

Nanjing Pharmatechs Pilot Plant 1 Information

Production Capacity: 10kg-100kg

Facility Information

Production Area	
First Floor	2370 sq. ft.
Second Floor	1500 sq. ft.
Clean Room Classified at 10,000	2240 sq. ft.
Working Temperature Range	-20°C-140°C
Pressure Range	Atmosphere
Vacuum	760 mmHg-1.5 mmHg

Equipment List

Designation	Type	Material	Volume	Location
K-R102	Reactor	Glass-lined steel	100L	Located in the production area
K-R106	Reactor	Glass-lined steel	100L	Located in the production area
K-R107	Reactor	Glass-lined steel	100L	Located in the production area
K-R112	Reactor	Glass-lined steel	200L	Located in the production area
K-R119	Reactor	Glass-lined steel	100L	Located in the production area
K-R125	Reactor	Glass-lined steel	100L	Located in the production area
K-R901	Reactor	Glass-lined steel	100L	Located in the production area
K-R902	Reactor	Glass-lined steel	100L	Located in the production area
K-R906	Reactor	Glass-lined steel	50L	Located in the production area
K-R909	Reactor	Glass-lined steel	100L	Located in the production area
K-R912	Reactor	Glass-lined steel	300L	Located in the production area
K-R915	Reactor	Glass-lined steel	200L	Located in the production area
K-R919	Reactor	Glass-lined steel	200L	Located in the production area
K-R130	Reactor	Glass-lined steel	50L	Located in the clean room
K-R717	Reactor	Glass-lined steel	200L	Located in the clean room
K-M115	Centrifuge	Stainless steel	300mm	Located in the production area
K-M116	Vacuum tray dryer	Stainless steel	2 Trays	Located in the production area
K-M122	Centrifuge	Stainless steel	300mm	Located in the production area
K-M132	Centrifuge	Stainless steel	300mm	Located in the clean room
K-M133	Vacuum tray dryer	Stainless steel	4 Trays	Located in the clean room
K-M136	SYH-10 Three dimensional mixer	Stainless steel	10L	Located in the clean room
Ancillary equipment: All reactors fully equipped with glass reflux condensers for distillation and reflux operation; vacuum pumps; compressed air.				



Two Levels Production Area



K-R112 on the Second Level of the Production Area



K-R130, K-R717 in the Clean Room



K-R130, K-R717 in the Clean Room



K-M133 Dryer in the Clean Room



K-M136 Mixer in the Clean Room

Nanjing Pharmatechs Pilot Plant 2 Information

Production Capacity: 500kg-5000kg

Facility Information

Production Area	
First Floor	2840 sq. ft.
Second Floor	842 sq. ft.
Third Floor	420 sq. ft.
Hydrogenation Bay	516 sq. ft.
Clean Room	1290 sq. ft.
Working Temperature Range	-20°C-140°C
Pressure Range	Up to 100atm
Vacuum	760 mmHg-1.5 mmHg

Equipment List

Designation	Type	Material	Volume	Location
R201	Reactor	Glass-lined steel	2000L	Located in the production area
R202	Reactor	Glass-lined steel	2000L	Located in the production area
R203	Reactor	Glass-lined steel	3000L	Located in the production area
R204	Reactor	Glass-lined steel	3000L	Located in the production area
R205	Reactor	Glass-lined steel	1000L	Located in the production area
R206	Reactor	Glass-lined steel	500L	Located in the production area
R207	Reactor	Glass-lined steel	500L	Located in the production area
R208	Medium pressure reactor	Glass-lined steel	1000L	Located in the hydrogenation bay
R209	High pressure reactor	Stainless steel	2000L	Located in the hydrogenation bay
R210	High pressure reactor	Stainless steel	2000L	Located in the hydrogenation bay
M201	Vacuum tray dryer	Stainless steel	32 Trays	Located in the clean room
M202	Vacuum tray dryer	Stainless steel	48 Trays	Located in the clean room
M203	Centrifuge	HDPE coated steel	800mm	Located in the production area
M204	Centrifuge	Stainless steel	800mm	Located in the production area
V201	Air receiver tank	Stainless steel	1000L	Located in the production area
V202	Nitrogen receiver tank	Stainless steel	1000L	Located in the production area
V203	Vacuum receiver tank	Stainless steel	200L	Located in the production area
Ancillary equipment: All reactors fully equipped with glass reflux condensers for distillation and reflux operation; vacuum pumps; compressed air.				



Three Levels Production Area



R206, R207 in the Production Area



R201, R202 in the Production Area



R203, R204 in the Production Area



R208, R209, R210 in the Hydrogenation Bay



M203 in the Production Area



M201, M202 in the Clean Room



Clean Rooms for Packaging

Nanjing Pharmatechs Production Plant 3 Information

Production Capacity: >5000kg

Facility Information

Production Area	
First Floor	23,245 sq. ft.
Second Floor	8130 sq. ft.
Clean Room Classified at 10,000	12,200 sq. ft.
Working Temperature Range	-20°C-140°C
Pressure Range	Atmosphere
Vacuum	760 mmHg-1.5 mmHg

Equipment List

Type	Material	Volume	Number	Location
Reactors	Glass-lined steel	3000L	7	Located in the clean room
Reactors	Glass-lined steel	1500L	3	Located in the clean room
Reactors	Glass-lined steel	1000L	2	Located in the clean room
Mother liquor tanks	Glass-lined steel	5000L	4	Located in the clean room
Mother liquor tanks	Glass-lined steel	3000L	2	Located in the clean room
Mother liquor tanks	Glass-lined steel	1500L	2	Located in the clean room
Storage tanks	Stainless steel	1000L	4	Located in the clean room
Solvent tanks	Stainless steel	10000L	2	Located in the clean room
Solvent tanks	Stainless steel	2000L	2	Located in the clean room
Solvent tanks	Stainless steel	1500L	3	Located in the clean room
Solvent tanks	Stainless steel	500L	1	Located in the clean room
Centrifuges	Stainless steel	SS-1000	5	Located in the clean room
ZLG-6 Vibrating fluidized bed dryer	Stainless steel		1	Located in the clean room
EYH-4000 Two dimensional mixer	Stainless steel	4000L	1	Located in the clean room
Ancillary equipment: Vacuum pumps; compressed air.				



Reactors



Reactors



Reactors and Solvent Tanks



Reactors and Solvent Tanks



Centrifuges



Centrifuges



Vibrating Fluidized Bed Dryer in the Clean Room



Mixer in the Clean Room

Nanjing Pharmatechs Production Plant 4 Information

Production Capacity: >5000kg

Facility Information

Production Area	
First Floor	968 sq. ft.
Second Floor	645 sq. ft.
Clean Room Classified at 100,000	4520 sq. ft.
Working Temperature Range	-20°C-140°C
Pressure Range	Atmosphere
Vacuum	760 mmHg-1.5 mmHg

Equipment List

Designation	Type	Material	Volume	Location
R301	Reactor	Glass-lined steel	1500L	Located in the production area
R305	Reactor	Stainless steel	1500L	Located in the production area
R307a	Reactor	Glass-lined steel	1000L	Located in the clean room.
R307b	Reactor	Glass-lined steel	1000L	Located in the clean room.
X306	Nutche-type filter	Stainless steel	300L	Located in the production area
V312a	Reactor	Glass-lined steel	1000L	Located in the production area
V312b	Reactor	Glass-lined steel	1000L	Located in the production area
V312c	Reactor	Glass-lined steel	1000L	Located in the production area
V312d	Reactor	Stainless steel	1000L	Located in the production area
V309a	Receiver	Stainless steel	2000L	Located in the production area
V309b	Receiver	Stainless steel	2000L	Located in the production area
M303	Centrifuge	Stainless steel	800mm	Located in the production area
M310	Centrifuge	Stainless steel	800mm	Located in the clean room
M313a	Vacuum tray dryer	Stainless steel	60 Trays	Located in the clean room
M313b	Vacuum tray dryer	Stainless steel	60 Trays	Located in the clean room
M314a, 314b	YK-160 Oscillating granulator	Stainless steel		Located in the clean room
M315	EYH-4000 Two dimensional mixer	Stainless steel	4000L	Located in the clean room
V304	Solvent tank	Stainless steel	500L	Located in the clean room
V311	Solvent tank	Stainless steel	300L	Located in the clean room
Ancillary equipment: All reactors fully equipped with stainless steel reflux condensers for distillation and reflux operation; vacuum pumps; compressed air.				



R305/V309 in the Production Area



V312 in the Production Area



Clean Rooms Classified at 100,000



R307 in the Clean Room



M310 in the Clean Room



M313 in the Clean Room



M314 in the Clean Room



M315 in the Clean Room

Nanjing Pharmatechs Warehouse Information

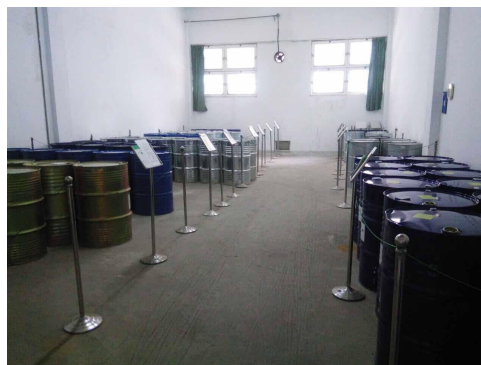
Total Warehouse Capacity: 21,200 sq. ft.

Facility Information

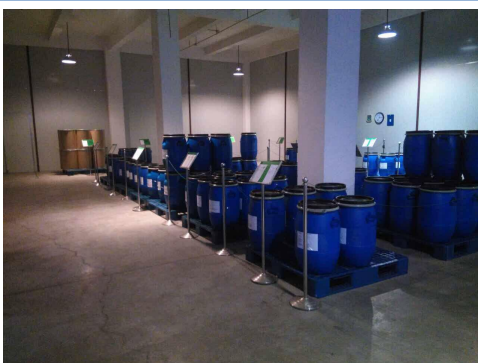
Warehouse for Solid Materials	10,000 sq. ft.
Warehouse for Solvents	6000 sq. ft.
Warehouse for Products	2300 sq. ft.
Warehouse for Products with Climate Control	2000 sq. ft.
Sample Rooms	200 sq. ft.
Warehouse for the Rejected Products	200 sq. ft.



Warehouse for Solid Materials



Warehouse for Solvents



Warehouse for Products



Warehouse for Products under Climate Control



Sample Rooms



Warehouse for the Rejected Products