



## *High Rapid Shear Mixer Granulator Machinery (400L)*



Applied in industries such as pharmaceutical, chemical as well as food industry and etc, more exactly shown as follow: Mixing of powder and powder, Granulation of powder and bond.

### **Products Characteristics:**

1. Adopt PLC and touch screen automatic control technology, the machine can get assured of stability in quality, as well as easy manual operation for convenience of technological parameter and flow progress.
2. Adopt inverter to control the stirring blade and cutter, easy to control the size of particle.
3. With the rotating shaft hermetically filled with air, it can prevent all dust from compact.
4. With a structure of conical hopper tank, all material can be in uniform rotation. The tank is laid with an interlayer on the bottom, in which water cooling circulation system featuring higher thermostatic performance than air cooling system is furnished, which leads to improve the quality of particles.
5. With automatic lifting of the bowl cover, the tank outlet matching with drying device, self-equipped arm-ladder, it is easy to operate.
6. Mouth of material outlet has changed into arc-shaped, avoiding up dead spaces.

### **Working Principle:**

1. The process consists of two procedures including mixing and granulating.
2. Powder metrical can be charged into the material pan from the conical hopper and continue to rotate in the container under the action of mixing blade once the hoper is closed. In the meanwhile, all materials grow up the shape of liquid bridge under continuous effects of conical tank wall. Under the action of extrusion, friction as well as crumb by blade and conical tank wall, all material

is gradually turn for loosen. At last, while opening the hoper outlet, waterish particles are pushed off under the centrifugal effects of blade.

3. These soft particles are formed not dependent on forced extrusion effects, more exactly; Mainly these small and uniform particles are formed after continuous cutting under the simile-liquid state. In all, this machine can realize the mutual transformation between different materials.

### Technical specifications

Total capacity	400L
Working capacity	100-280L
Material groove max.	Φ988mm
Inside diameter	
Material feeding capacity	50-140kg
Stirring paddle rotary speed	20-200r.p.m
Cutting knife rotary speed	50-3000r.p.m
Length	2500mm
Total Height	2320mm
Height of outlet	1000mm
Width	2050mm
Weight	1500kg