

Softgel Encapsulation System



Softgel Encapsulation System

Product Data

Contents	Page
Aprila SG 50 Softgel Encapsulation System.....	2
Aprila SG 100 Softgel Encapsulation System.....	6
Aprila SG 200 Softgel Encapsulation System.....	10
Aprila SG 250 Softgel Encapsulation System.....	14
Soft Capsule Size&Shape.....	18
Auxiliary Support Equipment.....	19

Softgel Encapsulation System

All-In-One Standard & Vgel Production

The SaintyCo **Aprila SG 50** softgel production system is a space saving, stand alone, all-in-one softgel encapsulation system capable of full production duties. With speeds up to 5 RPM and production volumes up to 12,600 softgels per hour @ 8 Oval 4 RPM base on oil. This is an attractive system for cost conscious start-ups, smaller production batches, or research and development.



Vgel & Standard Gelatin
Compact Design
All-In-One Solution



Aprila SG 50

Features:

- Up to 12,600 pcs/hour(8# OVAL 4RPM)
- All-in-one set up includes everything you need to get up and running
- Variable operation speeds up to 5RPM
- Compact size allows for smaller footprint
- Quick and easy replacement of change parts
- Suitable for use in pharmaceutical, food and recreational industries
- Color touchscreen control provides easy production management
- Tumble dryers have large, high powered centrifugal fan
- Vgel plant based gelatin option

Production Estimates:

Size/Shape	Cavities	Output Per Hour (@ 4 RPM)
6 Oval	72	17280
8 Oval	70	12600
10 Oval	68	16320
8 Oblong	82	19680
20 Oblong	34	8160
6 Round	108	25920
40 Round	44	10560

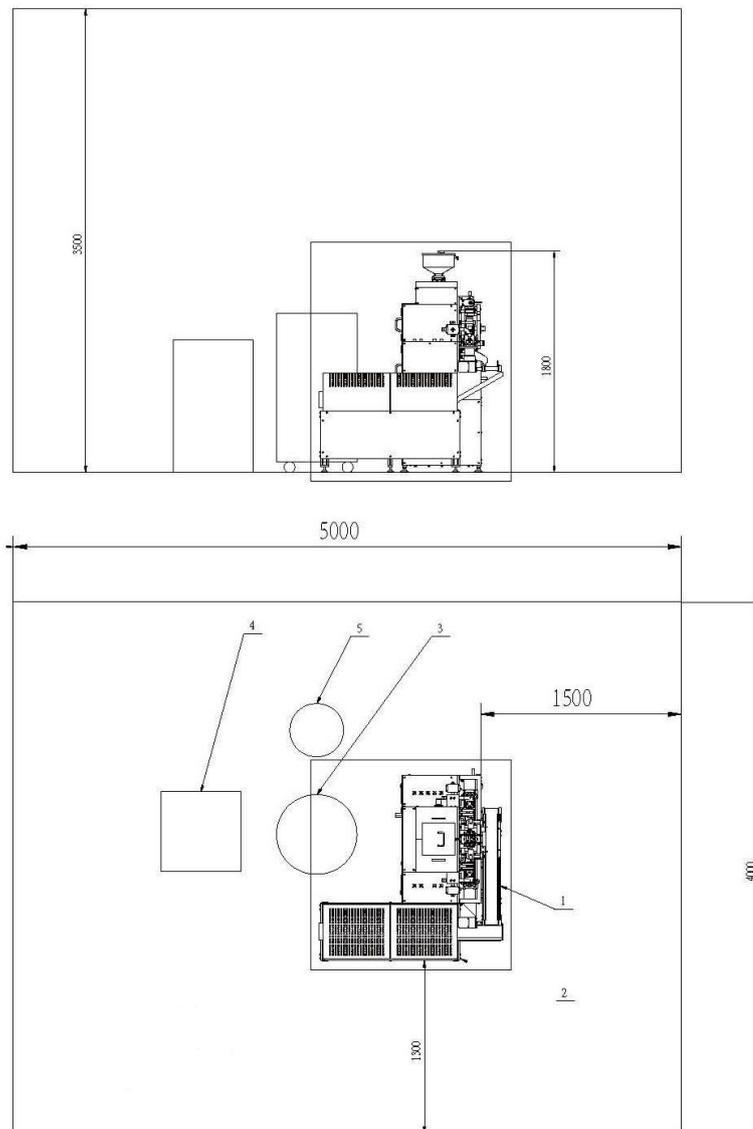
Production rates may vary depending on machine speed, fill material viscosity, and operator experience.

Complete System Includes:

- 1 SG 50 Softgel Encapsulator
- 2 Tumble Dryers
- 3 Chilling System
- 4 100 Liter Gelatin Melting/Mixing Tank
- 5 Drying Trays & Dollies
- 6 Change parts (Softgel Tooling)



Dimensions:



Technical Data	Aprila SG 50
Mold Sizes (mm)	φ150 x 50
Speed	Up to 5 RPM
Capacity (8# OVAL 4RPM)	12,600 pcs/h
Power	220V/380V,50/60Hz,3 Phase,1.7 Kw
Machine Dimensions (mm)	1700x810x1750
Weight	600 kgs
Tumble Dryers	2

Chilling System

The chilling unit is modular to fit your available floor space.

Refrigeration capacity: 5.28Kw

Power: 220 V 50 Hz 1P 2.27Kw

Dimensions: 580x550x925mm

Weight: 100Kg



Gel Melter

100 liter capacity gelatin melting and mixing tank is made from all stainless steel construction with sanitary stainless steel valves and clamps, a triple wall jacket with breather.

Volume: 100L

Temperature: <100 °C

Power: 220V 50Hz 1P 1.5kW

Dimensions: ϕ 550x1210



Drying Trays

The softgels come out of the tumble dryers and are placed on paper lined drying trays. The trays are then stacked on dollies and pushed into drying tunnels.

Dimensions: 750x475x55mm



Tumble Dryers

Each tumble dryer has a large, high powered centrifugal fan, and is equipped with an anti-static device to prevent softgels from sticking due to electromagnetic charge build-up.

Quantity of tumbler:2

Tumbler size: ϕ 316x417mm

Power supply: 380 V 50 Hz 3P

Dimensions: 1400x 450x800mm

Weight: 90 Kg



Softgel Tooling

The Softgel tooling is custom made to meet your needs with a 2-week turnaround. It features harder aircraft grade aluminum, colored timing marks, and "bead blasting" to minimize gel adhesion.

Complete set includes:

- 2 die rolls with stainless steel inserts
- Teflon ceramic coated aluminum wedge
- Solid Teflon distribution plate
- Industrial, compact storage case
- Timing gear



Softgel Encapsulation System

Small Standard & Vgel Production

The SainityCo **Aprila SG 100** softgel production system is a new small capacity model. With speeds up to 5 RPM and production volumes up to 31,500 softgels per hour @ 8 Oval 4 RPM base on oil. This is an attractive system for cost conscious start-ups, smaller production batches, or research and development. And it gives you the ability to produce both standard gelatin as well as popular vgel plant based gelatin softgels.



Vgel & Standard Gelatin
Small Scale Production
Button Control Panel or
Touch Screen Operated



Aprila SG 100

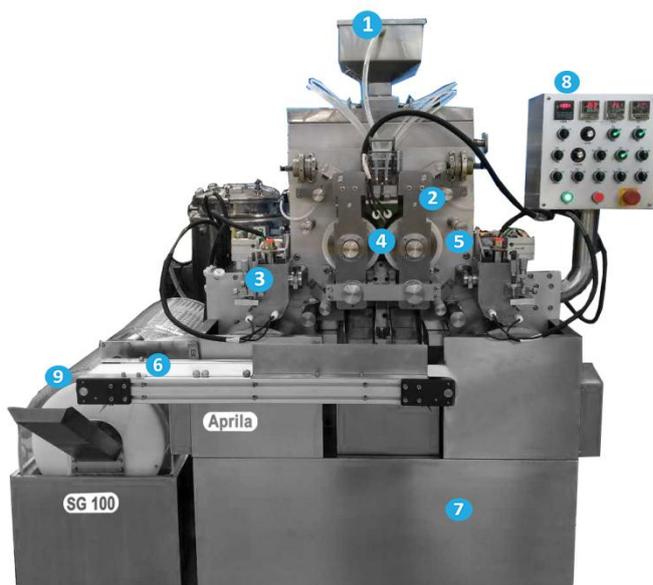
Features:

- Up to 31,500 pcs/hour(8# OVAL 4PRM)
- Operating speed up to 5RPM
- Die roll $\phi 150 \times 100$ mm AL7075 Dura Aluminum fabrication
- Teflon coated brass machine injection wedge
- Suitable for use in pharmaceutical, food and recreational industries
- Color touchscreen control provides easy production
- Capsule discharge and conveying system
- Tumble dryer system

Production Estimates:

Size/Shape	Cavities	Output Per Hour (@ 4 RPM)
6 Oval	180	32400
8 Oval	175	31500
10 Oval	170	30600
8 Oblong	164	29520
20 Oblong	102	18360
6 Round	272	48960
40 Round	110	19800

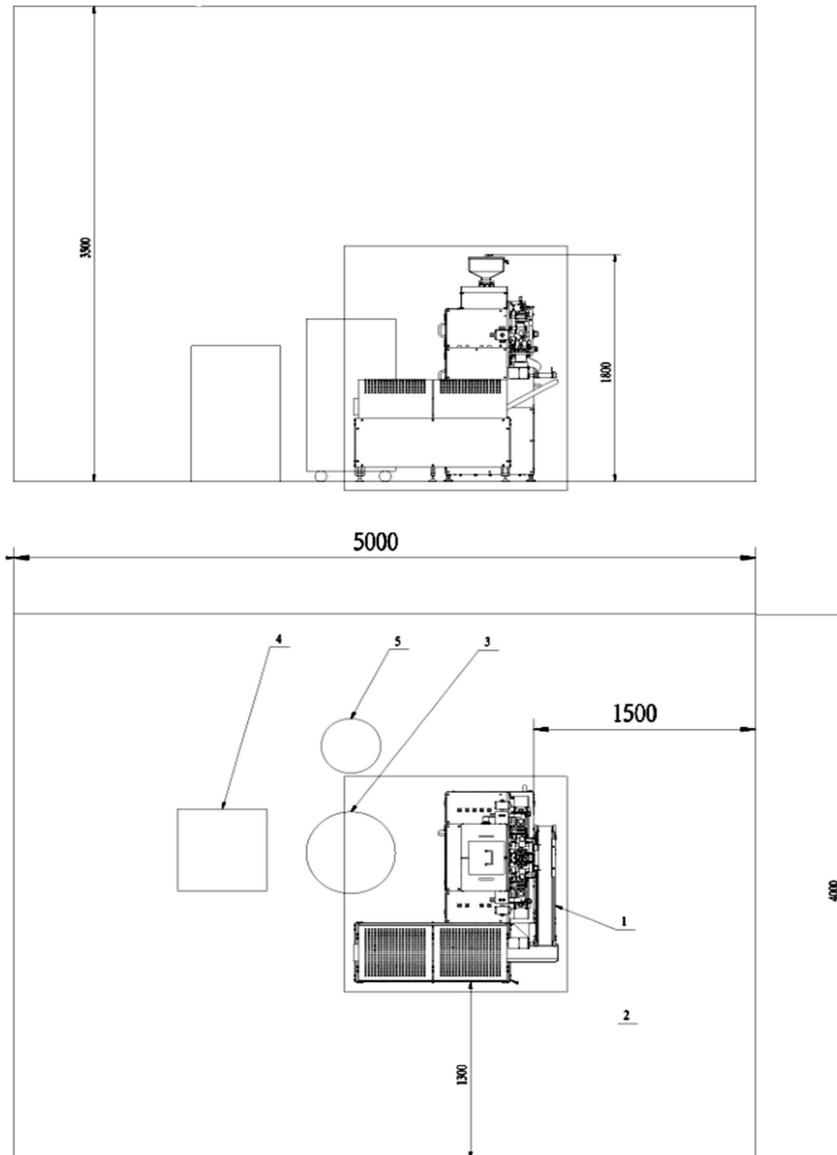
Production rates may vary depending on machine speed, fill material viscosity, and operator experience.



Machine Components:

- 1 Medicine pump
- 2 Wedge
- 3 Spreader box
- 4 Die roll
- 5 Lubrication roller
- 6 Mangle conveyor
- 7 Main body
- 8 Button control panel
- 9 Tumble dryer

Dimensions:



Technical Data	Aprila SG 100
Mold Sizes (mm)	φ150 x 100
Speed	Up to 5 RPM
Capacity (8# OVAL 4PRM)	31,500 pcs/h
Power	220V/380V,50/60Hz,3 Phase,2.5 Kw
Machine Dimensions (mm)	1800x900x1750
Weight	650 kgs
Tumble Dryers	2

Chilling System

The chilling unit is modular to fit your available floor space.

Refrigeration capacity: 5.28Kw

Power: 220 V 50 Hz 1P 2.27Kw

Dimensions: 580x550x925mm

Weight: 100Kg



Gel Melter

450 liter capacity gelatin melting and mixing tank is made from all stainless steel construction with sanitary stainless steel valves and clamps, a triple wall jacket with breather.

Volume: 450L

Temperature: <100 °C

Power: 4kW

Mix speed: 51rpm

Dimensions: ϕ 1200x2200

Weight: 1300Kg



Drying Trays

The softgels come out of the tumble dryers and are placed on paper lined drying trays. The trays are then stacked on dollies and pushed into drying tunnels.

Dimensions: 750x 475x55mm



Tumble Dryers

Each tumble dryer has been designed to provide fast and easy drying of a softgel capsule, stability of machine operation, user convenience, and safety.

Quantity of tumbler:2

Tumbler size: ϕ 316x417mm

Power supply: 380 V 50 Hz 3P

Dimensions: 1400x450x800mm

Weight: 90 Kg



Softgel Tooling

The Softgel tooling is custom made to meet your needs with a 2-week turnaround. It features harder aircraft grade aluminum, colored timing marks, and "bead blasting" to minimize gel adhesion.

Complete set includes:

- 2 die rolls with stainless steel inserts
- Teflon ceramic coated aluminum wedge
- Solid Teflon distribution plate
- Industrial, compact storage case
- Timing gear



Softgel Encapsulation System

Large Standard & Vgel Production

The SainityCo **Aprila SG200** softgel production system is a new medium capacity model. With speeds up to 5 RPM and production volumes up to 64,800 softgels per hour @ 8 Oval 4 RPM. And it gives you the ability to produce both standard gelatin as well as popular vgel plant based gelatin softgels.

Vgel & Standard Gelatin
Medium Scale Production
Touch Screen Operated



Aprila SG 200

Features:

- Up to 64,800 pcs/hour(8# OVAL 4RPM)
- Operating speed up to 5RPM
- Die roll $\phi 125 \times 200$ mm AL7075 Dura Aluminum fabrication
- Teflon coated brass machine injection wedge
- Suitable for use in pharmaceutical, food and recreational industries
- Color touchscreen control provides easy production
- Capsule discharge and conveying system
- Tumble dryer system

Production Estimates:

Size/Shape	Cavities	Output Per Hour (@ 4 RPM)
6 Oval	290	69600
8 Oval	270	64800
10 Oval	234	56160
8 Oblong	264	63360
20 Oblong	162	38880
6 Round	364	87360
40 Round	190	45600

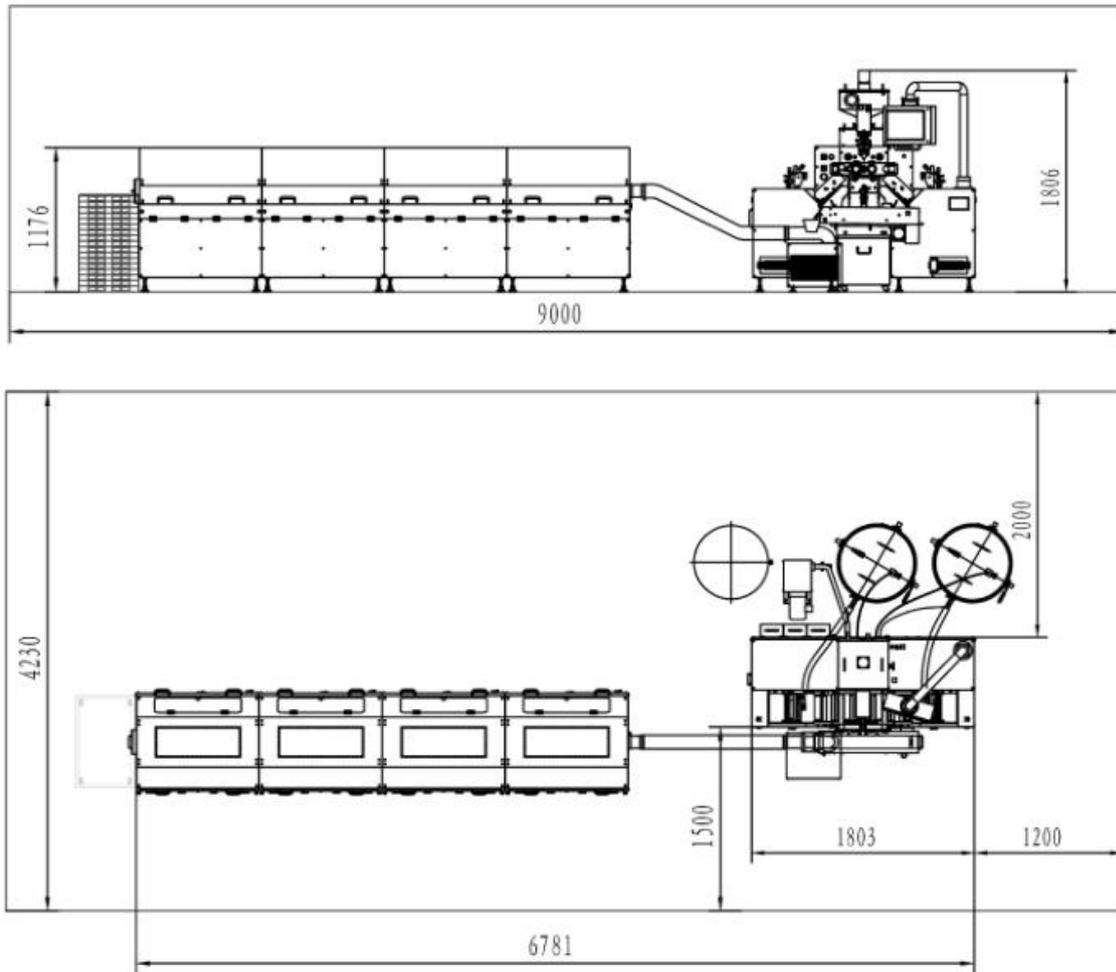
Production rates may vary depending on machine speed, fill material viscosity, and operator experience.



Machine Components:

- ① Medicine pump
- ② Wedge
- ③ Spreader box
- ④ Die roll
- ⑤ Lubrication roller
- ⑥ Mangle conveyor
- ⑦ Main body
- ⑧ Color touchscreen
- ⑨ Tumble dryer

Dimensions:



Technical Data	Aprila SG 200
Mold Sizes (mm)	φ125 x 200
Speed	Up to 5 RPM
Capacity (8# OVAL 4RPM)	64,800 pcs/h
Power	220V/380V,50/60Hz,3 Phase,2.5 Kw
Machine Dimensions (mm)	1800x1050x1800
Weight	1300 kgs
Tumble Dryers	4

Chilling System

The chilling unit is modular to fit your available floor space.

Refrigeration capacity: 7.91Kw

Power: 220 V 50 Hz 1P 3.33Kw

Dimensions: 930x520x975mm

Weight: 135Kg



Gel Melter

600 liter capacity gelatin melting and mixing tank is made from all stainless steel construction with sanitary stainless steel valves and clamps, a triple wall jacket with breather.

Volume: 600L

Temperature: <100 °C

Power: 5.5Kw

Mix speed: 51rpm

Dimensions: φ1300x2200

Weight: 1400Kg



Drying Trays

The softgels come out of the tumble dryers and are placed on paper lined drying trays. The trays are then stacked on dollies and pushed into drying tunnels.

Dimensions: 750x 475x55mm



Tumble Dryers

Each tumble dryer has been designed to provide fast and easy drying of a softgel capsule, stability of machine operation, user convenience, and safety.

Quantity of tumbler: 4

Tumbler size: φ580x900mm

Power supply: 380 V 50 Hz 3P, 4Kw

Dimensions: 4100x880x1200mm

Weight: 1200 Kg



Softgel Tooling

The Softgel tooling is custom made to meet your needs with a 2-week turnaround. It features harder aircraft grade aluminum, colored timing marks, and "bead blasting" to minimize gel adhesion.

Complete set includes:

- 2 die rolls with stainless steel inserts
- Teflon ceramic coated aluminum wedge
- Solid Teflon distribution plate
- Industrial, compact storage case
- Timing gear



Softgel Encapsulation System

Large Standard & Vgel Production

The SaintyCo **Aprila SG 250** softgel production system to satisfy customer varying output requirements-ranging from smaller systems to support first time start-up operators to large scale production needing the worlds fastest softgel encapsulator. With speeds up to 5 RPM and production volumes up to 109,200 softgels per hour @ 8 Oval 4 RPM base on oil.



The **Aprila SG 250** softgel production system is an industry standard for large scale softgel production. And it gives you the ability to produce both standard animal gelatin as well as popular vgel plant based gelatin softgels.

Vgel & Standard Gelatin
Large Scale Production
Touch Screen Operated



Aprila SG 250

Features:

- Up to 109,200 pcs/hour(8# OVAL 4PRM)
- Operating speed up to 5RPM
- Die roll $\phi 150 \times 250$ mm AL7075 Dura Aluminum fabrication
- Teflon coated brass machine injection wedge
- Suitable for use in pharmaceutical, food and recreational industries
- Color touchscreen control provides easy production management

Production Estimates:

Size/Shape	Cavities	Output Per Hour (@ 4 RPM)
6 Oval	504	120960
8 Oval	455	109200
10 Oval	408	97920
8 Oblong	410	98400
20 Oblong	238	57120
6 Round	680	163200
40 Round	286	68640

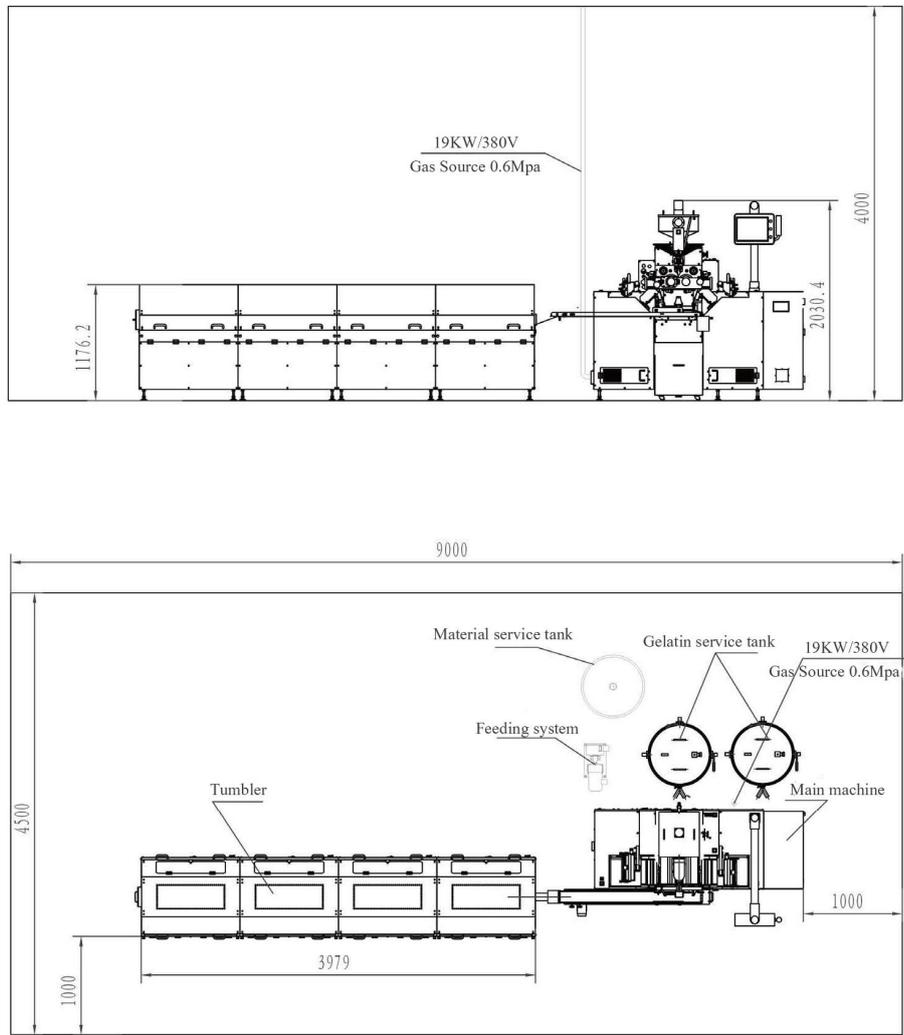
Production rates may vary depending on machine speed, fill material viscosity, and operator experience.



Machine Components:

- ① Medicine pump
- ② Wedge
- ③ Spreader box
- ④ Die roll
- ⑤ Lubrication roller
- ⑥ Mangle conveyor
- ⑦ Softgel transfer conveyor
- ⑧ Main body
- ⑨ Color touchscreen

Dimensions:



Technical Data	Aprila SG 250
Mold Sizes (mm)	Φ150 x 250
Speed	Up to 5 RPM
Capacity (8# OVAL 4RPM)	109,200 pcs/h
Power	220V/380V,50/60Hz,3 Phase,19 Kw
Machine Dimensions (mm)	2050x1200x1850
Weight	1900 kgs
Tumble Dryers	4

Chilling System

The chilling unit is modular to fit your available floor space.

Refrigeration capacity: 7.91Kw

Power: 220 V 50 Hz 1P 3.33Kw

Dimensions: 930x 520x975mm

Weight: 135Kg



Gel Melter

600 liter capacity gelatin melting and mixing tank is made from all stainless steel construction with sanitary stainless steel valves and clamps, a triple wall jacket with breather.

Volume: 600L

Temperature: <100 °C

Power: 5.5Kw

Mix speed: 51rpm

Dimensions: ϕ 1300x2200

Weight: 1400Kg



Drying Trays

The softgels come out of the tumble dryers and are placed on paper lined drying trays. The trays are then stacked on dollies and pushed into drying tunnels.

Dimensions: 750x475x55mm



Tumble Dryers

Each tumble dryer has been designed to provide fast and easy drying of a softgel capsule, stability of machine operation, user convenience, and safety.

Quantity of tumbler: 4

Tumbler size: ϕ 580x900mm

Power supply: 380 V 50 Hz 3P, 4Kw

Dimensions: 4100x880x1200mm

Weight: 1200 Kg



Softgel Tooling

The Softgel tooling is custom made to meet your needs with a 2-week turnaround. It features harder aircraft grade aluminum, colored timing marks, and "bead blasting" to minimize gel adhesion.

Complete set includes:

- 2 die rolls with stainless steel inserts
- Teflon ceramic coated aluminum wedge
- Solid Teflon distribution plate
- Industrial, compact storage case
- Timing gear



Soft Capsule Size&Shape

Oblong	 3 Oblong minims : 2.3 - 3.0 cc : 0.142 - 0.185	 4 Oblong minims : 3.0 - 4.0 cc : 0.185 - 0.246	 5 Oblong minims : 4.0 - 5.0 cc : 0.246 - 0.308	 6 Oblong(2) minims : 5.0 - 6.0 cc : 0.308 - 0.370	 8 Oblong minims : 6.5 - 8.0 cc : 0.400 - 0.493	
	 9½ Oblong minims : 7.5 - 9.5 cc : 0.462 - 0.585	 11 Oblong(1) minims : 8.5 - 11.0 cc : 0.524 - 0.678	 11 Oblong(3) minims : 8.5 - 11.0 cc : 0.524 - 0.672	 14 Oblong minims : 12.5 - 14.0 cc : 0.770 - 0.862		
	 16 Oblong minims : 14.5 - 16.0 cc : 0.862 - 0.986	 20 Oblong minims : 16.0 - 20.0 cc : 0.986 - 1.232	 22 Oblong minims : 18.0 - 22.0 cc : 1.109 - 1.355	 24 Oblong minims : 20.0 - 24.0 cc : 1.232 - 1.478		
Round	 1 Round minims : 0.75 - 1.0 cc : 0.046 - 0.062	 2 Round minims : 1.2 - 2.0 cc : 0.074 - 0.124	 3 Round minims : 2.2 - 3.0 cc : 0.136 - 0.185	 4 Round minims : 2.8 - 4.0 cc : 0.172 - 0.246	 5 Round minims : 3.2 - 5.0 cc : 0.197 - 0.308	
	 6 Round minims : 4.6 - 6.0 cc : 0.283 - 0.370	 7 Round minims : 5.0 - 7.0 cc : 0.308 - 0.431	 9 Round minims : 7.0 - 9.0 cc : 0.431 - 0.554	 15 Round minims : 12.0 - 15.0 cc : 0.740 - 0.925	 20 Round minims : 15.0 - 20.0 cc : 0.925 - 1.230	
Oval	 2 Oval minims : 1.5 - 2.3 cc : 0.092 - 0.142	 3 Oval minims : 2.4 - 3.0 cc : 0.148 - 0.185	 4 Oval minims : 3.1 - 4.0 cc : 0.191 - 0.246	 4 Oval(2) minims : 3.1 - 4.0 cc : 0.191 - 0.246	 5 Oval minims : 4.3 - 5.0 cc : 0.265 - 0.308	 6 Oval minims : 5.2 - 6.0 cc : 0.320 - 0.370
	 7½ Oval minims : 6.2 - 7.5 cc : 0.382 - 0.642	 8½ Oval minims : 7.0 - 8.5 cc : 0.431 - 0.524	 10 Oval minims : 7.5 - 10.0 cc : 0.462 - 0.616	 12 Oval minims : 8.3 - 12.0 cc : 0.511 - 0.739	 16 Oval minims : 12.4 - 16.0 cc : 0.764 - 0.986	 20 Oval minims : 17.0 - 20.0 cc : 1.047 - 1.232
Tubs	 8 Tubs minims : 6.0 - 8.0 cc : 0.370 - 0.493		 17½ Tubs minims : 15.0 - 17.0 cc : 0.924 - 1.047			
	 30 Tubs(1) minims : 27.0 - 32.0 cc : 1.663 - 1.971		 10 Suppository minims : 7.0 - 10.0 cc : 0.430 - 0.620	 17 Suppository(1) minims : 15.0 - 20.0 cc : 0.924 - 1.232	Suppository	 8 Twist-off 493ml
				Twist-off		

Auxiliary Support Equipment

GMV Gelatin Melting System



Model	GMV-450	GMV-600	GMV-800	GMV-1000
Melting Volume	100-450L	150-600L	200-800L	300-1000L
Volume	650L	900L	1100L	1300L
Heating area	3.2m ²	4m ²	4.8m ²	5.5m ²
Vacuum degree	Less than 0.09mpa			
Temperature	Less than 100℃			
Power	4kw	5.5kw	7.5kw	7.5kw
Mix speed	51rpm	51rpm	51rpm	51rpm
Tank weight	1300kgs	1400kgs	1500kgs	1600kgs
Tank dimension	Φ1200x2200mm	Φ1300x2200mm	Φ1400x2200mm	Φ1500x2200mm

GMV Moving Gelatin Melting Tank



Model	GMV-100	GMV-150	GMV-200
Melting Volume	50-100L	75-150L	100-200L
Volume	120L	180L	250L
Vacuum degree	Less than 0.09mpa		
Temperature	Less than 100℃		
Motor power	0.75kw	1.1kw	2.2kw
Heating	4kw	4kw	5kw
Mix speed	51rpm	51rpm	51rpm
Tank dimension	Φ600x1380mm	Φ600x1580mm	Φ700x1680mm

GST Gelatin Service Tank



Model	GST-100	GST-200	GST-300
Volume	100L	200L	300L
Temperature	< 100℃	< 100℃	< 100℃
Pressure	< 0.05Mpa	< 0.05Mpa	< 0.05Mpa
Power supply	220V/60HZ 1.5KW	220V/60HZ 2KW	220V/60HZ 2.5KW
Dimension	Φ550x1210 mm	Φ700x1330 mm	Φ800x1370 mm

Auxiliary Support Equipment

FMV Medicine Mixing Tank



Model	FMV-300	FMV-500	FMV-800	FMV-1000
Volume	100-300L	200-500L	200-800L	200-1000L
Heating area	2.8m ²	3.2m ²	4.8m ²	5.5m ²
Temperature	Less than 100℃	Less than 100℃	Less than 100℃	Less than 100℃
Power	2.2kw	4kw	5.5kw	5.5kw
Mix speed	51rpm	51rpm	51rpm	51rpm
Tank weight	1100kgs	1300kgs	1400kgs	1500kgs
Tank dimension	Φ1000x2100mm	Φ1200x2300mm	Φ1300x2450mm	Φ1300x2650mm

FMV-V Vacuum Medicine Mixing Tank



Model	FMV-V-300	FMV-V-500	FMV-V-800	FMV-V-1000
Volume	100-300L	200-500L	200-800L	200-1000L
Heating area	2.8m ²	3.2m ²	4.8m ²	5.5m ²
Temperature	Less than 100℃	Less than 100℃	Less than 100℃	Less than 100℃
Power	2.2kw	4kw	5.5kw	5.5kw
Mix speed	51rpm	51rpm	51rpm	51rpm
Tank weight	1300kgs	1400kgs	1500kgs	1600kgs
Tank dimension	Φ1100x2100mm	Φ1200x2300mm	Φ1400x2450mm	Φ1500x2650mm

MST Medicine Service Tank



Model	MST-100	MST-150	MST-200
Volume	100L	150L	200L
Temperature	< 100℃	< 100℃	< 100℃
Pressure	< 0.05Mpa	< 0.05Mpa	< 0.05Mpa
Power supply	220V/60HZ 1.5KW	220V/60HZ 1.5KW	220V/60HZ 2KW
Dimension	Φ550x1210 mm	Φ600x1330 mm	Φ700x1330 mm

Auxiliary Support Equipment

FCM-1 Color Mixer



Model	FCM-1
Capacity	800 kgs/h
Mixing power	7.5 kw
Mixing speed	0-1500 rpm
Power supply	380V/60HZ, 3 Phase
Dimension	1100x700x2400 mm

VM Vacuum Mixer



Model	VM-150	VM-200	VM-300
Volume	150 L	200 L	300 L
Vacuum degree	< 0.09 Mpa	< 0.09 Mpa	< 0.09 Mpa
Cutting power	3 KW	4 KW	4 KW
Cutting speed	0-1500 RPM	0-1500 RPM	0-1500 RPM
Mixing power	1.5 KW	1.5 KW	2.2 KW
Mixing speed	50 RPM	50 RPM	50 RPM
Electric heater	4 KW, 380V, 3 Phase	5 KW, 380V, 3 Phase	6 KW, 380V, 3 Phase
Dimension	1580x860x2100 mm	1600x860x2150 mm	17100x860x2200 mm

SP-200 Softgel Pulverizer



Model	SP-200
Capacity	60 kgs/hour
Grind speed	960 RPM
Net weight	80 kgs
Power supply	220V/60HZ 1.1KW
Dimension (LxWxH, mm)	Φ510x1200

Auxiliary Support Equipment

S-12 Softgel Sorting Machine



Model	S-12
Sorting Size Range	0-25 mm
Sorting Precision	Dia. +/- 0.1 mm; thickness: +/- 0.05 mm
Capacity	Max. 30000 pcs/hour
Sorting Roller Qty	12 pcs (6 sorting ways)
Size of sorting roller	Dia 45 mm; Length 910 mm
Power supply	220V/60HZ 0.5KW
Dimension (LxWxH)	1650x1000x1750mm

I-500 Inspection Machine



Model	I-500
Application	Inspection of hard or soft capsules plain or coated tablets and other round or cylindrical objects.
Min Tablet Thickness	3mm
Output	Up to 120, 000 capsules/h
Feed hopper	30 L
Electrical Connection	220V/50Hz, single phase
Power Input	0.6 kw
Compressed Air	0.6 MPa
Dimensions	1850 x 850 x 1315 mm
Weight	125 kg

TSP-1 Softgel Polishing Machine



Model	TSP-1
Internal diameter of basket	580 mm
Basket length	900 mm
Power	0.4 kw
Rotary speed	0-20 rpm
Basket quantity per section	2
Loading capacity per basket	> 20 kgs

Auxiliary Support Equipment

DSP-1 Softgel Polishing Machine



Model	DSP-1
Capacity	70 kgs/batch 5mins
Power	2.2 kw, 380V, 50Hz, 3 Phase
Rotary speed	0-30 rpm
Weight	320 kgs
Dimension	1700 x1000 x1700 mm

COMILL-1 Colloid Mill



Model	COMILL-1
Material Processing fineness	2-50µm
Capacity	50-500 kgs/h
Speed	2890 RPM
Power supply	220V/60HZ 4KW
Weight	190 kgs
Dimension	Ø450 x1136 mm

CTP Softgel Printing Machine



Model	CTP-1 Single side printing	CTP-2 Double side printing
Capacity	Any shape up 20000- 40,000 PCS/HR	
Compressed Air	40psi at 4SCFM continuous clean dry air (270Kpa at 0.0005m3/s)	
Power supply	220V 50Hz / 110V 60Hz 0.25KW	
Weight	120 kgs	
Dimension	610 x910 x640 mm	

SaintyCo also offer:

Encapsulation Solutions

Tablet Compression Solutions

Coating Systems

Cartoning Systems

Blister Packing Solutions

