature is less than the setting casting release temperature, the casting will not start.	3
10.5 A~J	Electric-pneumatic controlled shut-off valve. Driven by Festo pneumatic cylinder.	10
10.6A/B	Electric-pneumatic controlled shut-off valve, DN25, using for resin circulation back to resin mixer (3.1). Piston head and valve seat are made by ceramic. Driven by Festo pneumatic cylinder.	2
10.7 A/B	Electric-pneumatic controlled shut-off valve, DN25, using for hardener circulation back to hardener mixer (6.1). Piston head and valve seat are made by ceramic. Driven by Festo pneumatic cylinder.	2
10.8	Electric-pneumatic controlled shut-off valve, DN25, using for portable pot	1



<p>11.1 A~J</p>	<p><b>Injection device (or said SCU)</b>, using for mould injection and keep pressure for Shrinkage compensate the gelation of mould.</p> <ul style="list-style-type: none"> <li>- Useful volume of injection device for each mould: <b>20 liters (about 35kg resin)</b></li> <li>- Driven: by servo motor, reduce gear box and ball screw</li> <li>- Speed: controlled by servo motor, range 1~5kg/min</li> <li>- Pressure: Max. 10bar</li> <li>- <b>heating/cooling: NON</b></li> <li>- material: housing made by stainless steel or Al, inside PTFE bushing.</li> </ul> <p>Mould injection:</p> <ul style="list-style-type: none"> <li>- filling SCU first via dosing pumps and static mixer when mould opening and preparation (not injection time), it takes about 3 minutes for filling SCU.</li> <li>- dosing pumps can fill up other SCU if they are free.</li> <li>- once the mould is close and ready for injection, SCU is full and can start injection. The injection speed, weight, timer, pressure is regulated by SCU (not dosing pump), controlled automatically.</li> <li>- all SCUs can injection same time if they are full.</li> <li>- There is a 10" touch screen on each SCU, easy for operation.</li> </ul> <p>Daily production report for every mould, consist of operator name, mould type, products' serial number, injection time, speed, volume, temperature, etc, the report can be kept in PC hard disc about 6 months.</p>	<p>10</p>
---------------------	---	-----------







PE11.2	pressure sensor, the value can be show on screen, fixed on side of SCU.	10
11.3	Electric-pneumatic controlled shut-off valve, using for injection controlling.	10
13.1	<p>The equipment electric control system consists of hardware components and software operation interface.</p> <p>The main control cabinet installs with breakers, contactors, switches, fuses, etc, the cables and channel to the site electric components. The main control cabinet use steel frame case, water and dust proof, inside illuminate lights, air conditioner, safety terminal connectors for wiring, clearly marked in components. There are emergency stop in the main cabinet and the operation site.</p> <p>The equipment is controlled by a PLC. There is a PC with 19" touch screen on main control cabinet.</p> <p><b>Operation interface main functions:</b></p> <ol style="list-style-type: none"> <li>1) The screen can show the equipment running status and the flow chart;</li> <li>2) The process parameters such as temperature, vacuum, pressure, timers, injection weight and speed, etc. can be set on the screen;</li> <li>3) Trend record of all temperature, all vacuum, dosing pressure;</li> <li>4) 100 casting programs saved in the hard disc for casting program, including mould type, casting weight, casting speed, casting vacuum and</li> </ol>	1

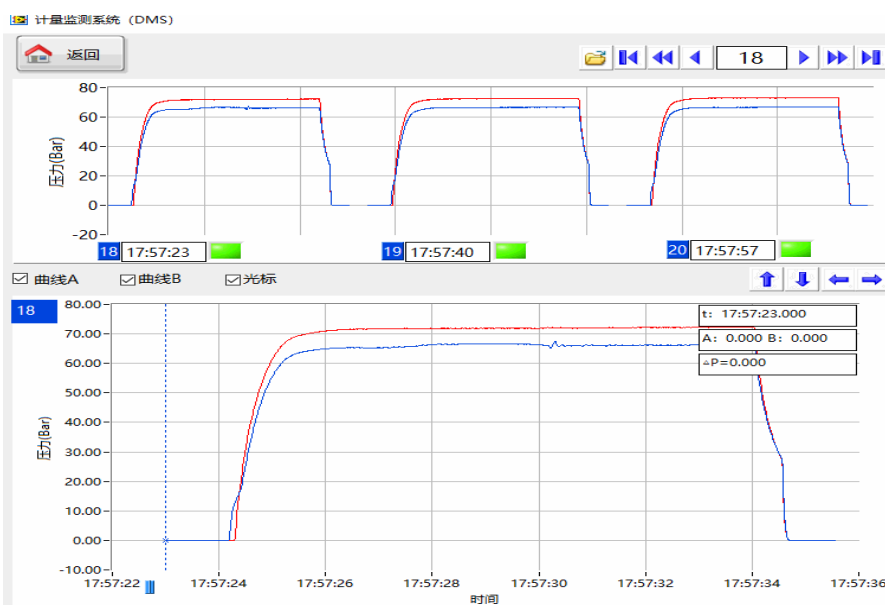
timers, etc.

- 5) Maintenance timer of main components;
- 6) There is alarm display to show the alarm messages;
- 7) Remote on-line trouble shooting via internet is available (user provide the internet and IP address). The operation data can be taken to other memory via USB or the net.

The operation interface is written in English.

### High speed Dosing Monitoring System (DMS):

The dosing pressure value (trend) of each shot can be show on screen clearly, for on-line checking the dosing pressure synchronization and stability, including the dosing accuracy (wearing of piston), valves sealing, mixing homogenization, in case of abnormal situation (out of limit) there will alarm and stop casting, to guarantee the casting products quality. For the normal casting, If the pressure trend is normal, then the sample dosing of mixed resin is not necessary, so that the operation is easy and save the raw material.



Cabinet, IP43, equipped with air conditioner

1

PLC

1

PC, with 19" touch screen

1

Breakers, contactors, switches, fuses, etc.

1

15.1

**Resin pre-mixer**, useful volume 400 liters (about 650kg), inside made by stainless steel SUS304, polish surface.

1

	<p>Mixer is equipped with thin-film degasser, stirrer and frequency inventor controlled reduce gear motor. The mixer intermittent running/pause timer can set on screen. There is an illuminated sight glass on lid.</p> <p>Mixer is designed with double jackets, using circulation water for heating, from RT to max. 80°C. Mixer body are covered with isolation material and galvanized sheet, outside coated with paint. Lid is unheated design.</p> <p>There is one rotary vane vacuum pump (5A) for evacuating the resin mixer, the pump speed 300m<sup>3</sup>/h, ultimate pressure of mixer is &lt;1mbar, leak rate is &lt;0.05mbar.L/s.</p> <p>The mixer lid and stirrer can be lifted up by workshop crane or forklift for maintenance.</p> <p><b>Option:</b> The mixer lid and stirrer can be lifted up by cylinder for maintenance.</p> <p><b>Filling of raw material:</b> Resin, flexibilizer and filler is to be sucked into resin pre-mixer (15.1) by vacuum, controlled by the load cells on pre-mixer, the accuracy is about 1%. In case of high viscosity at lower temperature, resin raw material has to be pre-heated and agitated before filling. Color paste is pumped into resin pre-mixer (15.1) automatically, controlled by the electronics balance, the accuracy is about 1%.</p> <p><b>Production capacity:</b> New filling and preparation of pre-mixer needs about 1~2 hours.</p>	
TS15.1	Temperature sensor Pt100 for mixer inside resin material, the value can be show on screen, accuracy 2°C	1
WE15.1	Load cells, for the max 1500kg, use for filling weight control of resin, filler, by precise 0.2kg.	1
15.2A	Electric-pneumatic controlled stainless steel ball valve, for suck-in resin from drum by vacuum.	1
15.2B	Electric-pneumatic controlled stainless steel ball valve, for suck-in flexibilizer from drum by vacuum. Flexibilizer is first manual charged into a stainless vessel, about 60 liters, with lid and low level switch.	1
15.3	Manual operated ball valve, for air admission	1
15.4	filter	1
15.5	Vacuum sensor TTR91, the value can be show on screen, range from 0.1mbar to 1013mbar.	1



15.6	Electric-pneumatic controlled vacuum valve,	1
15.9	Color cup, 1 liter, with ball valve and the lid, for manual filling of color.	1
16.1	<p><b>Hardener pre-mixer</b>, useful volume 400 liters (about 650kg), inside made by stainless steel SUS304, polish surface.</p> <p>Mixer is equipped with thin-film degasser, stirrer and frequency inventor controlled reduce gear motor. The mixer intermittent running/pause timer can set on screen. There is an illuminated sight glass on lid.</p> <p>Mixer is designed with double jackets, using circulation water for heating, from RT to max. 80°C. Mixer body are covered with isolation material and galvanized sheet, outside coated with paint. Lid is unheated design.</p> <p>There is one rotary vane vacuum pump (5B) for evacuating the hardener mixer, the pump speed 300m<sup>3</sup>/h, ultimate pressure of mixer is &lt;1mbar, leak rate is &lt;0.05mbar.L/s.</p> <p>The mixer lid and stirrer can be lifted up by workshop crane or forklift for maintenance.</p> <p><b>Option:</b> The mixer lid and stirrer can be lifted up by cylinder for maintenance.</p> <p><b>Filling of raw material:</b> Hardener and filler is to be sucked into pre-mixer (16.1) by vacuum, controlled by the load cells on pre-mixer, the accuracy is about 1%.</p> <p>Accelerator is manual charged into pre-mixer (16.1) via a port according to the formulation.</p> <p><b>Production capacity:</b> New filling and preparation of pre-mixer needs about 1~2 hours.</p>	1
TS16.1	Temperature sensor Pt100 for mixer inside material, the value can be show on screen, accuracy 2°C	1
WE16.1	Load cells, for the max 1500kg, use for filling weight control of hardener, filler, by precise 0.2kg.	
16.2	Electric-pneumatic controlled stainless steel ball valve, for suck-in hardener from drum by vacuum.	1
16.3	Manual operated ball valve, for air admission	1
16.4	filter	1
16.5	Vacuum sensor TTR91, the value can be show on screen, range from 0.1mbar to 1013mbar.	1

16.6	Electric-pneumatic controlled vacuum valve,	1
16.9	Accelerator cup, 1 liter, with ball valve and the lid, for manual filling of accelerator.	1
17.1	<p>Big bag discharger, for 1000kg filler empty, equipment with stainless steel storage vessel (about 60 liters), the support frame and electric hoist, vibrator etc.</p> <p>Dust free design.</p> 	1
LS-17.1	Low level switch	1
17.2A/B	Electric-pneumatic controlled butterfly valve	2
17.3A/B	Suck-in device, made by stainless steel.	2
17.4A/B	Electric-pneumatic controlled butterfly valve	2
23.1	<p><b>Color paste pre-mixer</b>, useful volume 50 liters, made by stainless steel SUS304, polish surface, equipped with stirrer. The whole drum of color paste (about 10~20kg) can be charged into mixer manually.</p> <p>After heating, the color paste is then pumped into resin pre-mixer (15.1) automatically.</p> <p>Color mixer is heated by circulation water (unit 4), the max. temperature is 90 ° C.</p> <p>There is an electronics balance on bottom of mixer, for color refilling weight control.</p>	1
23.11	Manual operated ball valve	1
23.12	feeder pump, for filling color to resin mixer (3.1)	1
23.13	Electric-pneumatic controlled 3-way valve, for color filling to resin pre-mixer (15.1) or circulation.	1



25.1/ 26.1	Resin/hardener raw material containers filling station. See above photo. Consist of: - support frame, for 2 IBC containers, raw material are loaded by workshop crane or forklift to the filling position and tilting for easy empty. - in case of low room temperature cause high viscosity and difficult discharging, the containers have to be warm up by user.	1
25.3/ 26.3	filter	2
25.4/ 26.4	3 liters Stainless vessel with low level switch	2
	A steel platform and stairs, guardrails, for pre-mixers is included. Resin, hardener and filler raw material are put on ground.	1

#### Main components sub-suppliers brand:

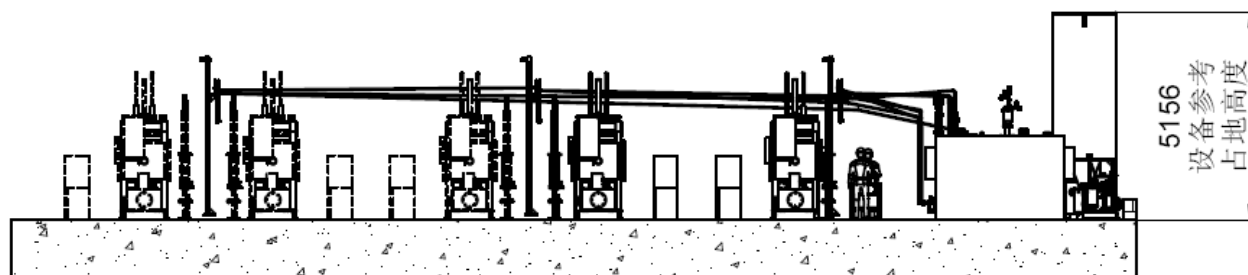
Name	Sub-suppliers Brand
mixers, filler sack empty, vacuum filter	Vactec
Rotary vacuum pump	<a href="#">Leybold</a>
Vacuum sensor	<a href="#">Leybold</a>
Mixer gear motor	Germany Nord or SEW
Pneumatic cylinder	Germany Festo
PLC	OMRON or SIEMENS
Servo motor	Huichuan or Maxine
Electric components	Schneider

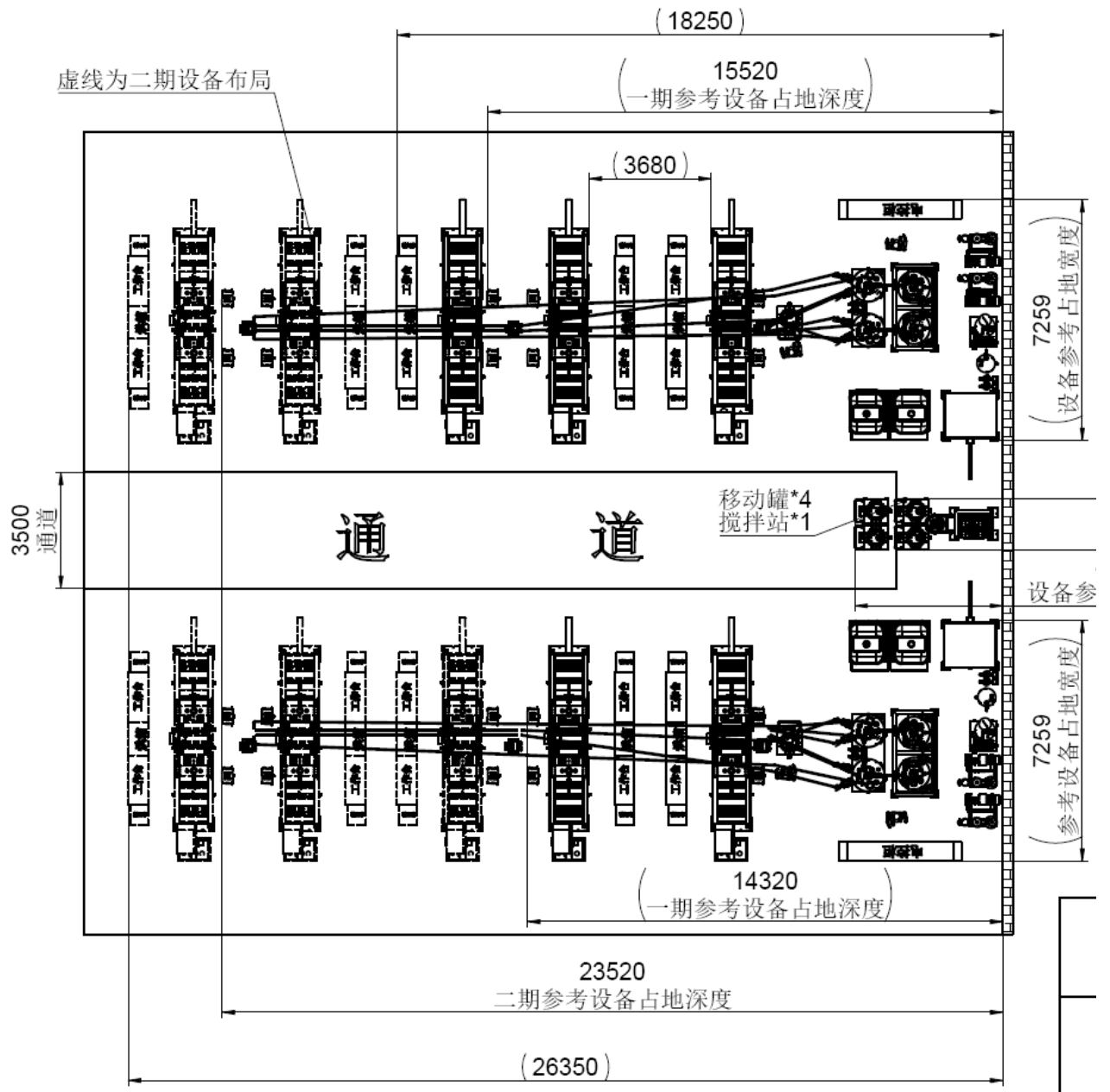
#### Spare parts list:

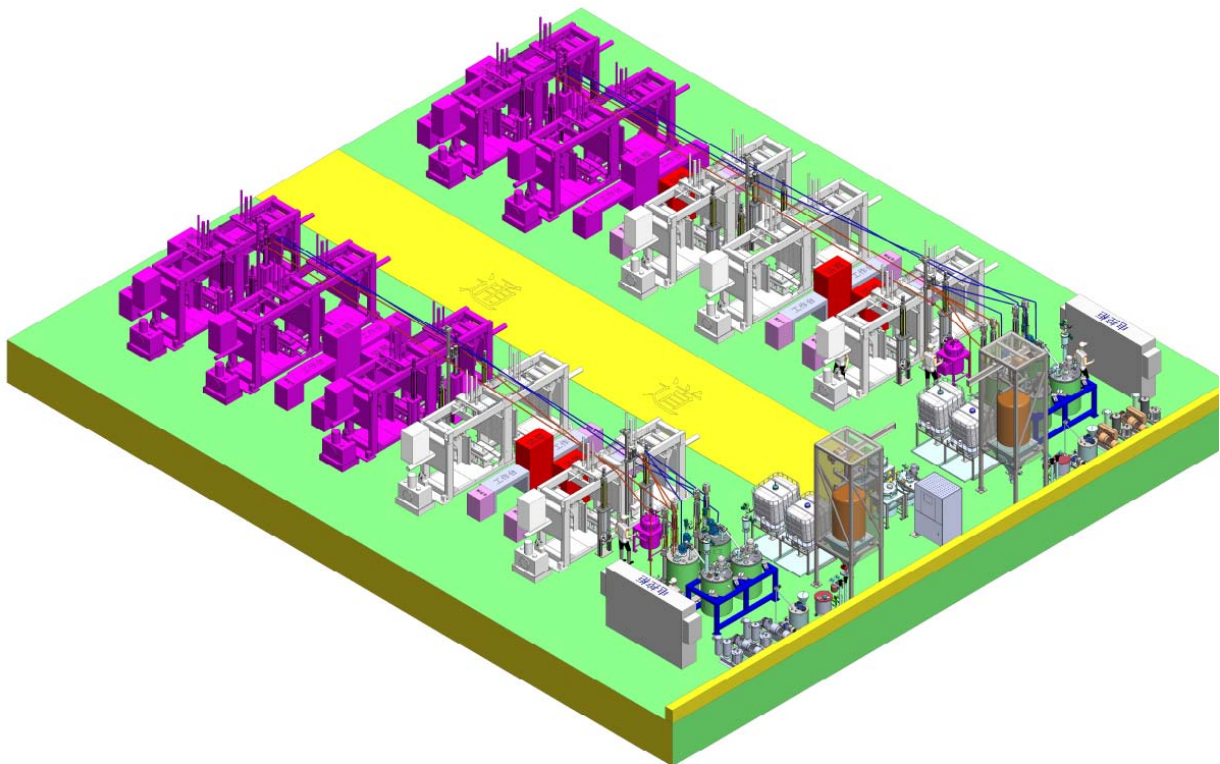
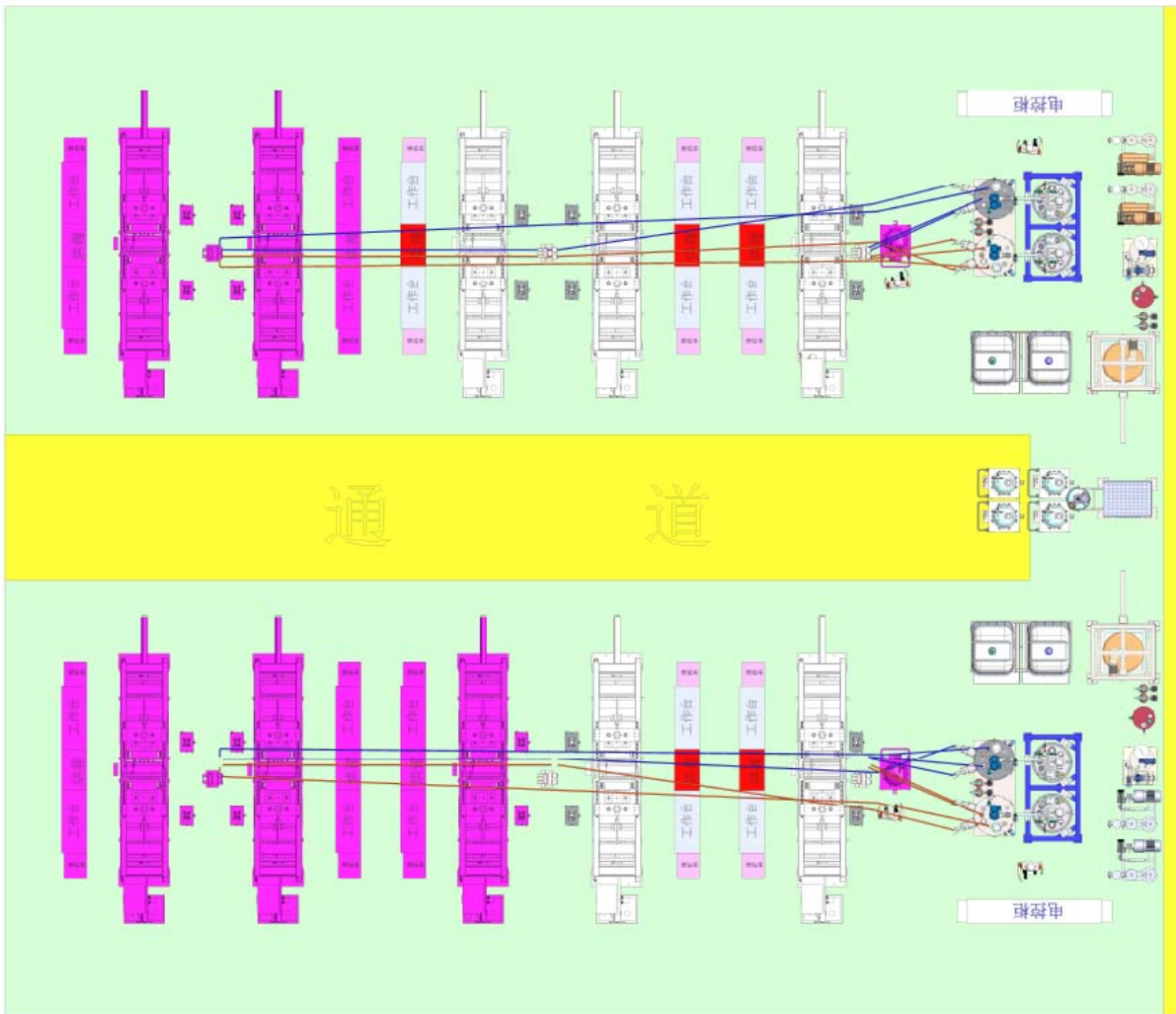
Item	Description	Qty.	Unit	Pos.
1	Glass for mixers	2	pc.	3.1/6.1/ 15.1 /16.1
2	Lamp for mixer	2	pc.	3.1/6.1/ 15.1 /16.1
3	Temperature sensor	2	pc.	3.1/6.1/ 15.1 /16.1
4	Vacuum sensor	1	pc.	3.5/6.5/ 15.5/16.5
5	Vacuum valve	1	pc.	3.6/6.6/ 15.6/16.5
6	electric heater	2	pc.	4.1/7.1
7	water pump	2	pc.	4.1/7.1
8	shaft seal ring and bearing for rotary vane vacuum pump	2	set	5.1

9	filter cartridge	2	pc.	5.2
10	Set for rotary seals for dosing pump	10	pc.	9.1/9.3
11	pressure sensor	1	pc.	PE 9.1/9.3
12	Proximity switch	2	pc.	9.1/9.3
13	ball and seals for dosing pump non-return valve	2	pc.	9.2/9.4
14	Set of rotary seal for 3-way valves	5	set	10.1/10.2
15	valve seat for 3-way valves	5	pc.	10.1/10.2
16	solenoid valve	1	pc.	10.1/10.2
17	set of seals for static mixer	5	set	10.3
18	ceramic valve seats	1	pc.	10.6/10.7
19	ceramic valve piston head	1	pc.	10.6/10.7
20	set of seals for SCU piston	6	set	11.1
21	seals for SCU bottom plate	6	set	11.1
22	PTFE bushing for SCU	2	pc.	11.1
23	fuse	5	pc.	13.1
24	relay	2	pc.	13.1
25	breaker	2	pc.	13.1
26	contactor	2	pc.	13.1
27	valve seat	2	pc.	15.11/16.11
28	ball for ball valve	2	pc.	15.11/16.11
29	butterfly valve without actuator	1	pc.	17.2/17.4
30	Tools for disassemble the dosing piston	1	set	9.1/9.3

**Layout drawings:**







**Paint:** gray RAL7032, or according to your wish

**Exclusion from delivery:**

- Construction of any required foundations;
- Any required exhaust-air and suction arrangements for dust and vapours.
- Charging devices and hoists, tools.
- Supply connection for electric power.
- Other devices not mentioned on the contract.

**User's supply:**

- Electric power supply: 3~400VAC+N+P, 50Hz, about 100KW for one equipment with 5 sets of double APG machines.
- dry compressed air: for control valves 200NL/min, 6bar
- exhaust and filter for vacuum pumps.
- raw material and cleaning material for trial running;
- injection hoses between SCU and moulds;
- lubrication vacuum pump oil;
- electronics balance, max. 10kg, precision 1 gram, use for ratio check;
- internet and IP address, for remote trouble shooting;

**Operation manuals:**

The machine is delivered with 2 copy of following documents:

- Specification of individual components;
- Electric hardware wiring diagrams;
- Spare parts lists;
- Operating and maintenance instructions;
- And one testing reports.

**◆ Portable mixer, and portable pots**

use for manually charge all resin material and manually casting to the mould.

**Item specification:**

Item	Description	Qty.
1.1	<b>Portable mixer</b> , is using for mixing and degassing of resin mixture in the portable pots which volume is about 60 liters.	1





Portable mixer is consists of vacuum pump, mixer lid, lifting device, steel frame and control cabinet.

1.1.1

Vacuum pump:

The single stage rotary vane vacuum pump, design in speed 100m<sup>3</sup>/h. There is filter in front of the vacuum pump for protect the pump. Vacuum pump is connected to the mixer lid via a hose, and controlled by a manual operated ball valve.

A digital vacuum gauge (Leybold) is installed on the vacuum line.

1

1.1.2	<p>Mixer lid:            Made by stainless steel SUS304.            Equipped with a gear reduced motor, which controlled by a frequency inverter, the turning speed can be adjusted via a potentiometer.            There is a illuminated sight glass on the lid for viewing the status.</p>	1
1.1.3	<p>Lifting device:            Lifting device is using for moving up the mixer lid so that the pressure pot can be put on the position.</p>	1
1.1.4	<p>Steel frame:            The steel frame is made by square steel tubes, and covered by steel plate.  <b>There are four wheels under the mixer, can be locked if necessary.</b></p>	1
1.1.5	<p>Control: <b>no PLC type, no touch screen.</b>            All the necessary electric components such as breakers, contactors, etc. are installed in the control cabinet.   <b>Option:</b>            PLC with 15" touch screen</p>	1
1.1.6	<p>General features:</p> <ul style="list-style-type: none"> <li>- <b>Electric power supply: 3~400VAC+N+PE, 50Hz,</b>              Connected load: 10KVA</li> <li>- <b>Paint: gray RAL7032, or according to your wish</b></li> </ul>	
1.1.7	<p>Operation manuals</p> <p>The machine is delivered with following documents:            Specification of individual components;            Electric hardware wiring diagrams;            Spare parts lists;            Operating and maintenance instructions;            Testing reports.</p>	2
1.1.8	<p>Set of spare parts are delivery with machines:</p> <ul style="list-style-type: none"> <li>- 1 cartridge for filter</li> <li>- 1 limit switch</li> </ul>	1
2.1	<p><b>Portable pressure pot</b>, used for resin mixture preparation, useful volume 60 liter, <b>inside made by stainless steel SUS304.</b></p>	4





All the necessary material such as resin, hardener and filler, color paste is manual charged into the pot.  
 The pot has to be cleaned completely before the potlife end.  
 The pot's lid has to be open manually when refill material, put to the portable mixer for preparation.

After finishing mixing and preparation, the portable pot is moved to the side of APG machine, then apply the compress air to cast resin into the mould, the injection speed and the weight is controlled manually.

Portable pot is including the body, the inside stirrer, and the lid. The stirrer is put inside and driven by motor in the portable mixer.  
 The body and the lid can be tighten by eight strong screws so that the pot can be used under pressure.

The pot is heated indirectly by electric heater, design for temperature up to 70°C.

The pot is designed for pressure from -1 to 6bar, apply air pressure on lid. Max. injection pressure is 6bar.  
 The pressure pot is design and manufacturing according to Chinese “Steel Pressure Vessel Standard GB150-98”. There are official certificates (in Chinese) for the pressure vessels.

The pot is fixed on a frame, with four wheels under it for moving.

The outlet of the pot is design in flange with hose connector, together with a hose clamp.

<b>Total price:</b>	
---------------------	--

**Terms of payment:**

- 1) 30% of contract value as down payment shall be paid to the Seller by T/T, within 10 days after contract signature date.
- 2) 60% of total contract value shall be paid to the Seller by T/T, within ten (10) days after receiving the shipping documents, consist of invoice, bill of lading, packing list.
- 3) 10% of total contract value shall be paid to the Seller by T/T, within (10) days upon the End User's notice after the successful completion of the installation and test operations.

We will arrange a trade company to export the goods. It is said that:

**Manufacturer: Xiamen Vactec Equipment Co., Ltd.****Seller:** VTK COMPANY LIMITED

Add: FLAT A 17/F UNION MANSION 33-35 CHATHAM RD SOUTH TST KL

Attn: Mrs. Li Chihua

E-mail: [logistics@raise-stone.com](mailto:logistics@raise-stone.com)

Tel: +86 592 2385961

Fax: +86 592 5757603

**Bank information:**

Name: WING LUNG BANK LTD.

TSIM SHA TSUI BRANCH

Address: 4 CARNARVON ROAD, T.S.T., KOWLOON, HONG KONG.

USD ACCOUNT: **612-343-0047-0**

SWIFT: WUBAHKHH

**Ex-work delivery period:**

- about 4~5 months after receiving down payment.
- 4~6 weeks for shipment and customs declaration.
- 4~5 week installation and commissioning on user site.

**Guarantee of machines:**

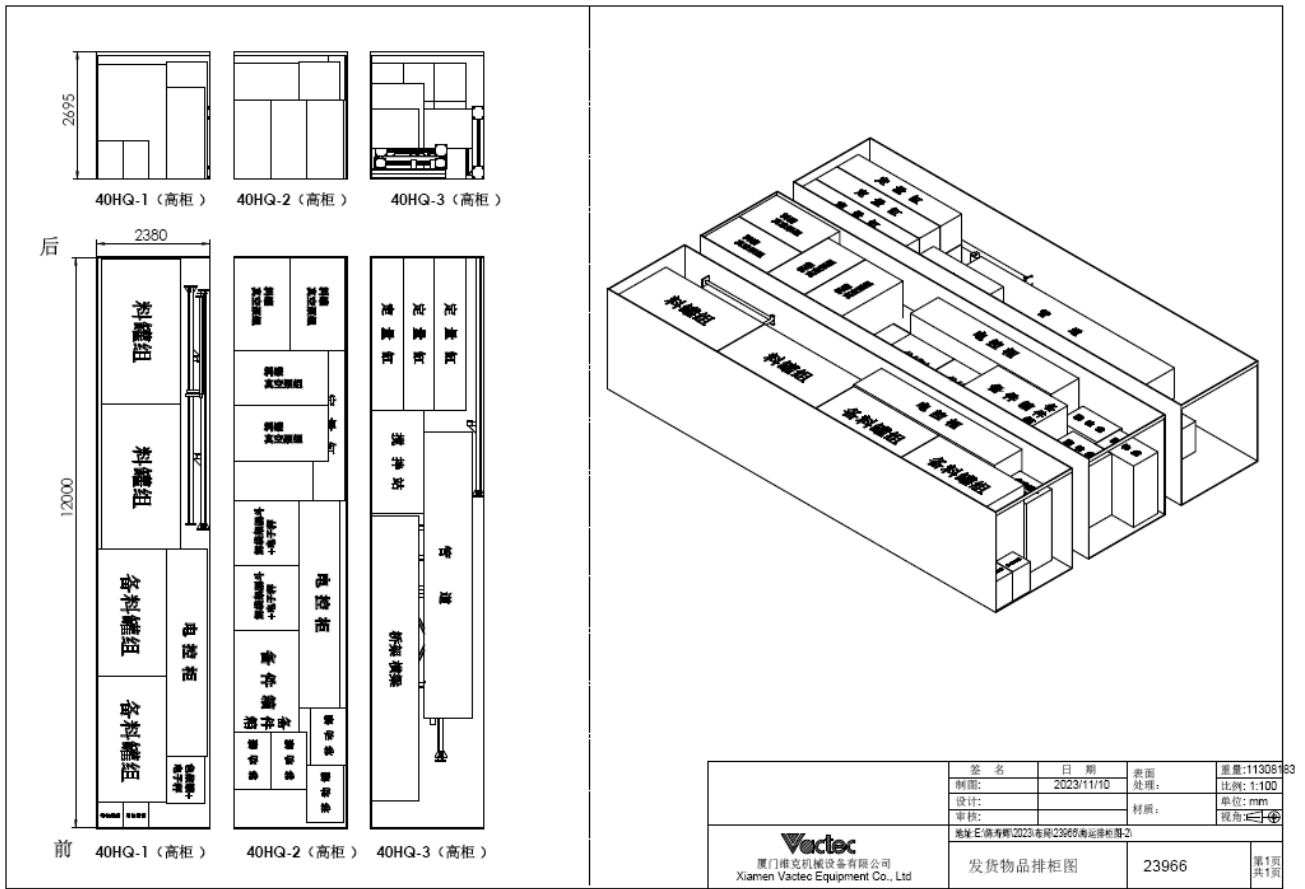
1 year after acceptance.

**Validity:**

This tender is valid until Dec. 06, 2023

Containers packing reference:

- 3x 40HQ OT, gross weight about 18T, 13T, 8T.



Reference photos:



