WPR

SERIES **NWA**

HIGH PRODUCTIVITY

VERSATILITY

PRECISION

"Give Value to your time.

The Value of your time"

CATALOGUE

SERIES **NWA**

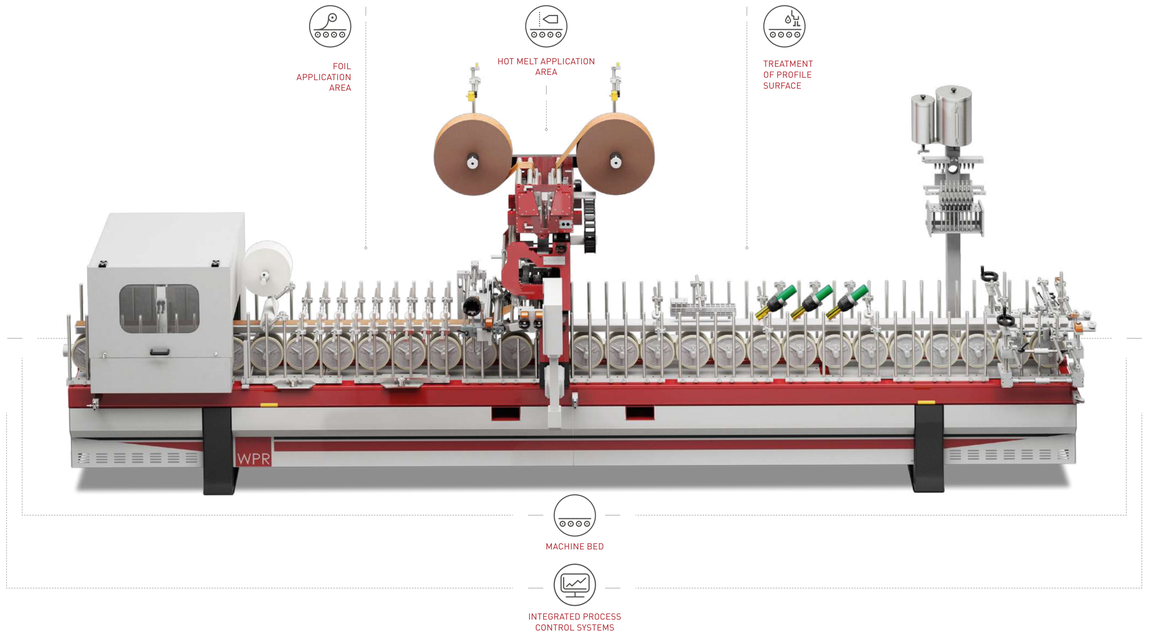
Machines – Components - Optionals

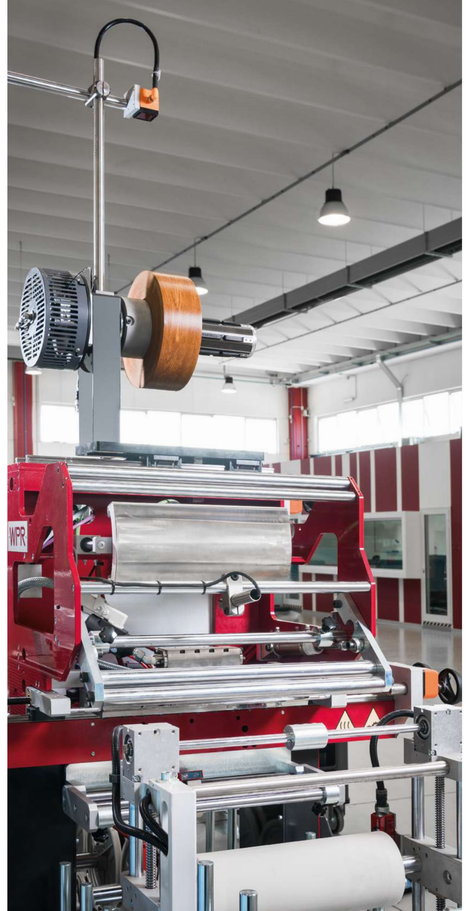
DISCOVER HOW
THE **NWA**
REALLY WORKS

SERIES **NWA**

The NWA system is specifically designed for the linear lamination of PVC profiles with paper or PVC foil by means of hot melt adhesives (HMPUR)

NWA is the result of extraordinary know-how and top-notch quality. The system is ideal for technologically advanced panel and profile lamination and all its components are entirely produced in Italy.





The particular design developed by WPR guarantees maximum simplicity of use, facilitating any adjustment and maintenance operation

MACHINE BED

WPR = WPR EXCLUSIVE ADVANTAGE

MACHINE BED

Machine bed in varnished steel complete with CE-compliant safety devices, with emergency push button on the control console and emergency puller. Electronic regulation of working speed with controls displayed directly on the main panel.

WPR

- STRUCTURAL FRAME MADE OF STABILIZED, POWDER COATED STEEL.
- THE HIGH PRECISION OF THE GEARS ELIMINATES ANY DYNAMIC VIBRATION.
- SPECIFIC "LONG-LIFE" LUBRICATION SYSTEM, FUNDAMENTAL FOR USE AT ELEVATED WORK TEMPERATURES.
- SAFETY SYSTEMS FOR OPERATORS.

Transport wheels covered in anti-slipping and heat-resistant material

OPTIONAL

REDUCTION OF SET-UP TIMES

PROCESS STABILITY AND SAFETY FOR OPERATORS

QUALITY I MPROVEMENT

PAIR OF PROFILE GUIDES

Side rails for profile alignment.

Adjustments can be performed rapidly on 2 axes (X+Y).

WPR

- The system considerably reduces set-up times.
- Facilitated adjustment without tools.

MOBILE SHOULDER

Mobile support for the simultaneous transfer of tools aboard the machine in the wrapping area (one side), complete with position indicator. Motions installed on ball bearing guides.

WPR

- The system considerably reduces set-up times.
- Facilitated adjustment without tools.

RAPID ADJUSTMENT OF TRANSPORT WHEELS IN 5MM STEPS

The system allows the rapid movement of the transport wheels through rails and blocking devices at 5mm steps.

WPR

- The system considerably reduces set-up times.
- Facilitated adjustment without tools.

RAPID TOOL CHANGE SYSTEM (3+3)

Mechanical eccentric blocking for rapid tool change.

WPR

- The system considerably reduces set-up times.
- It allows repeatability of the process.

"PUSH&PULL" SYSTEM

System for rapid unhooking of the pressing rollers.

WPR

- The system considerably reduces set-up times.
- Facilitated adjustment without tools.

TREATMENT OF PROFILE SURFACE

WPR = WPR EXCLUSIVE ADVANTAGE

AUTOMATIC DOSING SYSTEM FOR LOW VOC PRIMERS

The automatic dosing system for LOW VOC primer from WPR/TAKA is the result of more than 20 years of experience in the field of application. It is the only system to guarantee maximum precision and repeatability in one of the most important stages of the wrapping process. Special stainless steel/PTFE membrane dosing pumps regulate the quantity of primer with maximum precision based on the working speed. Application parameters can be easily and intuitively adjusted thanks to the multilingual touch-screen control panel. The optional stand-by function reduces the primer being applied to 10%, in order to avoid the drying of felt pads during production breaks. The system is designed for the application of solvent-based or environmentally-friendly primers. In the case of applications of inflammable primers, the connected installations must be equipped accordingly.

- Guarantees safety for the environment and for the operators
- Contributes to energy efficiency in the drying stage
- Savings of primer and energy consumption
- Guarantees quality of the finished product
- Universal system for all types of primers

Thanks to the solenoid valves,the automatic primer dosingoffers maximum precision.

OPTIONAL

REDUCTION OF SET-UP TIMES

PROCESS STABILITY AND SAFETY FOR OPERATORS

QUALITY I MPROVEMENT

SHORT WAVE IR LAMP

(Short wave) infra-red ray lamp for profile heating.

Facilitates bonding

HORIZONTAL BRUSH

Horizontal brush for removal of impurities from the surface of the work pieces, complete with motor and crank-case for the installation of a suction unit.

The system reduces impurities on the surface of the profile and guarantees a perfect finish.

VERTICAL BRUSH

Vertical brush for removal of impurities from the surface of the work pieces, complete with motor and crank-case for the installation of a suction unit.

The system reduces impurities on the surface of the profileand guarantees a perfect finish.

IONIZED AIR KNIVES

Adjustable, highly efficient ionised air knives.

The system reduces impurities on the surface of the profile and guarantees a perfect finish.

HOT MELT APPLICATION AREA

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WHM.30 HOT MELT PUR APPLICATION UNIT

Continuous cycle hot melt applicator for hot melt adhesives (HOT MELT) and reactive hot melt adhesives (HOT MELT PUR). The machine consists of: Tank, grill and manifold with high fusion capacity and anti-adherent surface treatment; special WPR design developed to avoid thermo-dynamic stress of the adhesive. Rapid opening system for safe and fast maintenance without the use of tools; rapid unhooking filtering units in AISI 316 stainless steel; automatic adhesive dosing system. The dosage is kept constant even when the production speed changes. The system avoids adhesive dosing errors, with consequent quality and economic benefits on the finished product. CPU for the centralized control of machine functions, process time and date setting functions, alarms and safety functions; indication of room temperature to guarantee that production is carried out in the thermal conditions advised by the PUR hot melt adhesive producers.

- Hot Melter especially developed for profile wrapping
- Management of the melter completely integrated in the system of the lamination line
- Fast and easy cleaning in less than 15 minutes
- Spare parts are interchangeable between glue head and hot melter

HOT MELT SUPPORT UNIT

The support is designed to accommodate:

- Application slot nozzle and adjustment devices
- Foil pre-heating
- Decoilers
- Servo-assisted control devices
- Central control of all functions

- The specific design developed by WPR guarantees maximum simplicity of use, facilitating any adjustment and maintenance operation.
- The bracket is complete with an unwinder with a single axial adjustment for the alignment of the foil and the slot nozzle on the profile.

OPTIONAL

REDUCTION OF SET-UP TIMES

PROCESS STABILITY AND SAFETY FOR OPERATORS

QUALITY I MPROVEMENT

SLOT NOZZLE WITH VARIABLE OPENING FOR THE APPLICATION OF HMPUR

Variable glue head, equipped with special high abrasive-resistant lips. Rapid change stainless AISI 316 steel filtering set, integrated in WPR's exclusive distribution system (Control Flow). The application is continually adjusted by means of precision registers featuring numeric indicators.

- Complete closure of the slot nozzle.
- Internal screws for the regulation of the application width, not in contact with the adhesive.
- Special treatment of lips for long-lasting durability
- High quality of the glue line
- Fast cleaning

The System guarantees a perfectly evenglue line.

The application lips undergo a special treatment making them more resistant and durable over time

FOIL APPLICATION AREA

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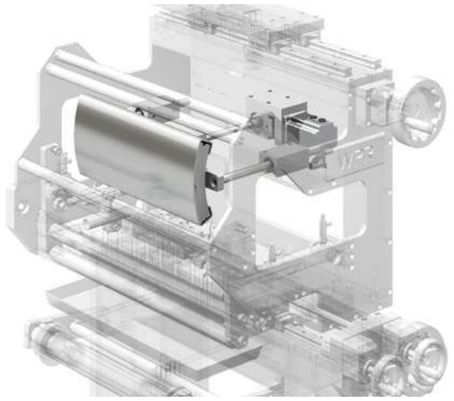
AUTOMATIC HEATING PLATE

Stainless steel heating plate for foil pre-heating, complete with servo-assisted positioning device. The control automatically keeps a constant temperature of the foil. The temperature can be read by means of a no-contact IR sensor.

WPR

- Guarantees the use of all the foils
- Improves adhesion



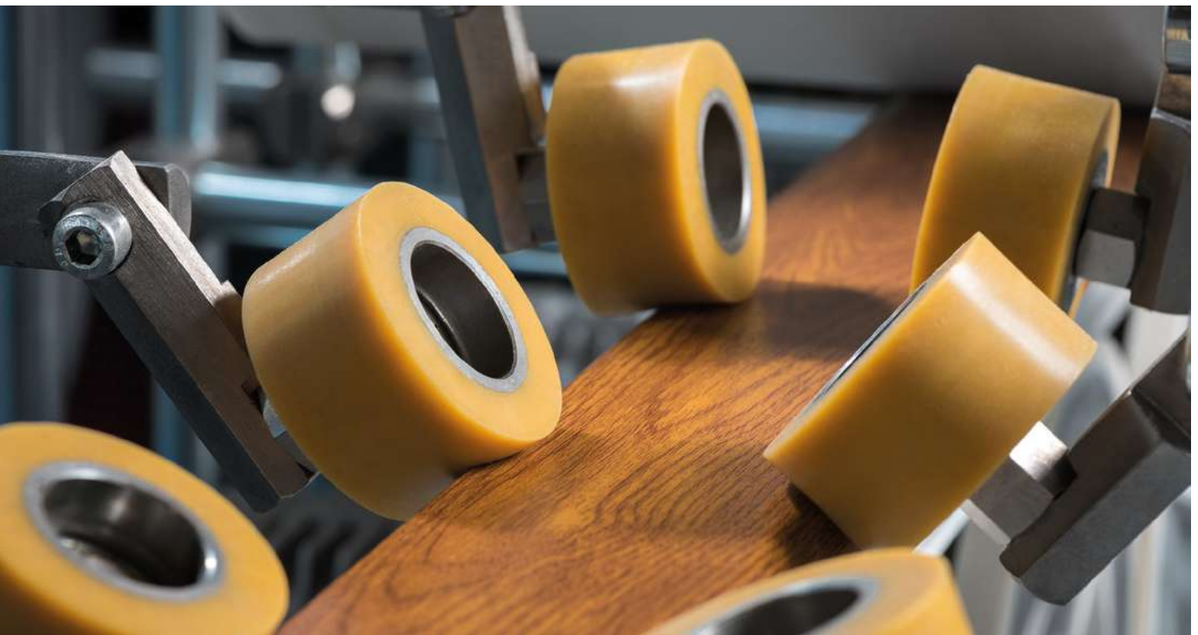
AUTOMATIC "AFC" BRAKING CONTROL

Automatic foil braking control. The system detects foil diameter variations by means of a laser sensor and maintains a constant braking rate during processing.

WPR

Foil expansion and tears are avoided

Wide range of pressing wheels for all profile geometries



OPTIONAL

REDUCTION OF SET-UP TIMES

PROCESS STABILITY AND SAFETY FOR OPERATORS

QUALITY I MPROVEMENT

ADDITIONAL FOIL UNWINDER

Unwinding shaft for foil in rolls. Equipped with precision pneumatic braking. Blocking of the foil with expanders and centralised control. Rapid regulation of the working position.

WPR

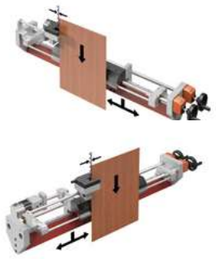
- Exclusive WPR brake that guarantees high precision at any speed with different foil widths
- The second unwinder helps to reduce the time for foil changes

AUTOMATIC "AFC" BRAKING CONTROL FOR ADDITIONAL UNWINDER

Automatic foil braking control. The system detects the working foil diameter variations by means of a laser sensor while keeping a constant braking.

WPR

Foil expansion and tears are avoided

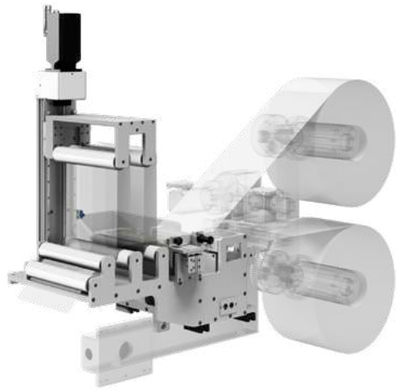


COATING ALIGNMENT CONTROL

Automatic alignment system of the coating on the foil. The system compensates any displacement of the foil guaranteeing precise coating of the adhesive thus improving the quality on the finished product.

WPR

- Waste reduction
- Reduction of human error



SEMI-AUTOMATIC FOIL SPLICE SYSTEM WITH RECOVERY

Semi-automatic junction system for the foil being processed with a foil in stand-by. Pneumatic slitting system positioned upstream the junction unit. The slitting position control is managed directly by the main control panel by means of Plc and detection photocell. In the operations area the machine is wholly protected in compliance with safety regulations. The system allows for continuous production. Semi-automatic junction system for the foil being processed with a foil in stand-by. Servo-assisted rotating support of the decoilers with automatic position control. Automatic slitting device positioned upstream the junction unit. Servo-assisted accumulator with automatic position control. The slitting position control is managed directly by the main control panel by means of Plc and detection photocell. In the operations area the machine is wholly protected in compliance with safety regulations. The system allows a continuous production.

- Simple use
- Remarkable increase of production capacity
- Elimination of downtime for foil change
- Waste reduction

SEMI-AUTOMATIC FOIL SPLICE SYSTEM

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- Remarkable increase of production capacity
- Elimination of downtime for foil change
- Waste reduction

AUTOMATIC FOIL CUTTING SYSTEM

Automatic foil cutting system that works independently from the width of the profiles and working speed. The system automatically manages the spacing between the profiles (adjustable from 5 to 10mm). Slitting is performed between two profiles. In the operations areas the machine is completely protected in compliance with safety regulations. The system is fundamental in case of an automatic unloading device.

- Increase of production capacity
- Operators' safety
- Reduction of production costs

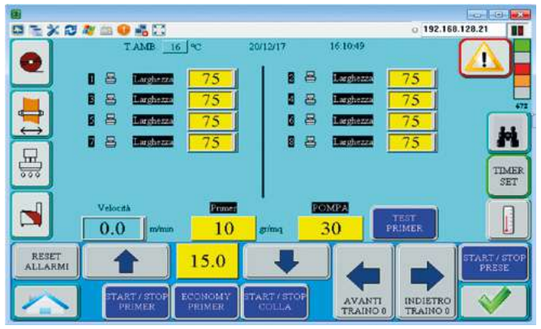
Foil braking system developed exclusively for WPR

INTEGRATED PROCESS CONTROL SYSTEMS

WPR = WPR EXCLUSIVE ADVANTAGE

CONTROL BOARD

Centralized control CPU of all working parameters. Back-lit touch-screen for operator's panel. Display and control of all machine parameters.



WPR

- Intuitive and easy-to-use
- Multilingual
- Possibility to control all application parameters from the screen

PRODUCTION **SPEED**

PROCESS TEMPERATURES

Measurement and control of all the temperatures of the adhesive being applied (tank temperature, pump, manifold, tube and hot melt application head).

ROOM TEMPERATURE

Measurement of room temperature with alarm in case of deviation from the tolerances set in order to guarantee the process is performed in the thermal conditions established by the RAL716 normative.

ADHESIVE APPLICATION **QUANTITY**

The adhesive's automatic dosing system, unlike traditional systems, eliminates the manual operations of measuring the quantity of adhesive being applied. The dosage is maintained constant when the production speed changes, with consequent quality and economic benefits on the finished product, as laid out by standard RAL716.

COMPLETE ALARM DIAGNOSTICS

(Process tolerance and system anomalies)

The operator is constantly informed about possible machine and temperature value anomalies of the hot melt adhesive.

WEEKLY **TIMER**

Possibility of machine start/stop heating weekly programming, with the aim of optimizing production.

Intuitive interface for the controlof all application parameters

QUALITY SYSTEM

Centralized control CPU of all working parameters. High-frequency lighting operator's panel. Display and control of all machine parameters:

PRODUCTION **SPEED**

PROCESS **TEMPERATURES**

Measurement and control of all the temperatures of the adhesive being applied (tank temperature, pump, manifold, tube and hot melt application head).

ROOM TEMPERATURE

Measurement of room temperature with alarm in case of deviation from the tolerances set in order to guarantee that the process is carried out in the thermal conditions established by standard RAL716.

APPLIED **QUANTITY** OF **ADHESIVE**

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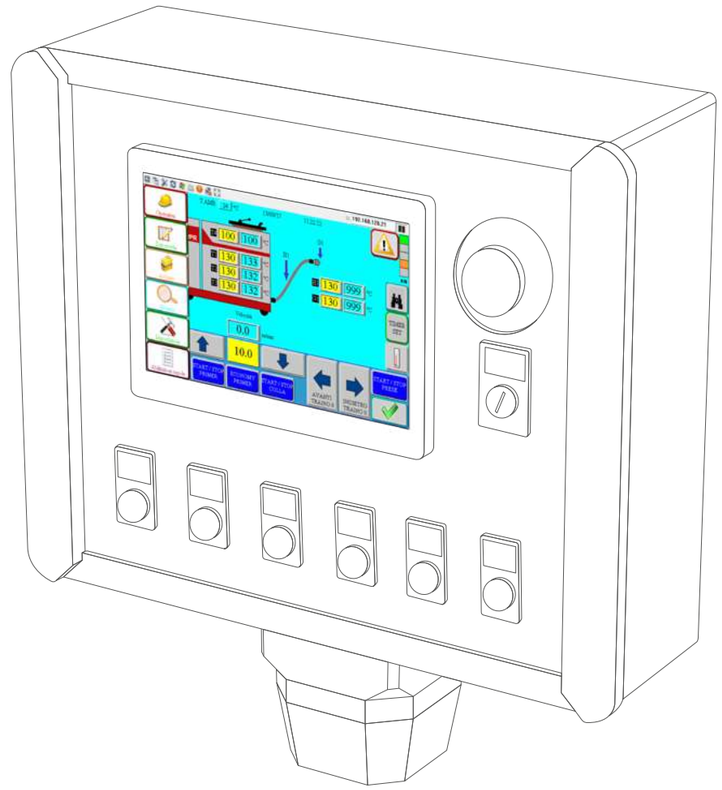

MEASUREMENT AND ANALYSIS OF PROCESS TEMPERATURES

Process temperature measurement and analysis is performed by non-contact IR sensors. The system monitors essential surface temperatures in 3 areas; profile infeed, adhesive application and profile outfeed. Such control is important to guarantee quality during the application phase as established by standard RAL716.

RECIPE **SAVING**

The system files as "recipes" all parameters that are necessary for process repeatability.
The maximum number of storable recipes is 999 with alphanumeric naming.

PROCESS **DATA EXPORT**

All the production reports, times and parameters can be exported and/or connected to other supervision and control systems, in order to provide reports for traceability of product batches.
Data export for further analysis with user's programs.

CATALOGUE

NWA SERIES

Machine – Components - Optionals

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