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A ROQUETTE COMPANY

## Commercial-Scale Universal Soft Gel Machine

SGM612NextGen®



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# Commercial-Scale Universal Soft Gel Machine

## SGM612*NextGen*<sup>®</sup>

The new generation **SGM612*NextGen*<sup>®</sup>** Universal Soft Gel machine utilizes the latest technology using servo motor. Its easy-to-use control system employs PLC and touchscreen available in two-platform options, which allows for ease of operation and productivity. Furthermore, its modular modern design improves part changeover timing, maintenance, and cleaning to help prolong the machine's life. This standalone unit can be easily integrated with existing soft-gel processing equipment. **Available for both gelatin and veggie-based films** with our TES VGen closed boxes and our TES VGen metering system, it is designed to meet the evolving needs of various industries, including laboratories, research institutions, food factories, nutraceutical facilities, and other related industries.

### **Features:**

- **Motion Control System:** the mechanical gearing was replaced with electronic gearing (implemented with closed-loop control systems) using servo motors.
- **Operational Speed:** up to 8 RPM. Nominal production speed: 6 RPM.
- **Die Roll Dimensions:** Approximately 6" x 12".  
Left and right casting drums have independent control that could be adjusted on the fly (during production) by electronically changing the gear ratio between the drums and dies.
- Convenient installation, energy efficiency, and high productivity.
- All Technophar soft gel encapsulation machines meet cGMP standards and related guidelines.

### **Construction:**

- Sealed construction to prevent leakage and subsequent contamination.
- Aluminum frame construction prevents any possible rust and allows for easy cleaning and maintenance.
- The outside covers of the machine are completely made from stainless steel, designed in accordance with GMP/FDA requirements.
- Improved serviceability, as most of the interior components slide out for easier access.

### **Control Panel:**

- Control of all production and process parameters using a safety PC-based control system (embedded PC with technology and safety integrated).
- PC-based visualization system (IPC with run-time software and industrial monitor).
- Electrical panel and PLC incorporated within machine.
- Control of all production and process parameters using Programmable Logic Controllers (PLC) with touchscreen.
- Reduced spacing requirements and carbon footprint.
- FDA 21 CFR Part 11 Software compliance.

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### Mechanism

#### Medicine Pump System

- The medicine pump is independently driven by a servo motor and electronically synchronized with the die rolls.
- During a capsule size change, the operator inputs the number of Die Roll cavities using the touch screen.
- The medicine pump timing is done electronically.
- Precise injection timing adjustments are done electronically using the touch screen. The timing can also be adjusted during production (without stopping the machine). Since this timing can be adjusted with such high accuracy it improves on seal integrity of the capsule. This, in turn, increases capsule quality and productivity.
- The medicine pump is placed in a special housing that is completely separated from the medicine pump drive system. This allows quick changeovers and easy maintenance.
- The slide lubrication system for the pump is an electronic pump located inside the machine. It is separated from the medicine pump drive system (GMP construction, no cross-contamination of drive system with fill material).
- Twenty (20) plunger medicine pump standard.
- Mini medicine pump: Thirty (30) plungers and maxi medicine pump twenty: (20) plungers available.
- Main work area (Die Rolls) is situated 70 mm lower than previous generation machine.

#### Die Roll Housing

- Two (2) independent Die Roll shafts driven by two (2) servo motors electronically synchronized, with high precision low backlash gearboxes.
- Fast and easy alignment of Die Roll shafts.
- No lubrication for Die Roll housing, leading to low maintenance costs.

#### Spreader Box

- Adaptable gelatin ribbon width that allows for minimum loss of ribbon net.
- Bronze construction.
- Gelatin level control is done electronically for gravity feeding. (Ground-level gelatin feeding also available).

#### Casting Drums

- "In-line" construction allows a straight gelatin ribbon to transfer to the Oil Rolls and Die Rolls without any twisting.
- Cooling drums allow high-efficiency cooling at high speed.
- Water and air-cooling system incorporated in machine.

#### Ribbon Lubrication & Drive System

- Porous material for lubrication roller.
- Four electronic metering pumps allow very accurate ribbon lubrication.
- Easy and accurate oil quantity adjustment.
- Independent electrical drivers allow fine adjustments of the ribbon tension on each side.
- Easy access from the operator side to feed the ribbon on the Oil Rolls.

#### Die Roll Pressure System

- Electronic control of the pneumatic system.
- The Divider (Chute Assembly).
- Variable speed independent drive.
- Sealed construction.

#### Mangle Rolls

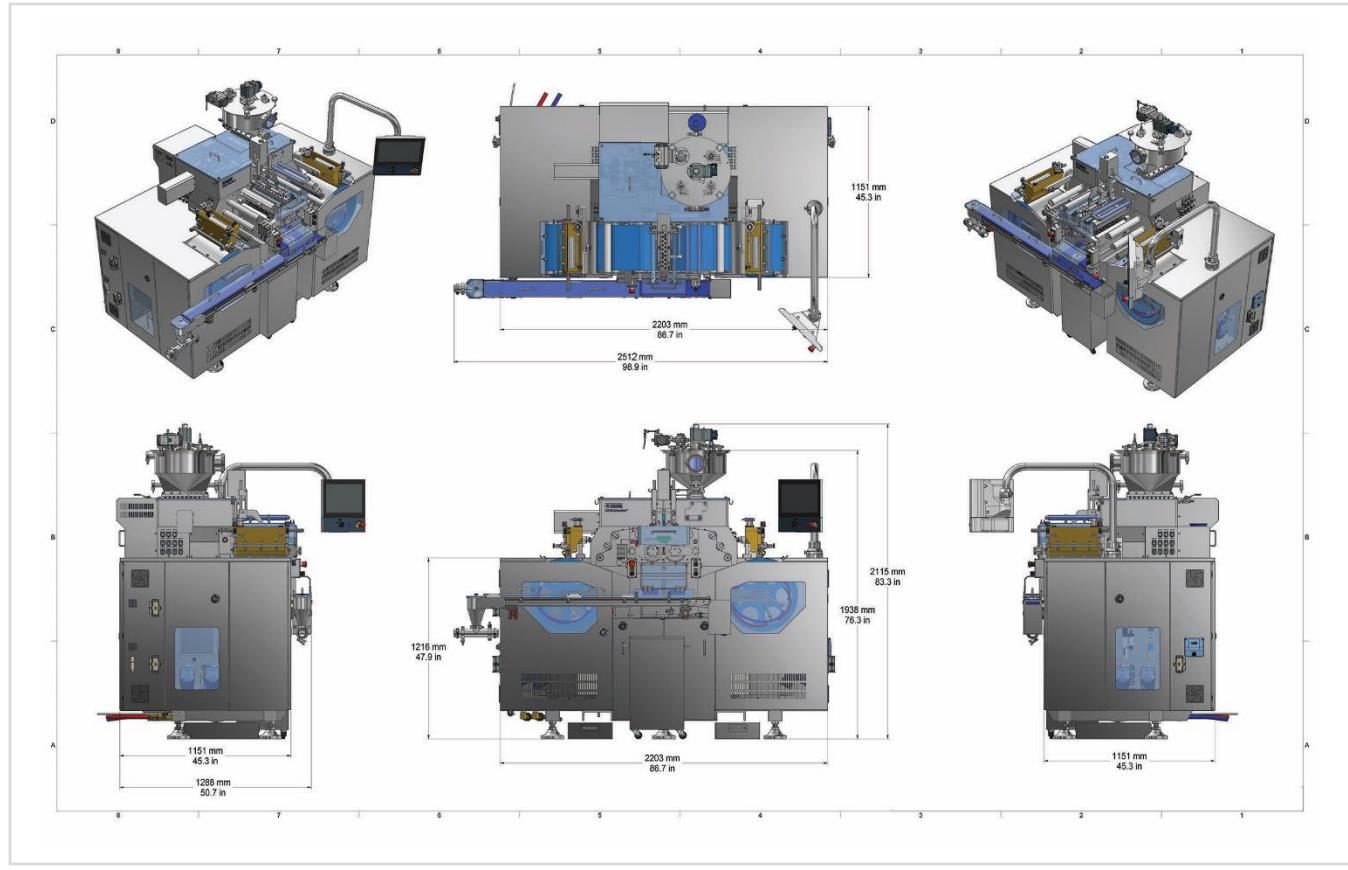
- Pneumatic cylinders for mangle roll pressure are used for ease of operation and maintenance.
- Electronic speed adjustment allows fine-tuning of the ribbon tension and helps 1the cutting process.

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## SGM612NextGen®

### Specifications

Soft Gelatin Encapsulation Machine SGM612NextGen®  
Units of Measure: mm/inches



#### Model No.

SGM612NextGen®

Commercial Scale Soft Gel Capsule Machine

#### Specifications

Dimensions (mm/inches)	2512mmW x 1151mmD x 2115mmH (mm) / 98.9" W x 45.3" D x 83.3" H (inches)
Die Roll Dimensions (mm/inches)	150mm Ø x 300mm Lg / 5.91 inches Ø x 11.81 inches
Drum Diameter (mm/inches)	506mm/ 19.92 inches
Compressed Air	100 PSI
Chilled Water	6 GPM, 7°C
Electrical Power	Max. 75 KVA
Weight (kg/lbs.)	Approx. 2400kg/ 5292 lbs.

**TECHNOPHAR**

Technophar Global Headquarters

[www.technophar.com](http://www.technophar.com)

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