

## *Small Lab Use Softgel Encapsulation Machine*



Joysun Pharma Lab Size soft gel capsule machine is designed for R&D purpose innovation of making new types of soft gel capsules (Size, Shape, Manufacturing Process Guide). It allows making new animal softgel or vegetable soft gel with minimum material waste and less cost. Joysun softgel machine is your best choice for trial production as a starter.

A lab size soft gelatin capsule machine requires much less raw materials, for example, a 20L gelatin solution can be used for 4-5 hours. While the big machine needs at least 20L gelatin to initiate the encapsulation process. It requires a much lower production cost. Small size soft gel machine is easier and fast to be cleaned in a short time. Also, speed up softgel variety change.

Tags: softgel manufacturing equipment; commercial use softgel encapsulation machine; softgel production line; softgel technology, softgel auxiliary equipment.

Adopts the newest tech and material, reach GMP requirements. Using a single-phase, 220V power, mainly applied for lab and pharmacy institution R&D experiment and small-batch produce. This machine adopts an automatic control system, has characteristics such as easy operation, stable and reliable performance. The whole soft gel capsule manufacturing machine was well-designed, has necessary functions, and a compact structure. A whole set includes the main machine, a control system, a tumbler dryer, a vacuum mixing tank, a set of die rolls, a removable platform, and an air blower.

- ◆ Gel ribbon cooling methods can be water cooling or wind cooling or both.
- ◆ Gel ribbon thickness can be adjusted upon variety to save cost.

A. The encapsulation part is the main machine, which can complete functions like gel ribbon making, capsule content measuring, and soft gel sealing. The vacuum mixing tank is for gelatin melting, storage and supplying gelatin solution to encapsulation machine. Tumbler dryer is for soft gel shaping and drying.

B. Tumbler dryer consists of a tumbler, fan, and motor. It can keep soft gel capsules in the tumbler or discharge by reverse rotating. It is mainly used for capsule shaping and drying.

C. Movable platform: Main machine, drying machine, electric control box were mounted at this platform, for moving easily.

D. Control system: Realize the whole device's normal and automatic function.

E. Water chiller: For gel ribbon cooling.

### Machine Parameter:

<b>1. Encapsulation machine (with a chiller, a gel ribbon wheel and a capsule die roll)</b>	
<b>Capacity</b>	≥5000caps/hour (7000-8000caps/hour, 8#oval capsule)
<b>Die roll overall size</b>	≥Φ40×50mm
<b>Die roll rotating speed</b>	0-5rpm VFD control
<b>Plunge</b>	0-2ml
<b>Capsule filling tolerance</b>	≤±1%
<b>Power</b>	1KW
<b>Gel ribbon wheel dia</b>	Φ 190x80mm
<b>Material</b>	Made of SS316, with import driven bearing.
<b>Power supply</b>	Single-phase AC220V 50HZ 0.18KW
<b>2. Tumbler dryer (Shaping equipment)</b>	
<b>Tumbler overall size</b>	≥φ300x400mm
<b>Tumbler rotating speed</b>	≥21rpm
<b>Machine power</b>	0.09KW AC220V
<b>Fan power</b>	AC220V 50HZ 0.4KW
<b>Overall size</b>	500X400X420mm
<b>3. Gelatin cooking tank (Gelatin cooking system)</b>	
<b>(With lab type water ring vacuum pump and oil-free mute air compressor)</b>	
<b>Working capacity</b>	≥30L
<b>Mixing speed</b>	≥17r/min
<b>Working pressure</b>	-0.09MPa~+0.06MPa
<b>Heater</b>	1.5KW AC220V
<b>Mixer power</b>	0.1KW Ac 220V
<b>Vacuum degree</b>	0.098MPa
<b>Pump delivery</b>	90L/min
<b>Power</b>	180w
<b>4. Drying trolley (SS304)</b>	
<b>Overall size</b>	≥650×850×1600mm
<b>Quantity</b>	20EA
<b>5. Working table (SS304)</b>	
<b>Overall size</b>	≥1200*600*850mm