

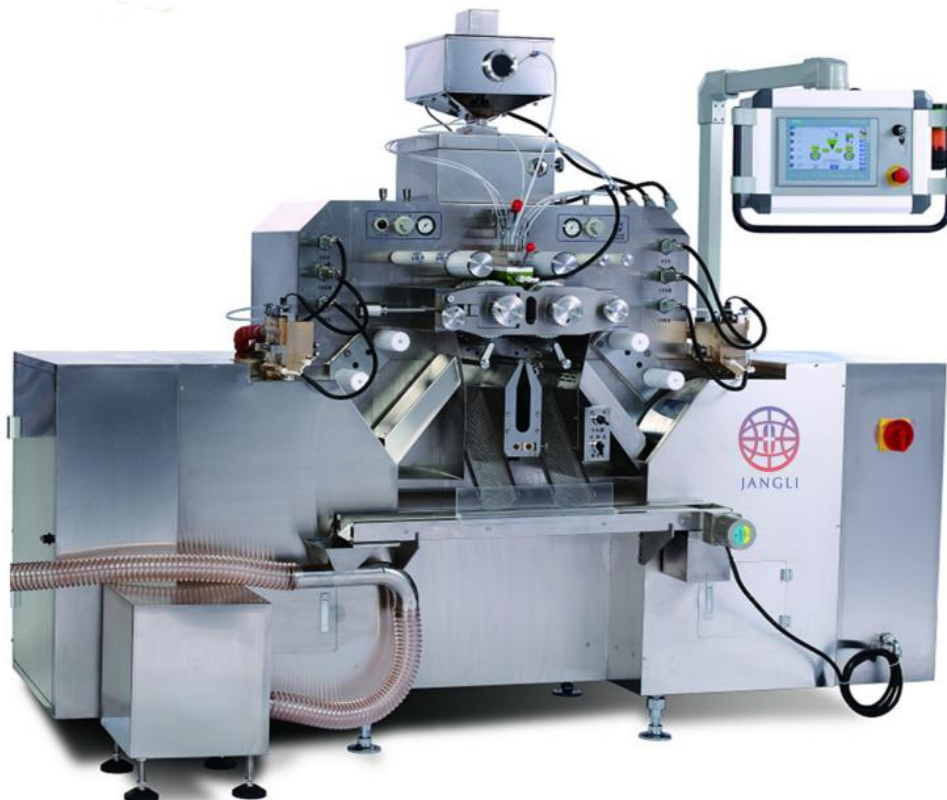


**Wuxi Jangli Machinery Co.,LTD**

--25+Years Focus On Softgel ONLY

# JL-150III Softgel Production Line

Brochure



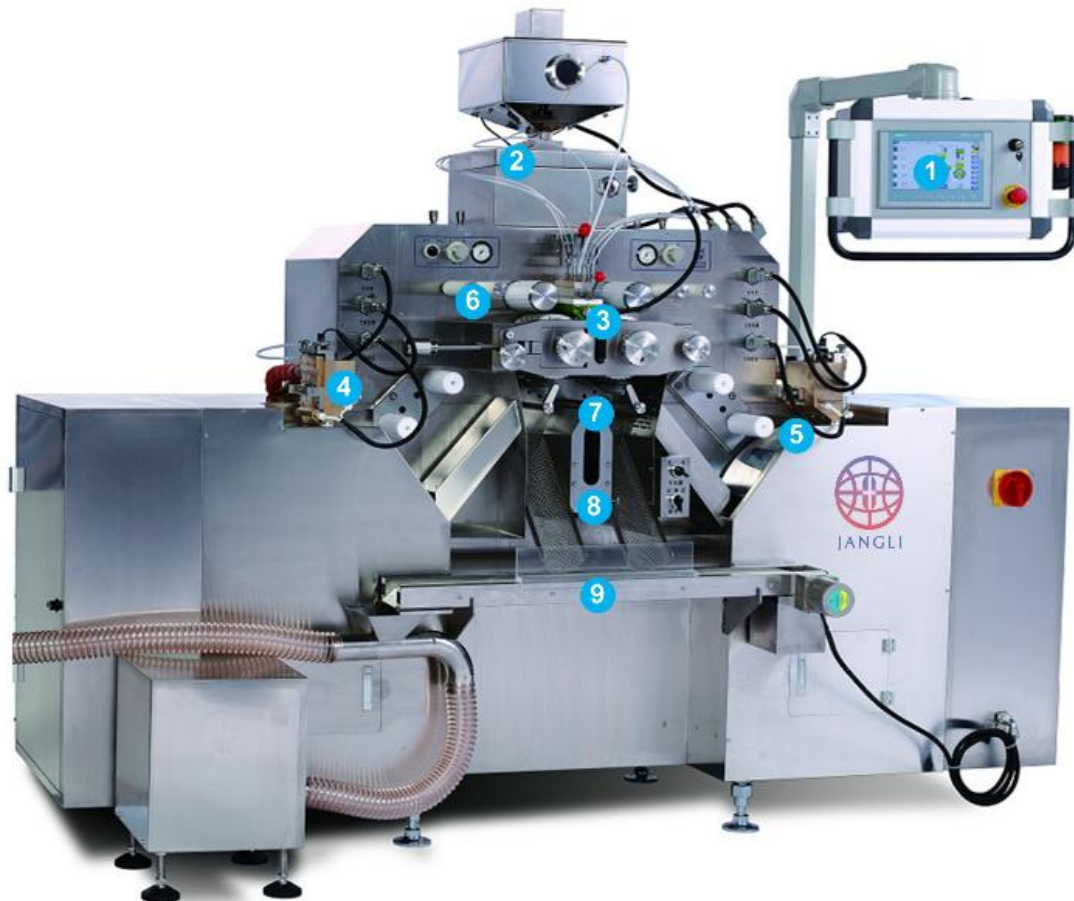
## Introduction

- JL-150III Soft Capsule Machine is a servo motor driving machine with medium scale production capacity. It fill a need for fully automatic servo motor machines in small softgel production factories. Through its high-tech automated operation, this softgel capsule making machine enables consistent production with minimal human intervention.
- JANGLI JL-150III soft gel encapsulation machine is ideal for animal gelatin as well as plant based tapioca or carageenan starch softgel production.

## Specification

Die Roller Size:	ø80x100mm (4")
Rotating Speed:	0~5RPM(frequency control)
Single Plunger Filling Volume:	0~1.5ml
Plunger Quantity:	6 pieces (3 on each side)
Filling Volume Accuracy:	+/- 0.5%
Power Consumption:	5kw
Dimension:	1440X660X1350(h)mm
Weight:	400kgs

## Structure



- |   |   |   |                  |
|---|---|---|------------------|
| 1 | PLC Touch Screen                              | 7 | Capsule Stripper |
| 2 | Medicine Filling Pump                         | 8 | Mangle Roller    |
| 3 | Die Roller Housing                            | 9 | Capsule Conveyor |
| 4 | Gelatin Spreader Boxes                        |   |                  |
| 5 | Casting Drums                                 |   |                  |
| 6 | Gelatin Ribbon Lubricating and Driving System |   |                  |

## **PLC Touch Screen**

All the functions of the JL-150III Softgel Making Machine are controlled using a PLC touch screen control panel. You can configure, and monitor the soft capsule encapsulate machine using this interactive controller. It presents information in full color, and is complemented by some Start, Stop and Set buttons.

## **Medicine Pump**

Medicine filling pump is independently driven by a servo motor and electronically synchronized with the die rollers. So injection timing and die roller alignment can be adjusted automatically. Filling volume can be adjusted precisely on PLC touch screen during working process.

## **Die Roll Housing**

Two separated servo motor drive two die roller shaft, faster and more accurate. And injection timing and die roller alignment can be completed automatically on touch screen, will makes the operation easier. No gear driving means no lubrication needed anymore.

## **Gelatin Spreader Boxes**

For maximum heat conductivity, the spreader box is made of copper. A set of liquid level sensors are installed at the top of the spreader box. These sensors work alongside pinch valves. They operate in tandem to automatically deliver gelatin liquid into the spreader box.

## **Casting Drums**

A medium size casting drum made of SS316 material is smooth, and it kept constantly cool using some anti-freeze liquid. The liquid's temperature is further kept cool using an external air conditioner. For maximum cooling effect, a cooling fan is installed under the casting drum. The speed can be adjusted on the touch screen.

## **Gelatin Ribbon Lubricating and Driving System**

The micro-lubricating oil roller has an innovative design. It is made of TT material, and has a collection of numerous holes. During operation, the oil flows right out of the holes smoothly. Electronic metering pumps are installed to control the lubricating oil supplying, so the lubricating oil quantity can be adjusted accurately on touch screen.

## **Capsule Stripper**

Easy attachable softgel capsule strippers. Nylon brushes are standard while silicon rollers are optional.





## **Mangle Roller**

The rolling speed can be adjusted on touch screen according to the gelatin ribbon tension.

## **Capsule Conveyor**

The JL-150III Softgel Making Machine is equipped with a conveyor belt to transfer softgel capsules to tumble dryers. Conveyor belt is designed bi-directional, which is helpful for waste capsules collecting at the beginning of the production.

**Output List**

Capsule		Cavity Number	Output/hour (5rpm)2
Shape	Size		
<b>Oval</b> 	<b>6#</b>	287	86,100
	<b>8#</b>	210	63,000
	<b>10#</b>	204	61,200
	<b>14#</b>	160	48,000
	<b>16#</b>	155	46,500
<b>Oblong</b> 	<b>8#</b>	164	49,200
	<b>10#</b>	160	48,000
	<b>16#</b>	108	32,400
	<b>20#</b>	102	30,600
<b>Round</b> 	<b>38#</b>	138	41,400
<b>Tube</b> 	<b>20#</b>	96	28,800

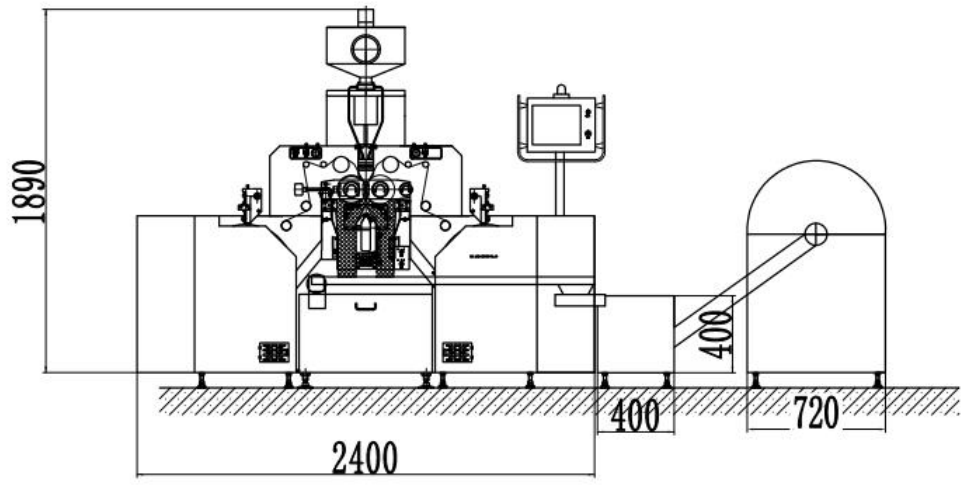
**Other Shapes Available**



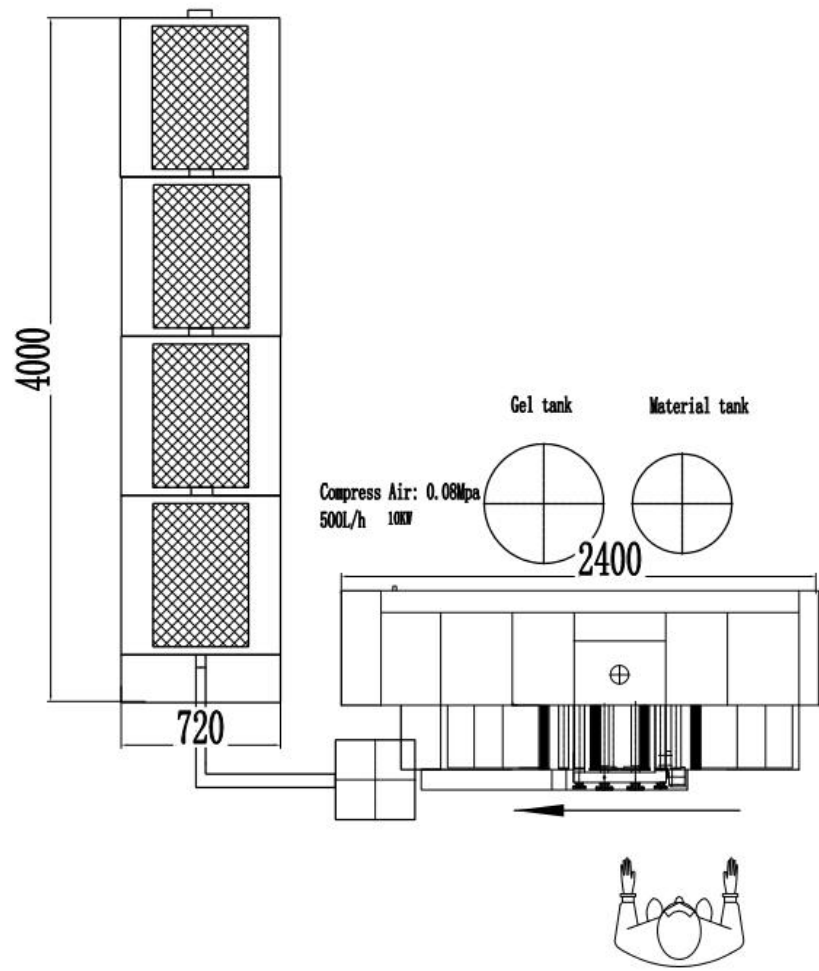
**Electrical configuration**

1. PLC and touch screen: SIEMENS
2. Lower voltage apparatus: Schneider
3. Cable Conduct: Murrplastik
4. Terminal block: Weidemuller
5. Temperature Sensor: ABB

## Standard Layout



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## Auxiliary Equipment



### Initial Tumble Dryer

Small basket used for softgel shaping and initial drying

Model: JLGZ-B

Quantity: 4 baskets



### Portable Gelatin Melting Tank

With wheels and integrated vacuum system, used for gelatin melting.

Model: JLRJ-200



### Gelatin Service Tank

Used to store liquid gelatin melted from gelatin melter.

Model: JLRJ-200



### Medicine Mixing and Service Tank

With mixer and insulation layer, used for mixing and store medicine

Model: JLSY-200



## **Softgel Drying Trays and Trolleys**

PP material and stackable drying trays, used for softgel final drying. Every 30 trays stack on one trolley