

DGN-2 Multi-Function Experimental Pharmaceutical Machine



Instructions:

DGN-2 Multi-Function Experimental Pharmaceutical Machine(DGN-2 Main Machine). Multi-functional Pharmaceutical R&D Machinery. Main Drive Unit. Main drive unit provides touch screen control and PLC control system that makes control more simple and convenient. Accessory Devices are made of 316L stainless and all items totally meet GMP standard.

DGN-2 could be well application on some perfect assembly parts, following add Agitator Stirrer Mixer, Double Cone Mixer, Multi-Directional Movement Mixer, Oscillating Granulator, Oscillating Sifter, Sugar Coating Ball, Trough Mixer, V Mixer.

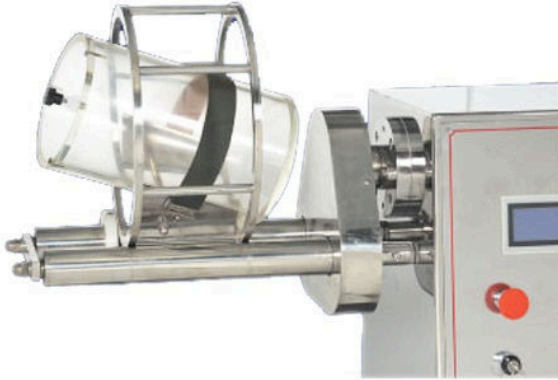
DGN-2 Main Machine + Agitator Stirrer Mixer. Agitator can mix all kinds of liquid with high and low viscosity. The stirring is finished by artificiality the container and stirrer mixer are both made of stainless steel.



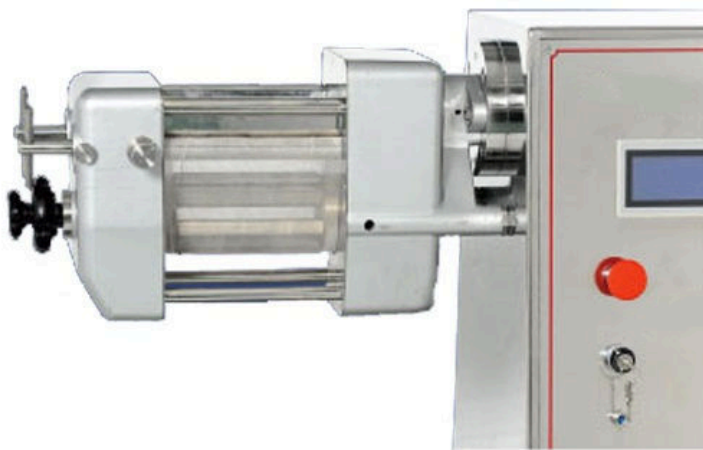
DGN-2 Main Machine + Double Cone Mixer. Double Cone Mixer is used for all free-flowing powder and granules. In the course of the campaign, it can quickly produce multi-dimensional movement and purpose to achieve a perfect mix.



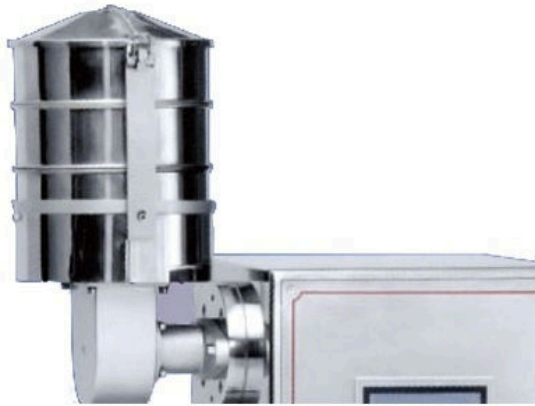
DGN-2 Main Machine + Multi-Directional Movement Mixer. Multi-Directional Movement Mixer. A ball barrel is bind symmetrically on the rotated frame, which is made of stainless steel, making the materials to be processed rotate as it and do three-dimensional motion, so as to rock-over and mix the materials.



DGN-2 Main Machine + Oscillating Granulator. Oscillating Granulator adopts rocking and rotating granular solids to make granular solids pass the desired mesh belt, with its max productivity of 30 kg/h, which depends on the materials and the meshes of two different sizes.



DGN-2 Main Machine + Oscillating Sifter. Vibrating screens. When rocking, it forces the granular solids to be screened by mesh, so you can choose the desired materials of mesh standard. There are screens of two sizes.

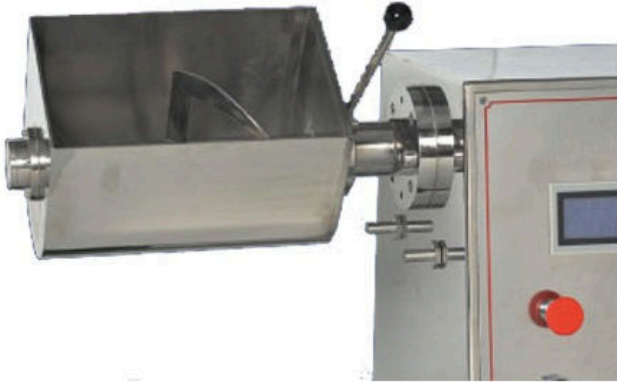


DGN-2 Main Machine + Sugar Coating Ball. Coating ball adopts a linking gear to connect all kinds of coating balls and the driving main engine, facilitating operators to produce coating materials uniformly in a correct angle. It is possible to equip with an electric air heater with a fixed pole above the ball, to drying promptly.

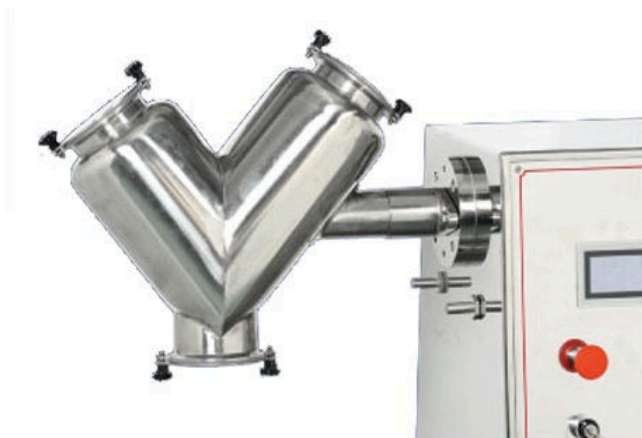


DGN-2 Main Machine + Trough Type Mixer. Trough mixer adopts a Z-chip to rotate in the groove container in different angles. It is made of stainless steel, with the different speed and the

outline of stainless chip, it mixes materials very well. The whole container can rotate at a 180 degree after cutting off the power, so it is easy to discharge and to be cleaned.



DGN-2 Main Machine + V-Type Mixer. V-Mixer consists of two cylinders made into asymmetrical, so that the materials produced by the reciprocating motion of the severity of impact, ran the purpose to achieve uniform mixing, with no dead ends, no accumulation of material, speed and so on.



Technical Parameters:

Model	DGN-2
Rotating Speed	0-120 r/min
Accessory Capacity	10 L
Power	220V/50Hz/0.37Kw OR 110V/60Hz/0.37Kw
Packing Size	520×420×530 mm
Packing Weight	120 Kg

Transportation, installation and working environment for the machine

1. The machine is packaged in one crate, attached with the following technical documents. Packing list, conformity certificate and instructional manual. For the Particular, refer to the packing list.
2. Transportation of the machine is to be in compliance with the stipulations of GB6388 < Delivery/Collection Marking on the Machine for Transportation>.
3. Making on the outer side of the crate is to be in compliance with the stipulations of GB191 < Indication Marks on the Machine for Storage and Transportation>. Lifting and handling of the Machine should be performed in accordance with the indicated positions as marked. And the equipment should be constantly kept in a vertical position. Inclination and sever vibration should be avoided.
4. After unpacking, examination should first be made to see if it is complete, in compliance with goods order. The technical documents are to be checked against the packing list-If any abnormality is found, contact is to be made with our company promptly.

Power supply

1. The power supply for the machine is single phase 220V.
2. In order to ensure the safety of the operators, the power supply must be grounded

Structure of the machine

The main driving system of DGN-2 Multi-functional Pharmaceutical Experimental Machine realizes the step-less adjustment of speed for the main shaft of the main machine within 1 to 120r/min., by means of the frequency variable motor through the inverter and the speed reduction worm gear box. Additionally, the time of running of the main machine can be set up for hour, minute or second. The scope to be set is from 1 second to 99 hours and 59 minutes 59 seconds. All the setting up and operations can be performed from the display screen on the machine man panel. The operation is easy, simple and direct. Moreover, outlet for foot switch is provided on the front of the panel for the convenience to operate by the user with foot so as he can do other performance with his hands. The button to be used in emergency is for the purpose to stop the machine quickly in emergency. 220V power outlet is provided on the back of the main machine.

Adjustment and utilization of the machine

The outlet for incoming line of power supply in the machine is installed on the back of the main machine. After energizing the power supply (220v), the inverter starts working. At the same time, the fan the motor and the axial flow blower start working too. By turning the power key for 90° in the clockwise direction to switch on the power. Then, the man-machine interface starts to display.

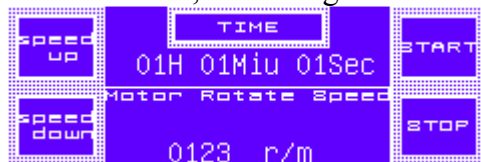


When the screen shows “the operational system of the Multi-functional pharmaceutical Experimental Machine”, operation can be made.

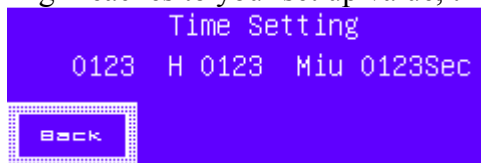


Pushing the “time”, it scrolls to “time of running”

Pushing the” set up”, it scrolls to screen for setting up the timing in accordance with the different modes of material processing for hour, minute and second. Finally“enter”is to be pushed confirmation Thus, the timing function set up is finished.



Pushing “return”, it returns to the precedent screen. Then, “start” is to be pushed main machine starts rotating. The display of “time of running” starts to change. At this point, the rotary speed will be automatically adjusted to the precedent set up value. Then, pushing “speed rising, or speed dropping”, you can adjust it to your required rotary speed. When the display of the “time of running” reaches to your set up value, the machine will stop automatically.



If it is required to stop the machine during the operation, “stop” button can be pashed. If it is necessary to restart the machine, the “stop” button should be pushed once again for it to return to its original position.

Then pushing the “start” button, the machine will be restarted. Over the power incoming line, is the outlet for the outgoing line of the power. The user can use it to connect the equipment for lighting, heating, cooling, air blowing and dust collection.

The hole of the outlet on the panel is provided specially for the foot Switch. When using, the plug of the foot switch is to be plugged in. Then, push the “stop” on the screen, the foot switch will be stated. If it is necessary to return to the interface operation, push “stop” to shift to the original status. The emergency stop button over the power key is to be used for stopping the machine in emergency. After the connection operation of button, the machine will be stopped promptly with message of “emergency stop, shown on the screen. Before restarting the machine, the emergency stop button should be rotated in the clockwise direction, for it to prop up into the original position.

After completion of the operation, the power key should be rotated for 90° in the counter clockwise direction and pulled out. Finally, the power plug is to be pulled out (or turning OE the switch of the outlet set).



Note: normally, the emergency stop button should not be used as the stop button of the machine.

The exit end of the main shaft of the main machine is in a normal hexagonal shape. When joined with the auxiliary machine, it can deliver out reliable dynamic. After the auxiliary machine is connected with it, two pieces of knurled screw shall be used to fasten the flange of the auxiliary machine with the main machine. In this way, the normal operation can be performed a very easy way.

Maintenance of the main machine and precautions

1. The main machine should be placed on the operational platform in a stable way. The operational platform should be stable and reliable. The laboratory where the main machine is to be placed should be dry with good ventilation to ensure the normal operation of the main machine.
2. The outer side of the main machine is clad with stainless steel in a clean and simple way without any dead corner for the convenience of cleaning. After completion of operation, it should be wiped clean. After the incoming line is pulled, the machine should be covered with cloth.
3. After the main is energized, attention should be paid to the normal running of the fan of the motor and the axial flow blower before starting the machine. Otherwise, the temperature rising inside the enclosure of the machine will affect the service life of the inverter and the motor.

The above description is to be referred to in the installation of the machine. The user is expected to use it correctly and conduct the maintenance of the equipment.

