

FORM-FILL-SEAL MACHINERY

ALWAYS A STEP AHEAD

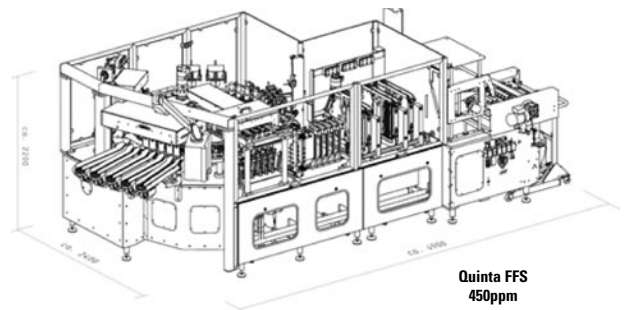
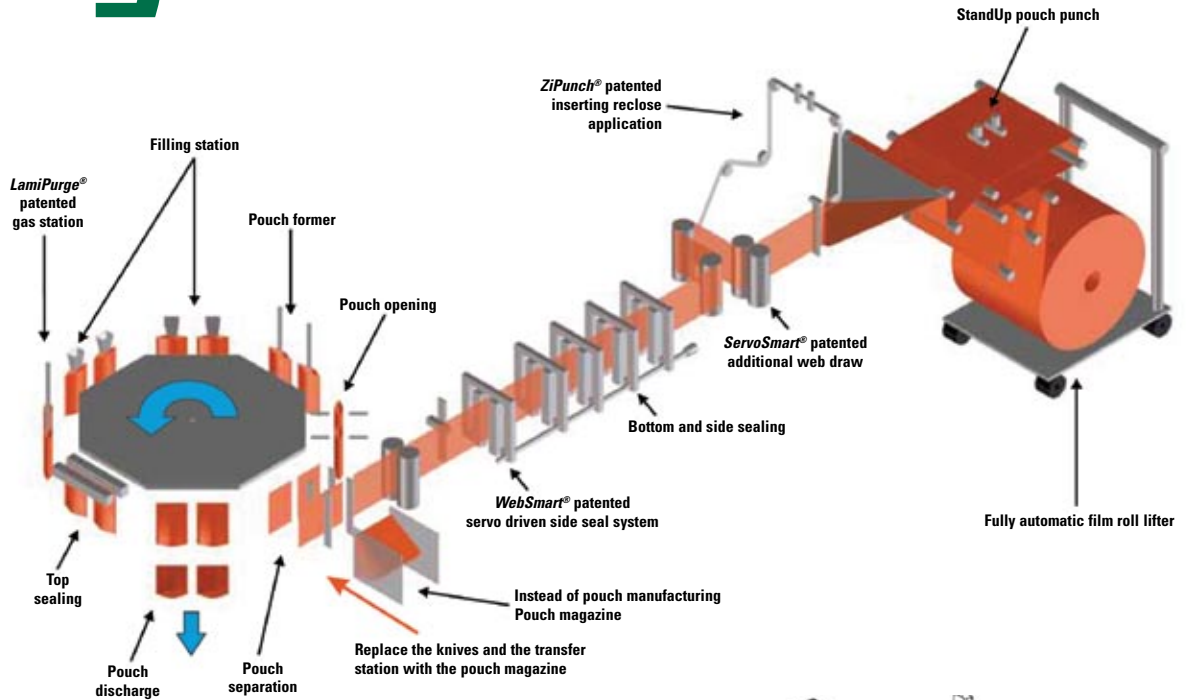
We are a leader in technology and innovations always focused on our customers needs. We remain close to our customers so that we can identify market needs and turn these into solutions.

ROBUST AND FLEXIBLE

All SN machines are designed for constant use, 24 hours a day, 365 days a year. Our machine efficiency is at 98%+! This gives you highest productivity over the shortest amortization time. Furthermore you will receive a customized machine that will produce at maximum efficiency for your product.

INTELLIGENT COST REDUCTION

We reduce your cost with our ideas and innovations. For example higher output (up to 450 ppm) usage of less expensive or thinner films (up to 20%) lower energy costs and faster format and product changes. These savings help pay for your machine!



POUCH PACKAGING FOR ALMOST ANY PRODUCT

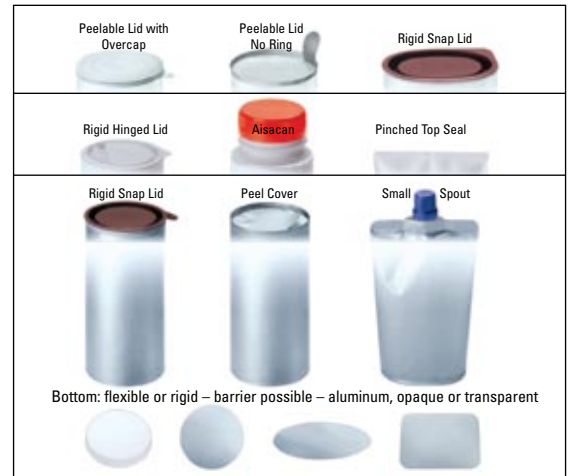
Almost anything is possible. Our SN machine concept is configured to package all kinds of products into pouches: granules, powder, pieces or liquids

MAXIMUM FLEXIBILITY

Our wide spectrum covers almost any application in pouch packaging – in the meantime we have developed the Quinta solution to produce 5 pouches in one stroke. Our machines are custom made to meet your ideas, demands and production requirements.

OUR PRODUCT RANGE

- FFS and FS machines (form-fill-seal and fill-seal)
- Pouch formats ranging from 1.57" x 1.97" to 11.8" x 13.78" (40 x 50 mm to 300 x 350 mm)
- Packaging speeds from 50 – 540 ppm
- Up to four fill stations for multifills or single components
- Different filling capabilities



3-Component
Dosage
Duplex Filling



Auger Filler



PPi Technologies GROUP and their joint venture partner **SN** offer the Huhtamaki developed **CYCLERO®** packaging concept. Cost effective **CYCLERO®** can be used for both liquids and dry products and are made using form-fill-seal technology on the **SN** rotary machinery.



Cyclero Fill-Seal or Form-Fill-Seal (Patented)

SN (Customized Innovation) FORM-FITMENT-FILL, DIECUT-SEAL POUCH MACHINERY

LDP
Dosing
Equipment



Form-Fitment-Fill
Three Side
Seal Pouch

- Economical
- 80 to 480 Pouches per minute
- Duplex to six-up
- Can have die-cut shape
- Heat seal or ultrasonic



Alternate IPN Fits



Form-Fitment
Fill-Seal
StandUp Pouch



Fitments supplied by Menshen

FBM es capaz de producir 80 bolsas por minuto. La gama de maquinaria SN puede producir bolsas con boquilla y de distintas formas y tamaños.



CELLPACK Corner Spout Pouch



DUO PAC™ Semi-Automatic Sealing Machine

Patented DUO PAC™ system



- Award winning patented DUO PAC™ dual pouch system.
- Available as either a fully automatic continuous module or semi-automatic DP module.
- DUO PAC™ can have an integral die cut handle feature for large dual pouch packs.
- Filled and sealed on **SN** FBM 20 and 22 form-fill-seal machinery. Can handle premade pouches.
- Reclosable zipper available.

Patent #5,954,432

THE COMPLETE POUCH PACKAGING RANGE

PILLOW POUCH

Pouch with three or four seals for high output. Mainly used in powder products

STANDUP POUCH

The standup pouch allows for large fill quantities. Press-to-close zipper and slider zipper offer reclosability

DOUBLE CHAMBER POUCH

Two pouches joined for double fill volumes or two different products. Also with perforation for separation of the pouches.



SN is the undisputed leader in almost every discipline of horizontal form-fill-seal rotary pouch machinery technology with these benefits:

- In-house ISO-9001 manufacturing plant (ensures accurate, timely component supply and quality)
- Flexibility in size (1.5" to 15" wide), weight (0.5 oz to 5 lb) at speeds up to 540 ppm
- Rapid change-over using *EZ Change™* Cassettes, high productivity and operating efficiency
- Only machine program to offer Simplex, Duplex, patented *TRIPLEX™*, *QUADRO™* and *QUINTA* (including 6 and 8) multi-up format solutions for both form-fill-seal and fill-seal processes
- Compact footprint, rotary design utilizing double bag clamps for positive pouch control with *ServoSmart™* system.
- USDA/3A approved models.

New small footprint SN models for StandUp and press-to-close zipper pouches include:

- *ServoSmart™* Technology including *DuoSmart™* secondary roll for registration control, *AdjustSmart™* for fast on-the-go adjustments, *WebSmart™* for film feed control, *WeighSmart™* turret and scale communication system.
- *ZiPunch™* patented zipper system for removal of excess zipper profile in the key side seals allows less material
- *Smart Technology* machine for modern membrane twin compartment pouches
- Horizontal twin frangible seal compartments for easy product fills
- One- or two-roll feed machinery
- Auger or liquid fillers or slide dosers
- Twin pouch grippers

FORMADO LLENADO Y SELLADO - SN es líder indiscutible en casi todas las disciplinas de formado, llenado y sellado horizontal de bolsas. A velocidades asombrosas, Laudenberg tiene un nuevo modelo mas pequeño FBM 04, para bolsas con cremallera de cierre a presión.



SHAPED POUCH

The shape, depending on product, will be cut during pouch production or offline. This is an ideal pouch for brand identity.

STAND-UP POUCH WITH SPOUT

The practical reclosable liquid pouch with center or corner fitment and screw cap

PAPER SEED POUCH

The classic paper seed pouch with folded and glued tabs and with hang hole

FILM SEED POUCH

Robust side seal pouch made from film with optimal moisture barrier for seeds

STERILE "GERM FREE" SEED POUCH

To prevent the germination of the seeds the seeds are packed in an additional inner pouch

AS NEW

Our machines have been developed and optimized for extended life span. If required, your existing machine can be modified and rebuilt. For overhauls, we can integrate the latest technologies and innovations, giving you access to the latest technologies. Our general overhaul and modernization leads to a second and third life for your machines. For all our **SN** machines that have had an overhaul we give the same guarantee as our new machines.



FM 1



FBM 22



FBM 33



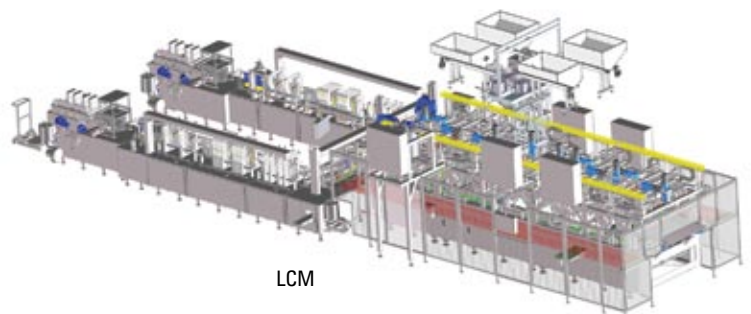
FBM 71



LBV 20



StandUp Pouches with Reclosable Zipper Feature



LCM

Specifications	FM1 SIMPLEX	FM1 DUPLEX
Pouch size [mm]	Width 40-180 Length 50-250	Width 40-90 Length 50-210
Machine output [pouches/min]	up to 120 *	up to 240 *
Packing material	sealable laminated film	
Safety equipment	Acc. to the international safety regulations e.g. CE, UL, CSA, OSHA	
Electricity power [kVA]	ca. 15 - 20 **	
Air consumption	ca. 550 NI/min, 6 bar **	ca. 650 NI/min, 6 bar **
Machine dimensions LxWxH [mm]	ca. 3.770 x 1.240 x 2.100 **	

sn TECHNICAL SPECIFICATIONS

NOTES:
 Electricity Supply: 3 x 400/230V + N + PE, 50/60 HZ (for all)
 Voltage [V] 400 / 230 / 24 (for all)
 * Output depends on filling characteristics and pouch size
 ** Depending on configuration
 *** 120 possible by Inquiry

Specifications	FM1 Combi			FM1 FS
Pouch size [mm]	Reel SIMPLEX Width 40-180 Length 50-250	Reel DUPLEX Width 40-90 Length 50-210	Magazine SIMPLEX Width 70-180 Length 80-210	Magazine SIMPLEX Width 70-180 Length 80-210
Machine output [pouches/min]	up to 120 *	up to 240 *	up to 80 *	up to 80 *
Packing material	all commercial heat sealable foils and laminated papers on a coil and laminated film on roll, or premade pouches and paperbags, membrane pouches			premade pouches of heat sealable foils or papers
Safety equipment	Acc. to the international safety regulations e.g. CE, UL, CSA, OSHA			
Electricity power [kVA]	ca. 15 - 20 **			
Air consumption	ca. 550 NI/min, 6 bar **	ca. 650 NI/min, 6 bar **	ca. 550 NI/min, 6 bar **	ca. 550 NI/min, 6 bar **
Machine dimensions LxWxH [mm]	ca. 3.770 x 1.240 x 2.100 **			ca. 2.700 x 1.240 x 2.100 **

Specifications	FBM S1 SIMPLEX	FBM D2 DUPLEX
Pouch size [mm]	Width 40-180 Length 50-210	Width 40-90 Length 50-210
Machine output [pouches/min]	up to 100 *	up to 200 *
Packing material	sealable laminated film	
Construction	Standard to process dry products Optional wash down construction	
Safety equipment	Acc. to the international safety regulations e.g. CE, UL, CSA, OSHA	
Electricity power [kVA]	ca. 5 - 7.5 **	
Air consumption	ca. 300 NI/min, 6 bar **	
Machine dimensions LxWxH [mm]	ca. 2.550 x 1.150 x 2.100 **	

Specifications	FBM071 135 SIMPLEX	FBM071 225 DUPLEX
Pouch size [mm]	Width 50-254 Length 80-350	Width 40-114 *** Length 80-250
Machine output [pouches/min]	up to 100 *	up to 200 *
Packing material	sealable laminated film	
Construction	Standard to process dry products Optional wash down construction	
Safety equipment	Acc. to the international safety regulations e.g. CE, UL, CSA, OSHA	
Electricity power [kVA]	ca. 7.5 - 10 **	
Air consumption	ca. 550 NI/min, 6 bar **	ca. 650 NI/min, 6 bar **
Machine dimensions LxWxH [mm]	ca. 4.800 x 1.950 x 2.100 **	

Specifications	LMS120 135 SIMPLEX	LMS120 235 DUPLEX
Pouch size [mm]	Width 50-180 Length 80-350	Width 50-90 Length 80-350
Machine output [pouches/min]	up to 60 *	up to 120 *
Packing material	sealable laminated film	
Safety equipment	Acc. to the international safety regulations e.g. CE, UL, CSA, OSHA	
Electricity power [kVA]	ca. 15 - 20 **	
Air consumption	ca. 550 NI/min, 6 bar **	ca. 650 NI/min, 6 bar **
Machine dimensions LxWxH [mm]	ca. 6.650 x 2.020 x 2.100 **	

Specifications	LBV20 225 SIMPLEX	LBV050 125 DUPLEX
Pouch size [mm]	Width 80-120 Length 60-250	Width 50-180 Length 60-250
Machine output [pouches/min]	80	40
Packing material	sealable laminated film	
Safety equipment	Acc. to the international safety regulations e.g. CE, UL, CSA, OSHA	
Electricity power [kVA]	ca. 23 **	ca. 12 **
Air consumption	ca. 1.900 NI/min, 6 bar **	ca. 1.300 NI/min, 6 bar **
Machine dimensions LxWxH [mm]	ca. 8.000 x 5.200 x 2.300 **	ca. 7.400 x 3.600 x 2.200 **

Specifications	FBM20 135 SIMPLEX	FBM20 225 DUPLEX	FMB22 135 SIMPLEX	FMB22 225 DUPLEX	FMB22 235 DUPLEX
Pouch size [mm]	Width 100-300 Length 120-350	Width 80-150 Length 120-250	Width 120-350 Length 120-350	Width 120-190 Length 100-250	Width 120-190 Length 100-350
Machine output [pouches/min]	up to 100 *	up to 200 *	up to 100 *	up to 200 *	up to 200 *
Packing material	sealable laminated film				
Construction	Standard to process dry products. Optional wash down construction.				
Safety equipment	Acc. to the international safety regulations e.g. CE, UL, CSA, OSHA				
Electricity power [kVA]	ca. 15 - 10 **				
Air consumption	ca. 600 NI/min, 6 bar **				
Machine dimensions LxWxH [mm]	ca. 6.100 x 2.050 x 2.200 **		ca. 6.100 x 2.350 x 2.200 **		

Specifications	FBM30 321 TRIPLEX	FBM33 325 TRIPLEX	FBM40 416 QUADRO	FBM44 421 QUADRO
Pouch size [mm]	Width 50-93 Length 70-210	Width 80-115 Length 120-250	Width 40-72 Length 70-160	Width 70-93 Length 80-210
Machine output [pouches/min]	up to 300 *	up to 300 *	up to 400 *	up to 400 *
Packing material	sealable laminated film			
Construction	Standard to process dry products. Optional wash down construction.			
Safety equipment	Acc. to the international safety regulations e.g. CE, UL, CSA, OSHA			
Electricity power [kVA]	ca. 15-20 **			
Air consumption	ca. 650 NI/min, 6 bar **		ca. 500 NI/min, 6 bar **	
Machine dimensions LxWxH [mm]	ca. 6.100 x 2.350 x 2.200 **			

Specifications	FM 115 SIMPLEX	FM 215 DUPLEX	FM 315 TRIPLEX	FM 415 QUADRO	FM 515 QUINTA
Pouch size [mm]	Width 100-470 Length 120-350	Width 100-215 Length 120-350	Width 80-130 Length 100-250	Width 70-110 Length 90-250	Width 40-80 Length 60-210
Machine output [pouches/min]	up to 90 *	up to 180 *	up to 270 *	up to 360 *	up to 450 *
Packing material	sealable laminated film				
Construction	Standard to process dry products. Optional wash down construction.				
Safety equipment	Acc. to the international safety regulations e.g. CE, UL, CSA, OSHA				
Electricity power [kVA]	ca. 10 - 30 **				
Air consumption	ca. 700 NI/min, 6 bar **				
Machine dimensions LxWxH [mm]	ca. 4.900 x 2.400 x 2.200 **				

Specifications	LCM 508 FFS	LCM 506 FFS	LCM 504 FFS	LCM 508 FS	LCM 506 FS	LCM 504 FS
Pouch size [mm]	Width 80-115 Length 80-350	Width 80-165 Length 80-350	Width 80-270 Length 80-350	Width 80-115 Length 80-350	Width 80-165 Length 80-350	Width 80-270 Length 80-350
Machine output [pouches/min]	up to 500 *	up to 375 *	up to 250 *	up to 400 *	up to 300 *	up to 200 *
Packing material	sealable laminated film					
Construction	Standard to process dry products. Wash down construction.					
Safety equipment	Acc. to the international safety regulations e.g. CE, UL, CSA, OSHA					
Electricity power [kVA]	ca. 80 **	ca. 70 **	ca. 60 **	ca. 60 **	ca. 50 **	ca. 40 **
Air consumption	ca. 1.000 NI/min, 6 bar **					
Machine dimensions LxWxH [mm]	ca. 17.550 x 5.000 x 3.150 **			ca. 8.500 x 2.200 x 1.900 **		