

and SLITTERS



MICRO PERFORATORS

HOT MICROPERFORATORS

IWX-E

ΙΜΧ

IWX-E (+VKR-E)

The IWX-E model is the basic version for medium production.

It is usually installed in line with extruders and production plants, but can also be supplied with its own unwinding/ rewinding unit for better independence and flexibility. The operating philosophy is identical to that of the higher

models in which respect the IWX-E has a marginally lower power and unified external heating.

This unit is scheduled with motorized perforating cylinder in order to manage in the right way the heating/cooling phases.

The IWX-E is further equipped with a thermal-protection shield to assure safety and efficiency and –thanks to correct infrared heading- it can be obtained a uniform temperature for quality results.

This unit schedules suitable controls for temperature and for the variation of holes diameter which can also be modified by adjustment of the needles penetration depth.



The IWX version is one of the most requested model since it grants high production, great reliability and versatility keeping a quite competitive price.

The microperforator IWX range is technologically one of the most advanced hot needles perforating unit, based on the hole production by material fusion.

The IWX secures hole dimension stability, maintains (and improves) the materials mechanical properties and consequently can reach very high perforation densities.

The quick replacement of the needles sleeves and the adjustable pins penetration depth allow the maximum versatility of the IWX microperforator, enabling any perforation pattern to be obtained.

The IWX perforating unit is supplied with:

- Three heating sources areas (2 sides, 1 central)
- Independent zones temperature controls
- Automatic safety system for hot chamber closing at machine stop
- Automatic control of cooling operation
- Safety system if pressure drops
- Automatic preselected start/stop machine
- Specially engineered microperforation head suitable for quick elimination of gases
- Automatic synchronization between the motorized perforation cylinder and the material speeds.

Even if this microperforator can be installed on existing production/converting lines (extruders, laminators, flexoprinters, coating machines, etc...) it is almost always required together with its own automatic independent rewinder (or slitter or centre folder).

(and related REWINDERS)

italwork rolls

IWX-S

IWX-ES OR IWX-S (+VKR-S)

These versions are the new generations to secure the highest production performances through technologically enhanced level, always keeping an easy operating control.

Our great experience on this type of machinery, applied on these versions grants high working speed, reliability and versatility.

These models owe all the technical characteristics to the IWX model, consequently maintaining easy machine management and applications flexibility.

The basic structure is practically double that of the

IWX model, so as the heating power of version IWX-ES and IWX-S is respectively 1/3 and two times higher than the one of the basic model. These two great microperforating units schedule:

- Motorized needles sleeves bearing shaft ideal to keep uniform temperature during heating/ cooling phases to assure geometric stability of the cylinder itself.
- Automatic system for the synchronization of the needles and film speed to grant the best perforating quality, avoiding longitudinal stresses.
- · System for automatic closure of the protecting shield when the microperforator is stopped
- The heating is automatically and independently controlled in 3 separate zones: two sides and one central area guarantee the maximum temperature uniformity.
- Predisposition for manual or automatic working that schedules the start only when the temperature and the film speeds reach the preselected



values; below these values the microperforating automatically stops.

• Automatic control of the cooling phase to avoid damage to the cylinder and pins sleeves.

• The design of the microperforating head is specifically engineered to grant a fast extraction of the gases produced during the fusion.

• The automatic rewinder for this version is engineered for a large mother-roll and finished rolls diameters, includes unwinding and rewinding tension controls. This unit can be equipped with trimming/exhausting device, automatic edge guider and hydraulic unit for rolls loading/unloading, etc...

MICRO PERFORATORS

HOT MICROPERFORATOR

Hot microperforating unit and dedicated panel control

Shaftless unwinder, brushless motorized This is the top version of our hot needle microperforating units which is installed on its personalized and highly versatile, multi-purposes unwinding-trimmingslitting-rewinding machine.

This unit is based on 4 Brushless motors drives, shaftless unwinding unit, full automatic tension controls, predisposed on request in line with dedicated film treating unit, inclusive of our tele-assistance remote control through up-Ethernet.

Our rewinder is an eco-friendly machi-

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IWX-TOP

THE MOST VERSATILE from 1 to 120 holes per square cm.

THE FASTEST up to 200 mt/minute (300 rew.)

Hot needles sleeves cylinder

Dedicated film side tensioning

Customized



(COMPLETE LINE)

ne since has been engineered for low energy consumption, schedules several fieldbus on drivings and PLC controls. This complete machinery also includes a dedicated high efficiency fumes exhausted cowl and relative air filtering group.

Notwithstanding the high technological level, this machine secures practical and smooth operating way, easy replacement of microperforating density, quick job changing, fast setting-up operation and limited maintenance.

(+VKM-RS.4M)

Cowl exhausting fumes





Fumes filtering group

THE LARGEST up to 2500-3200 mm. width

THE MOST FLEXIBLE suitable for different kinds of materials, engineered for microperforating only so as for unwinding, trimming, rewinding so as for microperforating-olithing rewindingslitting-rewinding. Suitable to be combined with center folding unit and equipable in line with corona treatment.

treatment unit



Personalized touch screen



Trimming, slitting, exhausting unit

MICRO PERFORATORS

COLD MICROPERFORATORS

The IWX-C model can be supplied as standard version (not driven) or as motorized version IWX-C/M

This cold microperforator is almost always installed in line with production plants. It is scheduled with perforating adjustment and - upon request - can be equipped with pneumatic opening/closure.

The cold microperforation can be applied to any plastic film where it usually requires a minimum transpiration and a low mechanical resistance.



MICROPERFORATORS: MAIN APPLICATIONS

The versatility of the hot needle microperforators IWX allows treatment of a large range of materials (plastic films, laminated, coated, coextruded, expanded and other non-plastic) used in various industrial fields and with very large applications based on diversified and personalized densities of perforation, scheduled up to 100/120 holes per sq.cm.; the following detailed table shows the most important ones:

Applications and materials	Holes CM2				
Sweets Packaging	1 (PP)	Bread Packaging	12 (PP - BOPP)	Transpiration on cars inside upholstery	56 (Simil leather)
Food low transpiration packaging	2 (coextr.)	Transpiration on insulators	16 (PE EXPAN)	Pre-cooked food pachaging	80 (coex. BOPP)
Cheese packaging	3 (lamin.)	Frames/profiles covering	20 (Paper/PP)		
Flowers packaging	4 (PP-PE)	Bread packaging french type	25 (CPP - BOPP)	Filters production	100 (unwoo- ven)
Inner sole	5 (PE EXPAN.)	Fresh cheese packaging	36 (PE lamin.)		
Protective Films	6 (BOPP)	Transpiration on water proof materials	48 (Smeared	Cellular plastic material (cain)	120 (CO- POLYMER)
Vegetables Packaging	9 (PP coextr.)		PVC)		

OUR MICROPERFORATORS IN LINE WITH OUR CONVERTING MACHINERY



SLITTERS

(REWINDERS - FOLDERS)



VIK range (duplex slitters)

Duplex centre rewinding slitter, cantilevered version, single or double side working. On request shaftless station, turret rewinder, finishing rolls unloading system.

Working width from 1000 to 1600 mm. Mechanical Speed 400-600 mt./min. Mother rolls diam. 800-1000-1200 mm. Rewinding diam. 500-600-800 mm.

WK range (center-peripherical slitters)

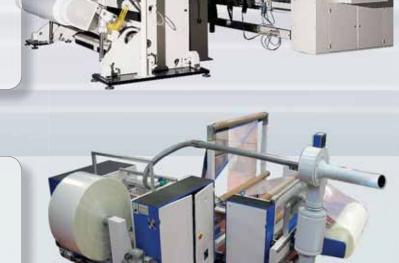
Centre-peripherical (surface) slitter rewinders (compact, down and aerial material passage versions) equipped with pneumatically driven or motorized independent rewinding arms, full automatic tension controls, unwinding/rewinding shaftless system. No contact model center rewinding with individual lay-on rollers.

Working width from 1600 to 3300 mm. Mechanical Speed 400-600-800 mt./min. Mother rolls diam. 800-1000-1200-1500 mm. Rewinding diam. 600-800-1000 mm.

IW-FR range (center folders)

Basic model with cantilevered rewinder or shaftless unwinding rewinding stations type or top version with automatic turret rewinder. Versatile unit suitable for multi-purposing operating.

Working width from 600 to 2500 mm. Mechanical Speed 300-600 mt./min. Mother rolls diam. 800-1000-1200 mm. Rewinding diam. 600-800-1000 mm.



WK-M range (mono-shaft slitters)

Single centre rewinding slitter, cantilevered or turret version. On request shaftless station and finishing rolls unloading system. Suitable to be equipped in line with dedicated treatment device (such as microperforating unit, corona treatment, embossing group, etc.).

Working width from 800 to 1600 mm. Mechanical Speed 300-600 mt./min. Mother rolls diam. 800-1000-1200 mm. Rewinding diam. 400-600 mm.





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