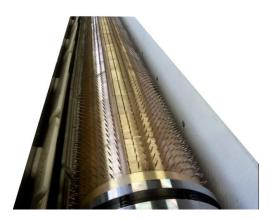
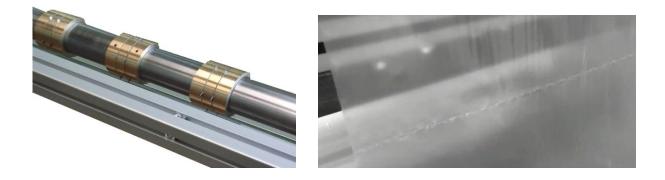


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HIGH SPEED MACRO PUNCHING SOLUTIONS

By macroperforation we are able to give to thermoplastic films the optimal properties for the packaging of products for both food and industrial use.

MOD. SM-CF - MOD. SM-CFL

C frame for holes on the edge of the film. It's possible to do a hole starting from diameter 3mm up to 50mm. with a throat from 100mm up to 400mm. It's possible to mount punches along the structure. Also a not completed cut hole can be done.

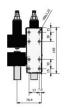


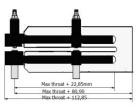
Features

Max material width	400mm
Max speed	250 meters per minute for elastic material and 120 for rigid material
Max Frequency	4800 holes per minute with a double- sided bridge
Diameter of the holes]	from 2mm up to 50mm
Shaped holes]	yes (handle, oval, earhole, etc.)
Not completed cut holes	Yes
Installation on	bag making machine, extruder, slitter, printing machine and so on
Holes on register	Yes
Encoder to synchronize the speed	Yes
Material that could be processed	PE, PP, paper, foam non-woven, coated material and so on
Pattern	linear, Zig zag and custom
Jo memory	Yes
Operator language	Yes
Easily set up punches across	Yes
User friendly software	Yes
remote assistance	Yes
Touch screen	Yes with predisposition 4.0











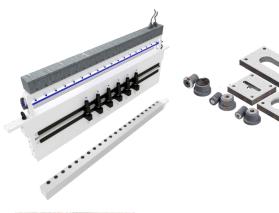


HIGH SPEED MACRO PUNCHING SOLUTIONS

By macroperforation we are able to give to thermoplastic films the optimal properties for the packaging of products for both food and industrial use.

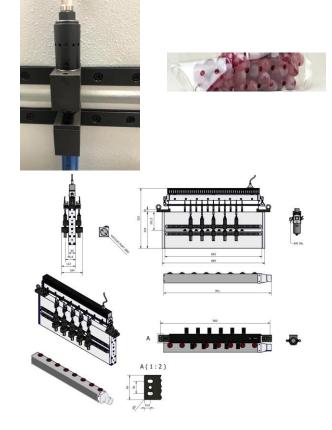
MOD. SM-SV - SM-SV2

Punching unit MOD. SM-SV - SM-SV2 are a slim solution usually suitable for installing on bag making machine, in case of tight space. The double bridge allows both twice the speed or holes narrower to each other.





Max material width	2000mm
Max speed	250 meters per minute for elastic material and 120 for rigid material
Max Frequency	4800 holes per minute with a double- sided bridge
Diameter of the holes]	from 2mm up to 50mm
Shaped holes]	yes (handle, oval, earhole, etc.)
Not completed cut holes	Yes
Installation on	bag making machine, extruder, slitter, printing machine and so on
Holes on register	Yes
Encoder to synchronize the speed	Yes
Material that could be processed	PE, PP, paper, foam non-woven, coated material and so on
Pattern	linear, Zig zag and custom
Jo memory	Yes
Operator language	Yes
Easily set up punches across	Yes
User friendly software	Yes
remote assistance	Yes
Touch screen	Yes with predisposition 4.0







HIGH SPEED MACRO PUNCHING SOLUTIONS

By macroperforation we are able to give to thermoplastic films the optimal properties for the packaging of products for both food and industrial use.

MOD. SM-SWV - MOD. SM-SWV2

Punching unit MOD. SM-SWV - SM-SWV2 are a very smart solution usually for installing on bag making machine, where both side units can be moved, using a handle wheel, thus moving at the same time all the punches without having to realigning them. The double bridge allows both twice the speed or holes narrower to each other.





Features

Max material width	3000mm	
Max speed	250 meters per minute for elastic material and 120 for rigid material	
Max Frequency	4800 holes per minute with a double- sided bridge	
Diameter of the holes]	from 2mm up to 50mm	J.:
Shaped holes]	yes (handle, oval, earhole, etc.)	
Not completed cut holes	Yes	
Installation on	bag making machine, extruder, slitter, printing machine and so on	
Holes on register	Yes	
Encoder to synchronize the speed	Yes	
Material that could be processed	PE, PP, paper, foam non-woven, coated material and so on	
Pattern	linear, Zig zag and custom	
Jo memory	Yes	
Operator language	Yes	
Easily set up punches across	Yes	
User friendly software	Yes	
remote assistance	Yes	
Touch screen	Yes with predisposition 4.0	
		-









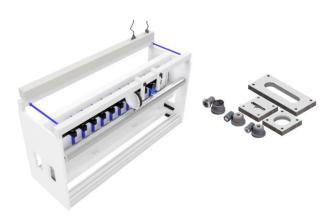


HIGH SPEED MACRO PUNCHING SOLUTIONS

By macroperforation we are able to give to thermoplastic films the optimal properties for the packaging of products for both food and industrial use.

MOD. SM-OV - SM-OV2

It's the perfect solution for high number of holes and high frequency. It can be installed on slitters, printing machines and extruders. It's equipped with idle rollers for material passage; the opening of the bridge facilitates easy thread up and die change. The double bridge allows both twice the speed or holes narrower to each other. Round, butterfly and or shaped holes can be done. Punches are easily moved in set-up. The structure is rigid, hard steel, coated and protected.

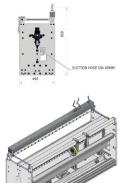


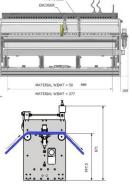
Features

Max material width	3000mm
Max speed	250 meters per minute for elastic material and 120 for rigid material
Max Frequency	4800 holes per minute with a double- sided bridge
Diameter of the holes]	from 2mm up to 50mm
Shaped holes]	yes (handle, oval, earhole, etc.)
Not completed cut holes	Yes
Installation on	bag making machine, extruder, slitter, printing machine and so on
Holes on register	Yes
Encoder to synchronize the speed	Yes
Material that could be processed	PE, PP, paper, foam non-woven, coated material and so on
Pattern	linear, Zig zag and custom
Jo memory	Yes
Operator language	Yes
Easily set up punches across	Yes
User friendly software	Yes
remote assistance	Yes
Touch screen	Yes with predisposition 4.0













HIGH SPEED MACRO PUNCHING SOLUTIONS

By macroperforation we are able to give to thermoplastic films the optimal properties for the packaging of products for both food and industrial use.

MOD. SM-OV - MOD. SM-OV2 TROLLEY

It's the perfect solution for high number of holes and high frequency. It's equipped with idle rollers for material passage; the opening of the bridge facilitates easy thread up and die change. The double bridge allows both twice the speed or holes narrower to each other. The structure is rigid, hard steel, coated and protected. MOD. SM-OV TROLLEY is equipped with the mobile trolley to move the unit. The operator can also easily carry out maintenance operations.

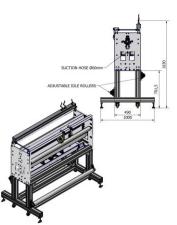


Features

Max material width	3000mm
Max speed	250 meters per minute for elastic material and 120 for rigid material
Max Frequency	4800 holes per minute with a double- sided bridge
Diameter of the holes]	from 2mm up to 50mm
Shaped holes]	yes (handle, oval, earhole, etc.)
Not completed cut holes	Yes
Installation on	bag making machine, extruder, slitter, printing machine and so on
Holes on register	Yes
Encoder to synchronize the speed	Yes
Material that could be processed	PE, PP, paper, foam non-woven, coated material and so on
Pattern	linear, Zig zag and custom
Jo memory	Yes
Operator language	Yes
Easily set up punches across	Yes
User friendly software	Yes
remote assistance	Yes
Touch screen	Yes with predisposition 4.0













Encod Mate



HIGH SPEED MACRO PUNCHING SOLUTIONS

By macroperforation we are able to give to thermoplastic films the optimal properties for the packaging of products for both food and industrial use.

MOD.SM-OV - SM-OV2 SOUNDPROOFED

It's the perfect solution for high number of holes and high frequency. It can be installed on slitters, printing machines and extruders. It's equipped with idle rollers for material passage; the opening of the bridge facilitates easy thread up and die change. The double bridge allows both twice the speed or holes narrower to each other. Round, butterfly and or shaped holes can be done. Punches are easily moved in set-up. The structure is rigid, hard steel, coated and protected. MOD. SM-OV SOUNDPROOFED is equipped with an acoustic shield to reduce sensibly the noise.





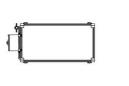


Max material width	3000mm
Max speed	250 meters per minute for elastic material and 120 for rigid material
Max Frequency	4800 holes per minute with a double- sided bridge
Diameter of the holes]	from 2mm up to 50mm
Shaped holes]	yes (handle, oval, earhole, etc.)
Not completed cut holes	Yes
Installation on	bag making machine, extruder, slitter, printing machine and so on
Holes on register	Yes
der to synchronize the speed	Yes
terial that could be processed	PE, PP, paper, foam non-woven, coated material and so on
Pattern	linear, Zig zag and custom
Jo memory	Yes
Operator language	Yes
Easily set up punches across	Yes
User friendly software	Yes
remote assistance	Yes
Touch screen	Yes with predisposition 4.0













HIGH SPEED MACRO PUNCHING SOLUTIONS

By macroperforation we are able to give to thermoplastic films the optimal properties for the packaging of products for both food and industrial use.

MOD. SM-MOV - MOD. SM.MOV2

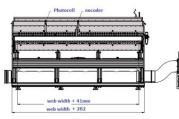
t's the perfect solution for doing big holes like for the mulching film. It's the strongest and the hardest structure. It's usually installed on extrusion lines. Is suitable for doing holes small and big holes at the same time. The opening of the bridge facilitates easy thread up and die change. The double bridge allows both twice the speed or holes narrower to each other.

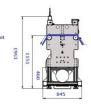


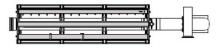
Max material width	4000mm
Max speed	150 meters per minute
Max Frequency	3000 holes per minute
Diameter of the holes]	from 2mm up to 100mm
Shaped holes]	yes (handle, oval, earhole, etc.)
Not completed cut holes	Yes
Installation on	bag making machine, extruder, slitter, printing machine and so on
Holes on register	Yes
Encoder to synchronize the speed	Yes
Material that could be processed	PE, Biodegradable material
Pattern	linear, Zig zag and custom
Jo memory	Yes
Operator language	Yes
Easily set up punches across	Yes
User friendly software	Yes
remote assistance	Yes
Touch screen	Yes with predisposition 4.0















SPARE PARTS PUNCHING UNIT

PUNCHING UNITS SPARE PARTS

We can offer spare parts of competitors' for punchiung units, like hammers and dies and so on.



Features

Installation on our spare parts can be mounted on competitors' punching units











HIGH SPEED COLD & HOT NEEDLE PERFORATION

By microperforation we are able to give to thermoplastic films the optimal properties for the packaging of products for both food and industrial use.

MOD. SM-CMS

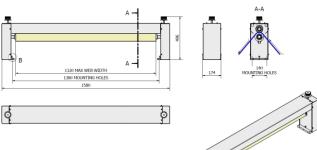
The Cold needle perforation is a mechanical perforation where the material is only pushed aside and not melted by heating. This generally results in the hole partially re-closing after perforation, which offers some advantages when trying to permit only one-way passage of a liquid or solid through the hole. The back-up pressure roller could be in natural fibre (brush) or rubber according to the material to be processed. Our Mod. SM-CMS is our basic unit where the density of the pins is not too high.



Features

Max material width	1600mm
Max speed	200 meters per minute
Density of the holes	High and low denisty of holes
Installation on	bag making machine, extruder, slitter, printing machine and so on
Material that could be processed	PE, PP, paper, foam non-woven, coated material and so on
Pneumatic device for adjusting the depth of the pins	Yes









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e-mail: rosanna@punchandpin.com



Mat



HIGH SPEED COLD & HOT NEEDLE PERFORATION

By microperforation we are able to give to thermoplastic films the optimal properties for the packaging of products for both food and industrial use.

MOD. SM-CMM

The Cold needle perforation is a mechanical perforation where the material is only pushed aside and not melted by heating. This generally results in the hole partially re-closing after perforation, which offers some advantages when trying to permit only one-way passage of a liquid or solid through the hole. The back-up pressure roller could be in natural fibre (brush) or rubber according to the material to be processed. The Mod. SM-CMM is suitable for high speed and or high density of pins, such as for aluminium or foam material.

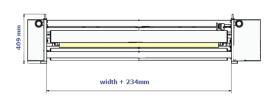


Features

Max material width	3000mm
Max speed	200 meters per minute
Density of the holes	High and low denisty of holes
Installation on	bag making machine, extruder, slitter, printing machine and so on
terial that could be processed	PE, PP, paper, foam non-woven, coated material and so on















HIGH SPEED COLD & HOT NEEDLE PERFORATION

By microperforation we are able to give to thermoplastic films the optimal properties for the packaging of products for both food and industrial use.

MOD. SM-CML

Cold needle perforation is a mechanical perforation where the material is only pushed aside and not melted by heating. The back-up pressure roller could be in natural fibre (brush) or rubber according to the material to be processed.

Mod. SM-CML is our heavy-duty unit, high speed and high density of pins or in case of high pressure application, like for corrugated material.

Drive pin shaft Yes



Features	
Max material width	4000mm
Max speed	200 meters per minute
Density of the holes	High and low denisty of holes
Installation on	bag making machine, extruder, slitter, printing machine and so on
Material that could be processed	PE, PP, paper, foam non-woven, coated material , corrugated and so on
remote assistance	Yes
Touch screen	Yes with predisposition 4.0
Pneumatic device for adjusting the depth of the pins	Yes













HIGH SPEED COLD & HOT NEEDLE PERFORATION

By microperforation we are able to give to thermoplastic films the optimal properties for the packaging of products for both food and industrial use.

MOD. SM-HMS

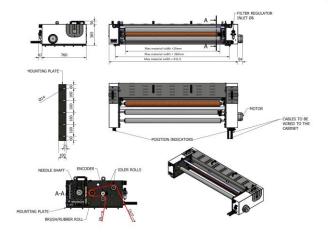
Hot needle perforation involves passing super-heated needles through the material to both penetrate and melt it. This results in a round and clean hole. Microperforation can be used to vent the steam from package or for breathybility or oxigen fresh food. Our state-of-the-art hot-needle perforation features digital computer controls and servo drives for precise hole size. The heating system is segmented into three comparts of infrared ceramic elements for maximum temperature uniformity. Microperforation can be performed in strips on a certain area of the film or on the entire tape; many different perforation patterns according to the customer's needs can be made.

Features

Max material width	2000mm
Max speed	100 meters per minute
Diameter of the holes]	from 0,1mm up to 1,5mm
Density of the holes	High and low denisty of holes
Installation on	bag making machine, extruder, slitter, printing machine and so on
Holes on register	No
Encoder to synchronize the speed	Yes
Material that could be processed	PE, PP, paper, foam non-woven, coated material and so on
Operator language	Yes
remote assistance	Yes
Touch screen	Yes with predisposition 4.0
Pneumatic device for adjusting the depth of the pins	Yes
Drive pin shaft	Yes









Pr



HIGH SPEED COLD & HOT NEEDLE PERFORATION

By microperforation we are able to give to thermoplastic films the optimal properties for the packaging of products for both food and industrial use.

MOD. SM-HML

Hot needle perforation involves passing super-heated needles through the material to both penetrate and melt it. This results in a round and clean hole. Some fresh products require high breathability or oxygen transmission rate to extend their shelf life. Our state-of-theart hot-needle perforation features digital computer controls and servo drives for precise hole size. The heating system is segmented into three comparts of infrared ceramic elements for maximum temperature uniformity. MOD. SM-HML is our heavy-duty unit with large diameter rollers; the most suitable unit for high density of pins or high pressure application. Microperforation can be performed in stripes or on the entire web according to customers' needs.

Features

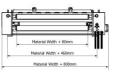
Max material width	3000mm
Max speed	200 meters per minute
Density of the holes	High and low denisty of holes
Installation on	bag making machine, extruder, slitter, printing machine and so on
Holes on register	no
Encoder to synchronize the speed	Yes
Material that could be processed	PE, PP, paper, foam non-woven, coated material and so on
remote assistance	Yes
Touch screen	Yes with predisposition 4.0
neumatic device for adjusting the depth of the pins	Yes
Drive pin shaft	Yes

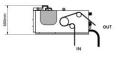


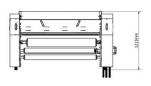




MOD. HMS LAY OUT













SPARE PARTS MICROPERFORATION

MICROPERFORATION SPARE PARTS

We can ofer spare parts of competitors' microperforator such as pin cylinders, brush and rubber rollers.



Features

Installation on our microperforation spare parts can be mounted on competitors microperforation units.









PRE-CUT

Cross or longitudinal pre-cut on moving web

MOD. SM-CTM

Perforation unit for doing slits in machine direction. It is a mechanical perforation unit where the material is only pushed aside. The back-up pressure roller can be in natural fibre (brush) or rubber according to the material to be processed. It could be installed on extruder, slitters, bag making machine, printing machines and so on. Our Mod. SM-CTM can be equipped with toothed circular blades or pins mounted on a shaft depending on customers' requirements and materials. The max material width is 3000mm.



Max material width	3000mm
Max speed	200 meters per minute
Installation on	bag making machine, extruder, slitter, printing machine and so on
Encoder to synchronize the speed	Yes
Material that could be processed	PE, PP, paper, foam non-woven, coated material and so on









PRE-CUT

Cross or longitudinal pre-cut on moving web

MOD. SM-CTP

cross tear perforation unit for web direction tear lines in in film, foil, foam, paper and non-woven. The back-up pressure roller can be in natural fibre (brush) or rubber according to the material to be processed. Our Mod. SM-CTP can be equipped with blades or pins mounted on a shaft depending on customers' requirements and materials. The encoder with a measuring wheel synchronizes the speed with the hosting machine and manage the distance of the crosstear lines and there is also an epicyclical adaptor for motion transmission to the roller.

The minimum or maximum distance of each cross-tear web direction lines is as per customer request.

3000mm
200 meters per minute
bag making machine, extruder, slitter, printing machine and so on
Yes
PE, PP, paper, foam non-woven, coated material and so on
Yes
Yes
Yes with predisposition 4.0

















HIGH SPEED LASER FOR MICRO-HOLES & SCORING

Laser perforation is for doing micro-holes into material to allow the release of atmospheric gases from the packaging to extend the shelf life of your products (MAP) or for doing scoring, scribing in machine direction.

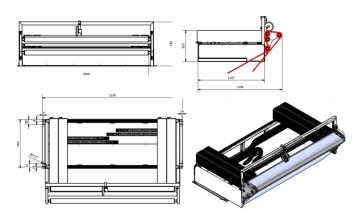
MOD. SM-LMH

Laser perforation for doing micro-holes into material to allow the release of atmospheric gases from the packaging to extend the shelf life of fresh products. (MAP). Our MOD. SM-LMH is typically modular and it can be mounted on just about any line The are a non-contact method of perforating. Laser focus can be adjuste for the material being processed. It's for extending shelf life of fresh products.



Max material width	3000mm
Max speed	300 meters per minute
Diameter of the holes]	from 70 my to 200 my
Installation on	bag making machine, extruder, slitter, printing machine and so on
Holes on register	Yes
Encoder to synchronize the speed	Yes
Material that could be processed	PE , PP , coated
Jo memory	Yes
Operator language	Yes
User friendly software	Yes
remote assistance	Yes
Touch screen	Yes with predisposition 4.0









HIGH SPEED LASER FOR MICRO-HOLES & SCORING

Laser perforation is for doing micro-holes into material to allow the release of atmospheric gases from the packaging to extend the shelf life of your products (MAP) or for doing scoring, scribing in machine direction.

MOD. SM-LS

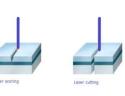
LLaser perforation for doing micro-holes into material to allow the release of atmospheric gases from the packaging to extend the shelf life of fresh products. (MAP). Our MOD. SM-LMH is typically modular and it can be mounted on just about any line The are a non-contact method of perforating. Laser focus can be adjuste for the material being processed. It's for extending shelf life of fresh products.

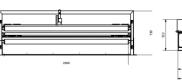


Features

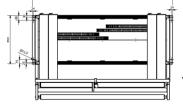
Max material width	3000mm
Max speed	300 meters per minute
Installation on	bag making machine, extruder, slitter, printing machine and so on
Encoder to synchronize the speed	Yes
Material that could be processed	PE,PP and coated material
Operator language	Yes
User friendly software	Yes
remote assistance	Yes
Touch screen	Yes with predisposition 4.0

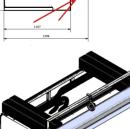
















FIBRILLATION - BARS AND CYLINDERS

Fibrillation is the process of forming multiple short cuts or splits in the yarn parallel to the yarn axis.

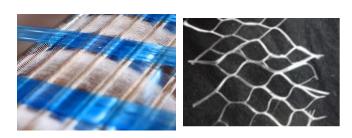
MOD. SM-FSC

Our MOD. SM-FSC is a fibrillation shaft on which are mounted fibrillation rollers. The pin projection the pin pattern and pin density can be customized to the application. Various pin angles can be utilized to suit the customer needs. The final products that can be done are: artificial lawn and astroturf, ropes, cords yarns, harvest yarns, concrete re-enforcement fibers, carpet backing, belts, staple fibers, and so on.

Features

Max material width 3000mm

















FIBRILLATION - BARS AND CYLINDERS

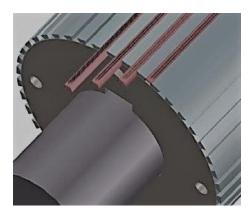
Fibrillation is the process of forming multiple short cuts or splits in the yarn parallel to the yarn axis.

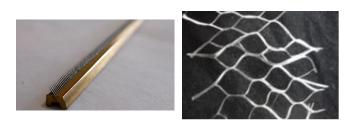
MOD. SM-FSB

Our MOD. SM-FSB is a fibrillation roller with grooves and needle bars. The pin projection, the pin pattern and the pin density can be customized to the application. Various pin angles can be utilized to suit the application. The final products can be: artificial lawn and astroturf, ropes, cords, yarns, harvet yarns, concrete reenforcement fibers, carpet backing, belts, staple Fibers (PTFE Teflon etc.) and so on.

Features

Max material width 3000mm

















COLD EMBOSSING

Embossing is the process of pressuring a roll of embossing cylinder which has a pattern engraved on its surface.

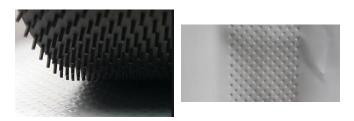
MOD. SM-ECS

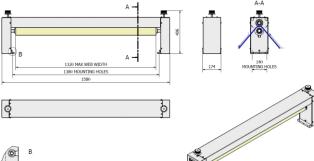
Our MOD. SM-ECMS embossing machine consists of a shaft with embossed engravings, pressed against another cylinder covered with rubber. A special device coordinate the cylinders, preventing them from slipping and ensuring a clear impression of the design. The final products are Embossing stripes on heavy duty sacks for reducing slippage during palletisation.



Features

Max material width	2000mm
Max speed	200 meters per minute
Installation on	bag making machine, extruder, slitter, printing machine and so on
Material that could be processed	PE, PP, paper, coated material and so on
Pneumatic device for adjusting the depth of the pins	Yes









 \checkmark





COLD EMBOSSING

Embossing is the process of pressuring a roll of embossing cylinder which has a pattern engraved on its surface.

MOD. SM-ECM

The embossing machine consists of a shaft with embossed engravings, pressed against another cylinder covered with rubber. A special device coordinate the cylinders, preventing them from slipping and ensuring a clear impression of the design. The final products are: Embossing stripes on heavy duty sacks for reducing slippage during palletisation, Smooth Embossing Disposable Gloves, Smooth embossing for cigarettes, Smooth embossing for butte, Smooth embossing for chocolate.



Features

Max material width 3000mm

Max speed 200 meters per minute

Installation on bag making machine, extruder, slitter, printing machine and so on

Pneumatic device for adjusting the Yes depth of the pins



