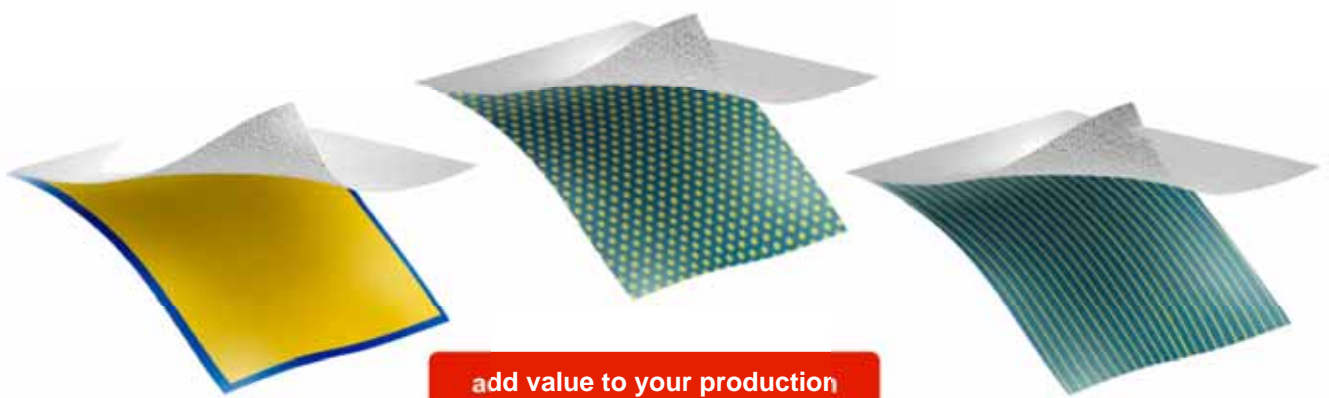
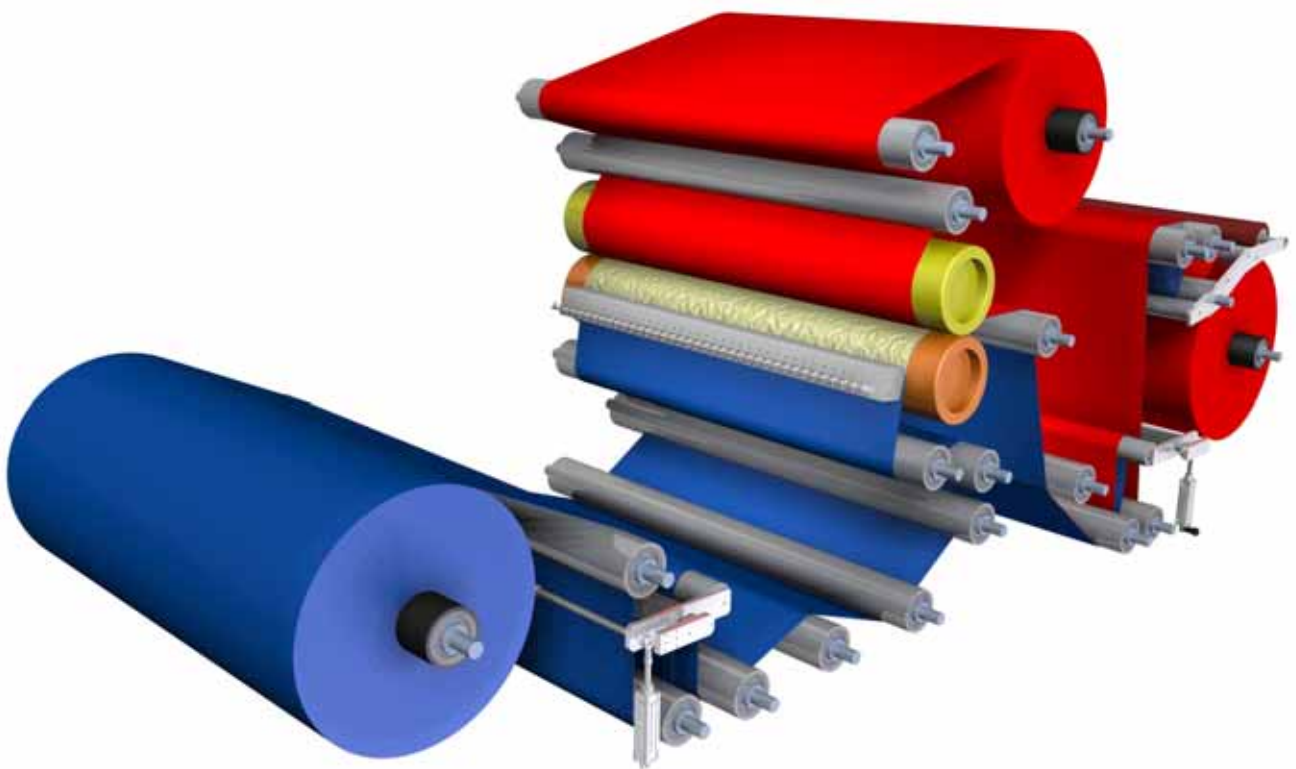




MACHINES for TECHNICAL CONVERTERS
Turn-Key Converting Lines, Melters, Dispensers & more
for Hot Melt Adhesive



add value to your production

COMPANY

With more than 2.000 machines installed worldwide HIP-MITSU from the year 1994, Italian Company based 20 minutes far away from Venice international Airport, is one of the most qualified producers of melters and dispensers for hot melt adhesives.

We are located in a region where an age-old tradition of International trade can reckon on one of the most advanced mechatronics districts in Europe.

Thanks to this extraordinary industrial environment, HIP-MITSU can also avail of the cooperation with the universities of Milan, Padua and Bologna.

The considerable number of International patents we have been granted so far is the result of the continuous R&D activities - supported also by a state-of-the-art competence center - where we are investing 7% of our turnover every year.

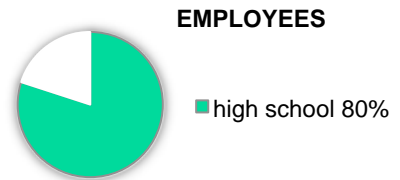
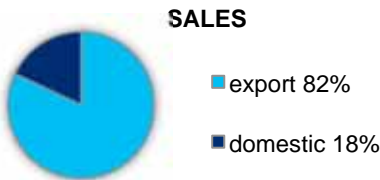
80% of our co-workers have a secondary school certificate or a university degree: they are our most important resource and they are all involved in a continuous training process and improvement projects.

We are only working in accordance with some strict computerized procedures which govern every single activity and in particular quality control: we do put very special emphasis to details and we are very proud of it.

These are the only reasons that make the performances of the machines designed, produced and installed by HIP-MITSU worldwide so unique.



Venice, historically one of the most export-oriented cities in the world, right at the heart of one of the most advanced mechatronics districts in Europe where art, culture and technology merge at



our engineering, always accurate in every detail, works to reach top performances and high reliability

SKILLED IN MATERIALS

Dozens of systems installed for all kind of converting industries specialized in technical textiles enabled us to gain a great experience and an extensive knowledge on different materials:

- foam
- textile
- nonwoven
- paper
- plastic Film
- breathable Plastic Film
- tissue
- roll goods and in sheet for any thickness

SKILLED IN HOT MELT ADHESIVE

Since 1994 HIP-MITSU systems can apply the hot melt adhesives which are commonly used for technical textiles:

- PSA
- PUR
- ACRILIC
- EVA
- COPE

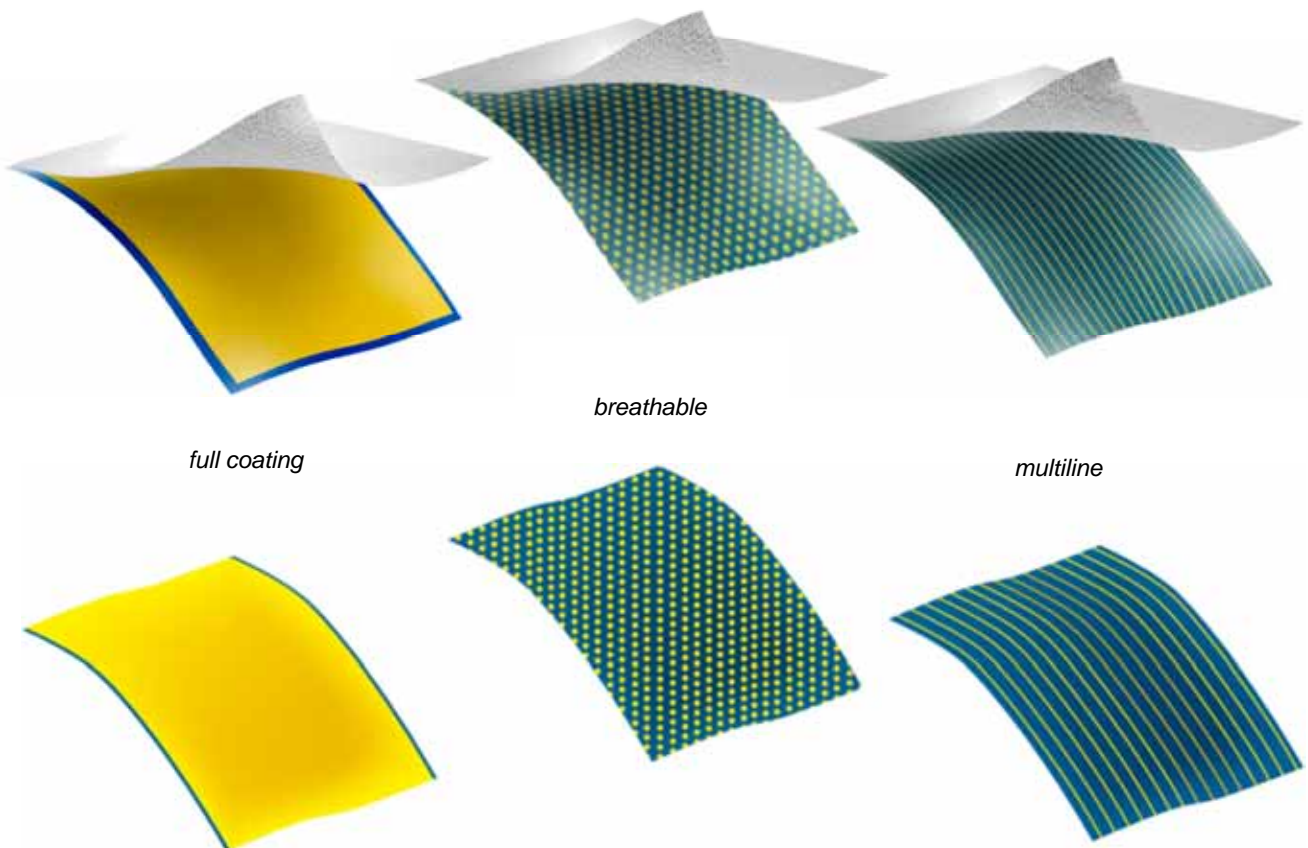
end product:

- lamination
- self adhesivation
- thermo adhesivation

WHAT CAN YOU DO WITH THE MACHINES FOR HOT MELT ADHESIVES MADE BY HIP-MITSU?

HIP-MITSU turn-key converting lines, melters and dispensers are used everyday by our customers to produce coated or laminated technical textiles that can be employed in various fields of application, such as those mentioned below.

Top performers in precision work: all HIP-MITSU machines are able to apply hot melt adhesives for the manufacture of coated and/or laminated products as described below.



MAIN FEATURES

- soft hand
- breathability
- waterproofing
- absorbency
- wind stopping
- membrane

FIELDS WHERE WE HAVE REFERENCES and a WIDE EXPERIENCE

- | | | |
|---------------------------|----------------------|-----------------------------------|
| ➤ Hygiene and Medical | ➤ Carpet Backing | ➤ Shoes and sport shoes |
| ➤ Automotive | ➤ Technical Textiles | ➤ Lingerie |
| ➤ Membrane | ➤ Filtration | ➤ Geotextiles |
| ➤ Building | ➤ Plastic Film | ➤ Antivibrating |
| ➤ Roofing | ➤ Reinforced Plastic | ➤ Thermal and Acoustic Insulation |
| ➤ Abrasive and Car Polish | ➤ Foam Lamination | and more... |

FOAM CONVERTER



just some examples:

- Foam + Textile
- Foam + Plastic Film
- Foam + Aluminium Foil
- Recycled Rubber + Lead
- Foam + Jersey
- Self Adhesivized Foam / Siliconized Paper
- Self Adhesivized Foam / Siliconized Plastic Film

and more...

NONWOVEN and RECYCLED CONVERTER



just some examples:

- NW + Textile
- NW + Barrier Film
- NW + NW
- NW + Recycled Foam
- NW Recycled + Plastic Film
- NW + Jersey
- NW + Aluminum Foil
- NW + NW

and more...

MEMBRANE CONVERTER

The membranes made with machines HIP-MITSU are characterized by a hand extremely round and soft.

Their breathability is always in line with the highest standards.



just some examples:

- Membrane + Cotton
 - Membrane + Jersey
 - Membrane + Elastic Textiles
 - Membrane + Jersey
 - Membrane + Technical Textiles
- and more...*

Usable on:

- Military Clothing
- Sport textiles
- Sanitary

and more...

TRADITIONAL TEXTILE CONVERTER



just some examples of PUR lamination:

- Lace + jersey
- NW + lining
- Upholstery
- Jersey + pelt
- Upholstery + finishing fabric
- Elastic Textile + Elastic Textile

and more...

HYGIENE, MEDICAL and PLASTER



just some examples:

- NW + Plastic Film
- NW + NW
- NW + PE Film
- NW + Tissue
- Tissue + Plastic Film
- NW + Plastic Film + Tissue
- NW + Silicon Paper

and more...

GEOTEXTILE and REINFORCED GEOTEXTILE CONVERTER



just some examples:

- NW + Plastic LDPE sheet
- NW + Plastic LDPE Net
- NW + Film

and more ...

AUTOMOTIVE CONVERTER



just some examples:

- *NW + Textile (car seating and interiors)*
- *Multiline Self adhesive Recycled NW (insulation and anti-vibrations)*
- *Foam + Textile (car seating and interiors)*

and more...

SHOES and SPORT SHOES CONVERTER



just some examples:

- *Lamination*
- *Self adhesivation*
- *Thermoadhesivation*

and more ...

LATEX FREE CARPET BACKING and PRE-COATING



just some examples:

- *Pre-Coating on tufted carpet*
- *Backing on tufted carpet*
- *Backing on artificial tuft*

HIP-MITSU : MELTER and DISPENSER



tank and drum melter, pumping station



heated hose



contactless dispenser



*MITSU Custom Concept Die (international patent)
the top performer traditional slot die*

COATING PERFORMANCES

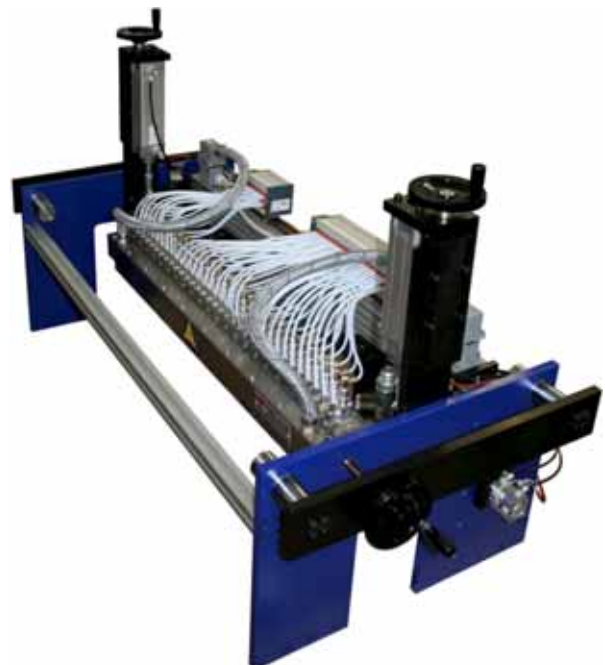
Min coating width (mm)	0,5
Max coating width (mm)	6.500
Coating width change (sec)	1
Coating weight change (sec)	1
Adhesive's add-on level (gsm)	from 0,2
Sigma in CD (%)	up to 1
Sigma in MD (%)	up to 1
Intermittence	yes
Pattern available	all
Pattern's change (sec)	up to 1
Adhesive's change (sec)	up to 1
Automatic cleaning system	yes

COATING WEIGTH SET and CONTROLS

Automatic setting	yes
Stable application independent from:	
- viscosity variation	yes
- adhesive's changes	yes
- temperature changes	yes
- dirty filters	yes
- gear pump aging	yes
Recipies of each batch	yes
In-line process monitoring and control	yes
Reporting batch by batch	yes
Remote control	yes
Automatic setting	yes

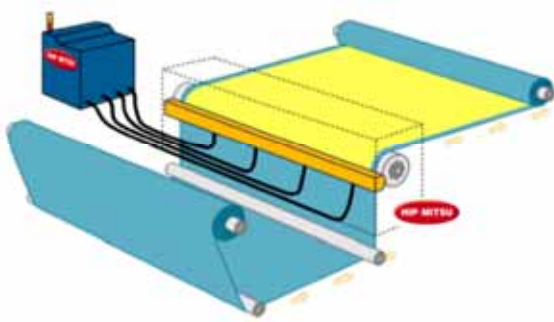
MELTING and PUMPING PERFORMANCES

Tank melter (kg/hour)	from 2 up to 1.000
Drum melter (EU std)	for 20 and 200 liter
Drum melter (US std)	for 5 and 55 gallon
Metering pumping station	yes

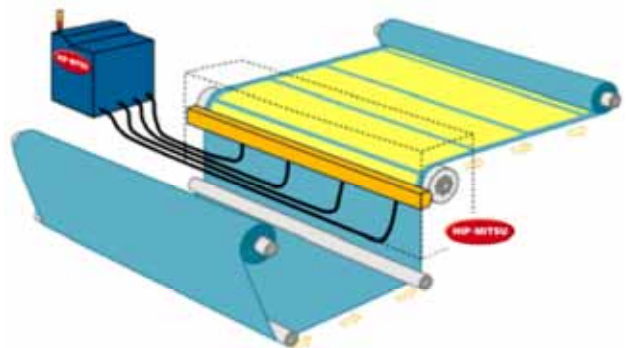


*MITSU Smart Coat (international patent)
the latest hot melt technology
for the next generation of laminated product*

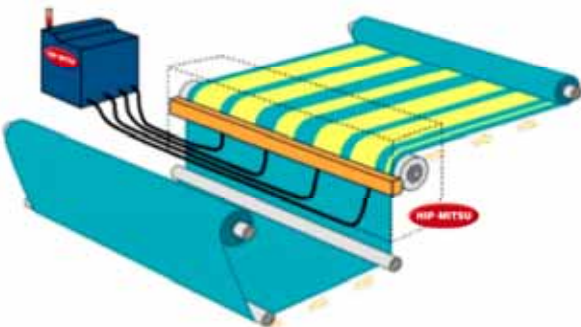
HIP-MITSU SLOT DIE: AVAILABLE ADHESIVE'S APPLICATIONS



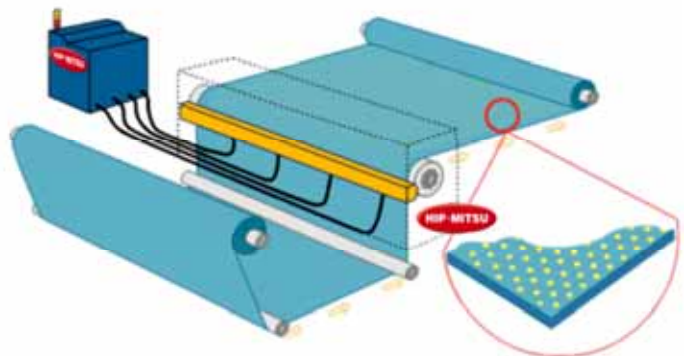
continuous



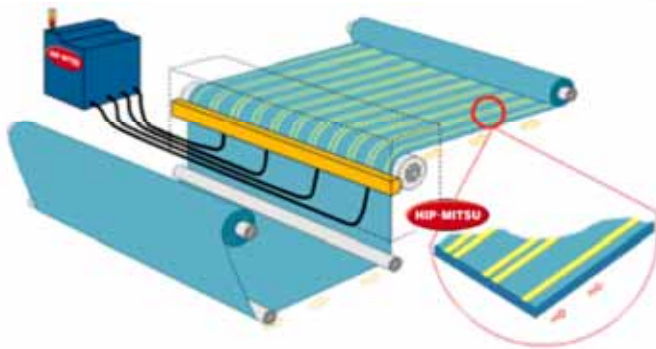
intermittent in Machine Direction



partialization in Cross Direction

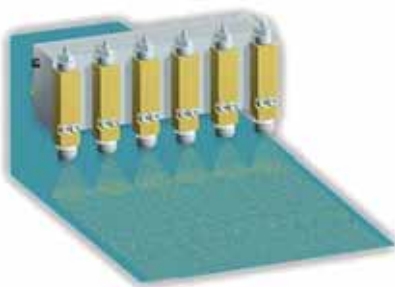


breathable

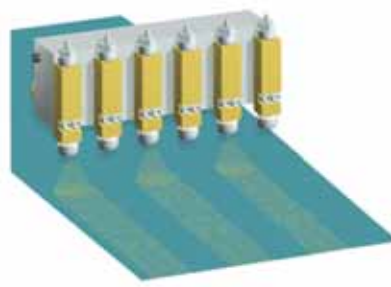


multiline

HIP-MITSU CONTACT-LESS AUTOMATIC GUNS: AVAILABLE ADHESIVE'S APPLICATIONS



continuous



intermittent

For further detailed information, please ask for the specific brochures of this families of machines

TURN-KEY CONVERTING LINES FOR HOT MELT

The wide range of solutions offered by MIP-MITSU can answer to all production needs in the technical textile converting area and in particular regarding:

- Web width
- Production speed
- Adhesive coating weight
- Quick adhesive change
- Quick adhesive pattern change

CUSTOM-MADE MACHINE LAYOUT

All our machines are modular: this is the reason why you can purchase a machine in its standard configuration or customized design.

It's easy to design your dream machine by using HIP-MITSU standard modules.

Please see in the following pages some available configurations.



example of converting line for material in roll and in sheet, included of motorized belt, suitable for foam, textiles, nonwoven, silicon paper and film, and more ...

TURN-KEY HOTMELT CONVERTING LINES: GENERAL PERFORMANCES

Working width (mm)	from 50 up to 6.500
Laminating speed (m/min)	from 2 up to 150
Web tension control	yes
Calendering pressure (kg/cm)	from 0 up to 20
Winders and Unwinders roll max diam. (mm)	1.500
Reel diameter (inch)	3" or 6"
Integrated web-guide	yes
In-line slitting unit	yes
Edge trimming unit	yes

WEB FLOW SETTING & CONTROLS

SIEMENS and/or ROCKWELL platform	yes
SCADA integration	yes
Recipes	yes

HOT MELT ADHESIVES TURN-KEY CONVERTING LINES FOR TECHNICAL CONVERTER



*example of two layer converting line for material in roll, included two unwinder, web-guide system, slot die, calender, winder, floor and bridge path; web tension control: traditional.
Suitable for automotive, shoes, textile, furniture converter and more...*

HOT MELT ADHESIVES TURN-KEY CONVERTING LINES FOR TECHNICAL CONVERTER



example of three layers converting line for material in roll, included unwinders, web-guide system, slot die, two calender, winder, floor and bridge path, motorized belt. Suitable for insulation and building converter and more...

HOT MELT ADHESIVES TURN-KEY CONVERTING LINES FOR TECHNICAL CONVERTER



*example of three layers converting line for material in roll, included unwinders, web-guide system, slot die, calender, winder, floor and bridge path, motorized belt.
Suitable for paper converter and more...*

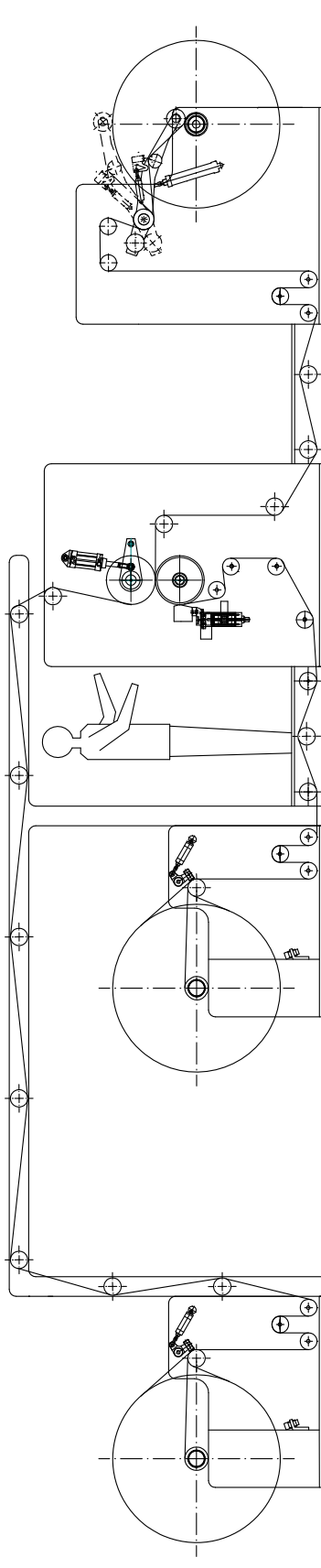
HOT MELT ADHESIVES TURN-KEY CONVERTING LINES FOR TECHNICAL CONVERTER



example of two layers converting line for material in roll, included unwinders, web-guide system, slot die, calender, in-line slitting unit, winder, floor path. Suitable for medical or membrane converter and more...

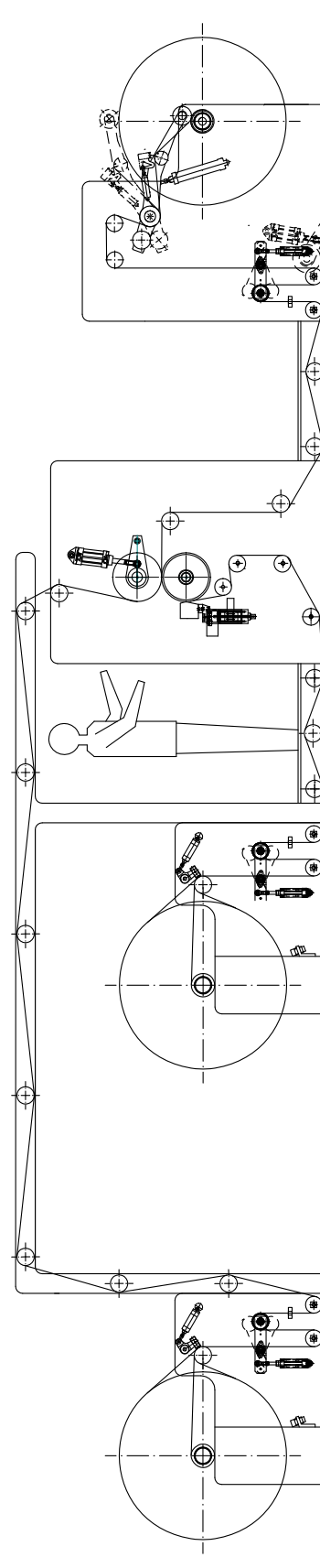
JUST SOME MACHINES LAYOUT:

➤ MODEL TOPAZ



included unwinders, web-guide system, hot melt adhesive dispenser (slot die or contact-less), calender, winder with pressure roll, floor and bridge path, web-stop system for the change of the roll.

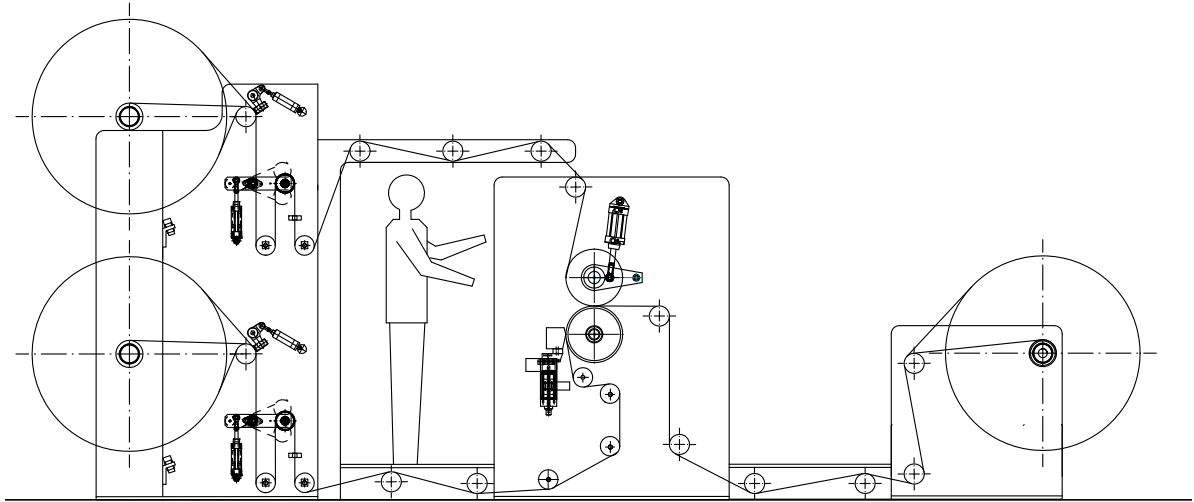
Speed, roll diameter and width of the web within the general performances previously reported



included unwinders with dancer, web-guide system, hot melt adhesive dispenser (slot die or contact-less), calender, winder with dancer and pressure roll, dancer for web tension control, floor and bridge path, web-stop system for the change of the roll.

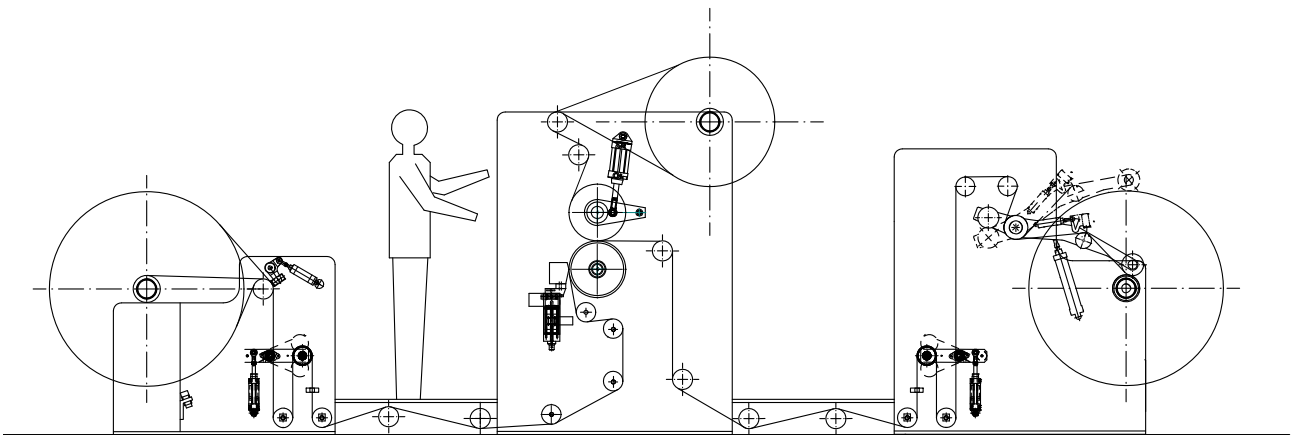
Speed, roll diameter and width of the web within the general performances previously reported

➤ MODEL EMERALD



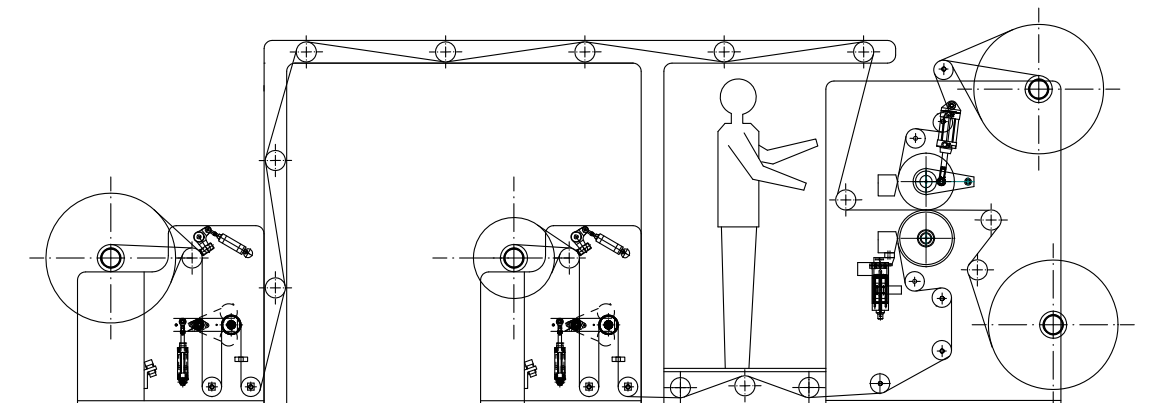
example of two layers converting line for material in roll, included unwinders with dancers, web-guide system, slot die, calender, winder, floor and bridge path

➤ MODEL DIAMOND



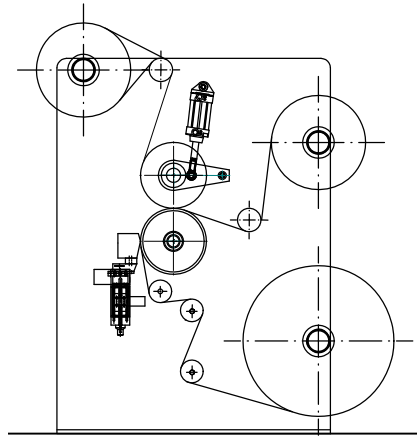
example of two layers converting line for material in roll, included unwinder with dancer, web-guide system, slot die, calender integrated of unwinder, winder with dancer, pressure roll, web-stop system for the change of the roll, floor path

➤ MODEL ONIX



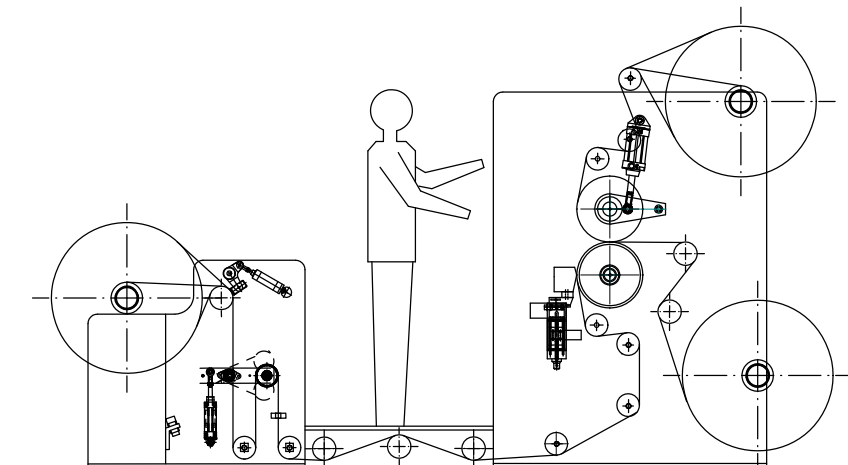
example of three layers converting line for material in roll, included unwinders with dancer, web-guide system, two slot die, calender integrated of unwinder and winder, floor and bridge path

➤ MODEL CORAL



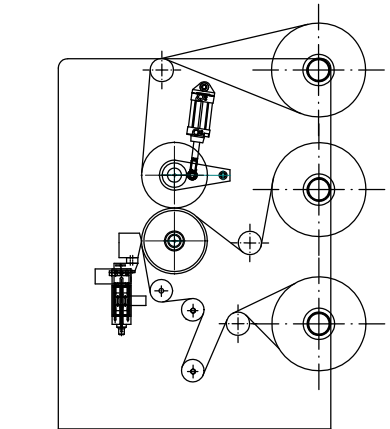
example of two layers converting line for material in roll, calender integrated of unwinders and winder, web-guide system, slot die

➤ MODEL JADE



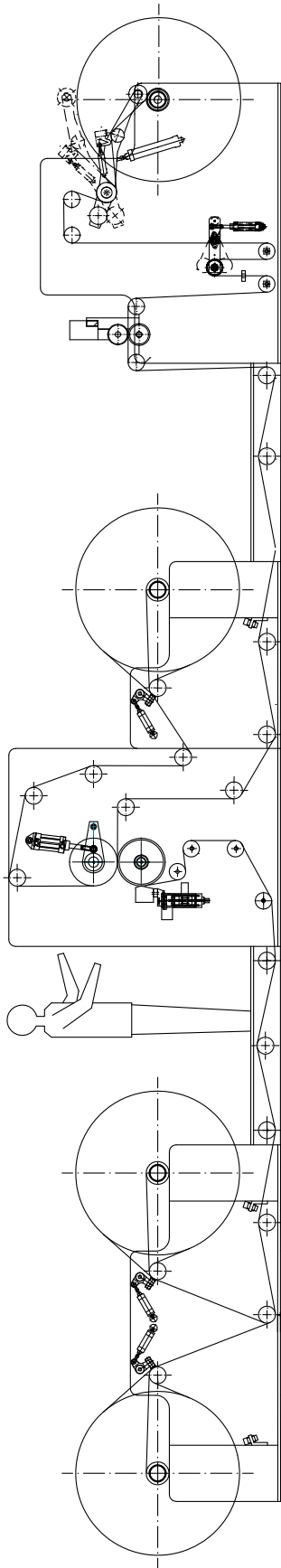
example of two layers converting line for material in roll, included unwinder with dancer, web-guide system, slot die, calender integrated of unwinder and winder, floor path

➤ MODEL SAPPHIRE

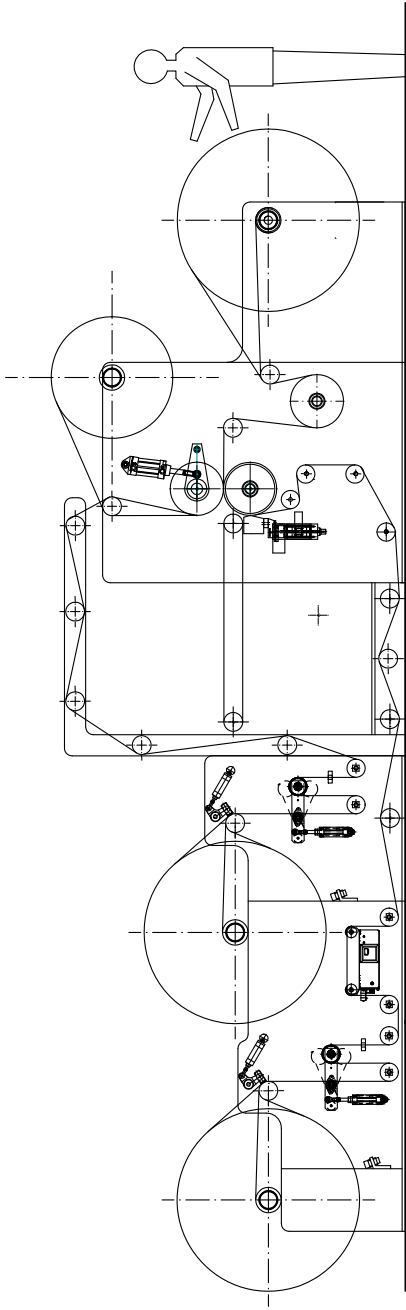


example of two layers converting line for material in roll, web-guide system, slot die, calender included of integrated unwinders and winder

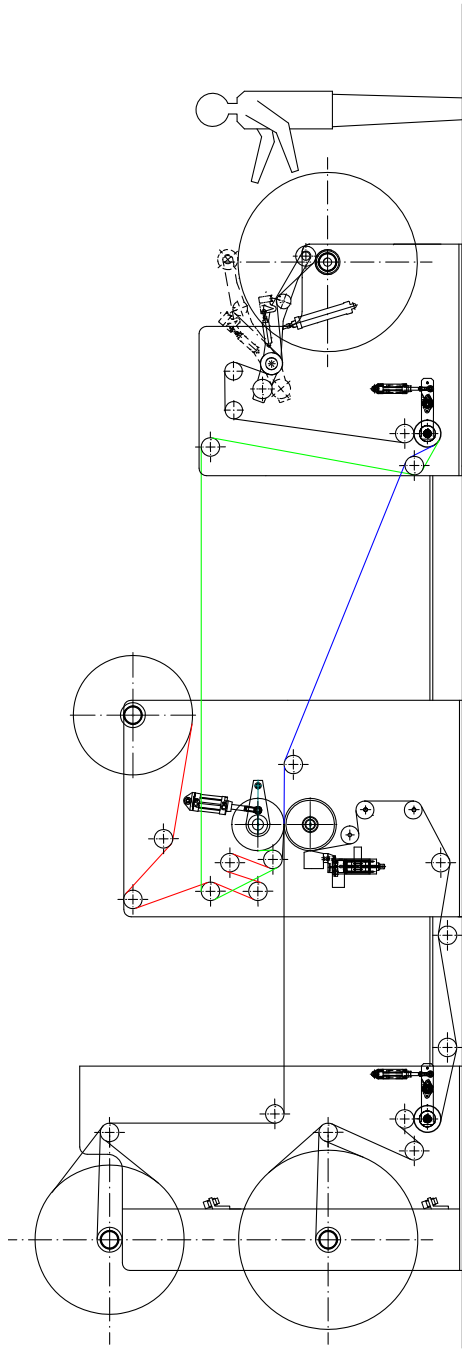
HOT MELT ADHESIVES CUSTOMIZED CONVERTING LINES FOR TECHNICAL CONVERTER



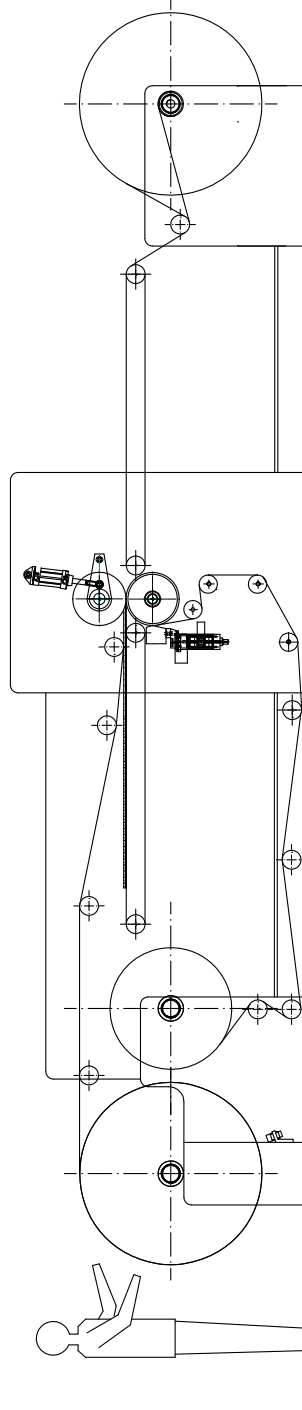
included three unwinders, web-guide system, hot melt adhesive dispenser (slot die or contact-less), calender, winder with pressure roll, web-stop system for the change of the roll, slitter, floor path



included unwinders with dancers, centering unit, web-guide system, conveyor belt, hot melt adhesive dispenser, calender, chiller, winder, web-stop system for the change of the roll, floor and bridge path



included three unwinders, auxiliary motorized nip roll, web-guide system, hot melt adhesive dispenser, calender equipped with chill roll, heated/cooled roll, winder with pressure roll, web-stop system for the change of the roll; green path for thermo-adhesion, top calender's roll with antistick coating



included two unwinders, conveyor belts, hot melt adhesive dispenser, calender, winder, floor path easy to use, is the perfect "comby" machine that enables you to work any kind materials in roll or in sheet

HIP-MITSU HOT MELT LAMINATOR and WEB-COATER

Solid, easy to use and to integrate with any type of auxiliary machine. They can be used in master or slave mode, for any line's performances

INTEGRABILITY

Mechatronics platform designed to be integrated with all kind of controls, including factory's EDP system.



HOTMELT LAMINATOR and WEB-COATER: GENERAL PERFORMANCES

Working width (mm)	from 50 up to 6.500
Laminating speed (m/min)	any
Tension control	yes
Calendering pressure (kg/cm)	from 0 up to 20
Heating/cooling rolls	yes
Independent nip	yes

WEB FLOW SETTING & CONTROLS

SIEMENS and/or ROCKWELL platform ; SCADA integration	yes
Recipes	yes

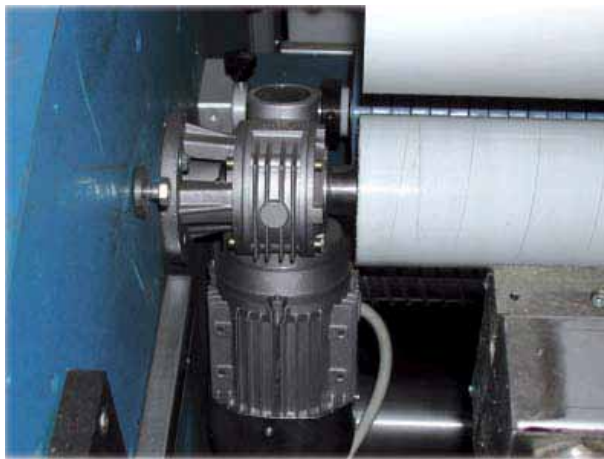
For further detailed information, please ask for the specific brochures of this families of machines



integrated of HIP-MITSU dispenser for hot melt adhesive



adjustable calendaring gap and pressure



AUXILIARY ROLLS

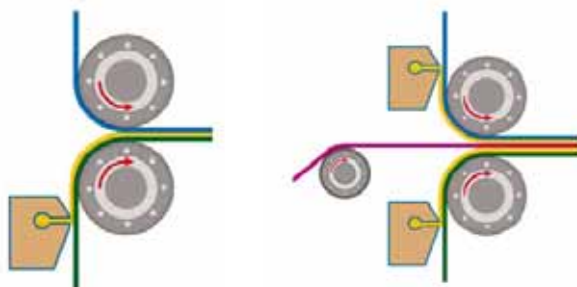
HIP-MITSU calenders and web coaters can be equipped with auxiliary rolls type:

- stretchers
- brake cylinders
- banana
- antistick

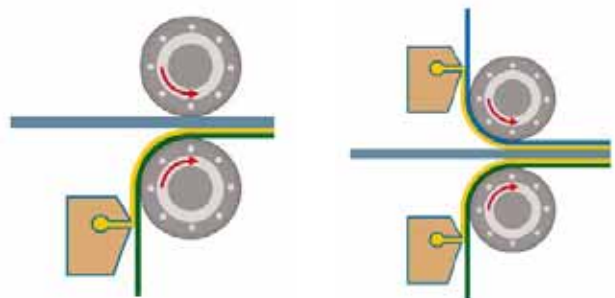


MAIN ROLLS

- heated
- chilled
- rubberized
- special coating



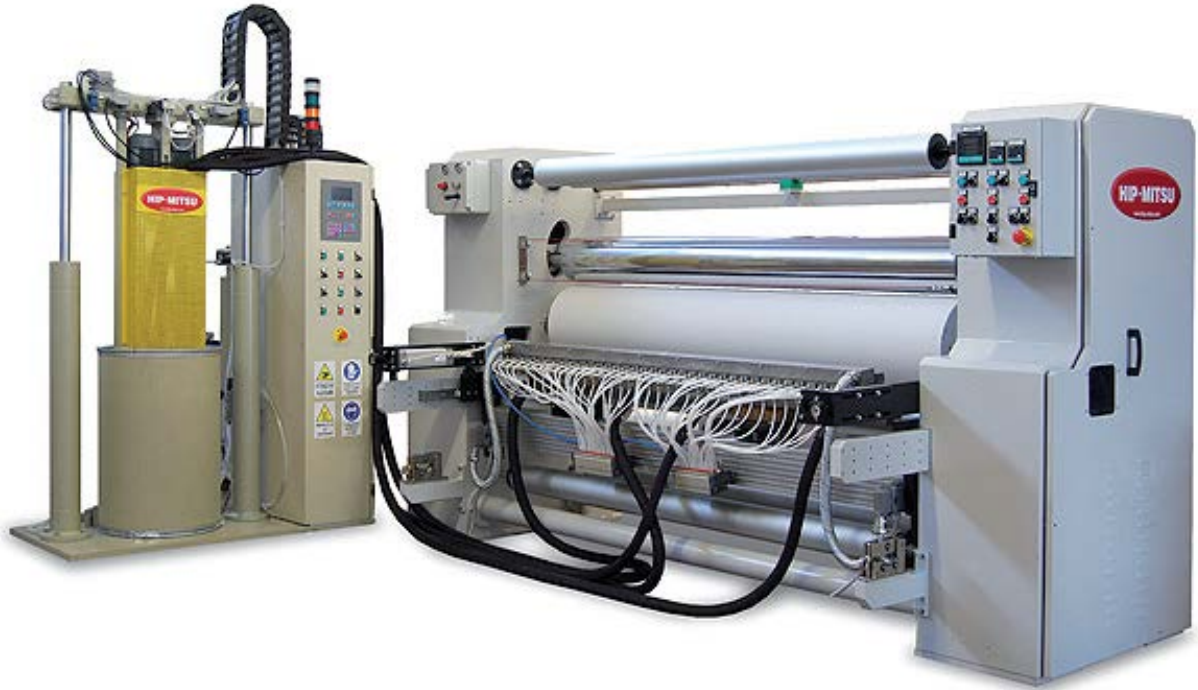
2 or 3 layers roll to roll laminators



2 or 3 layers roll to sheet laminators

For further detailed information, please ask for the specific brochures of this families of machines

HIP-MITSU HOT MELT LAMINATOR and WEB-COATER



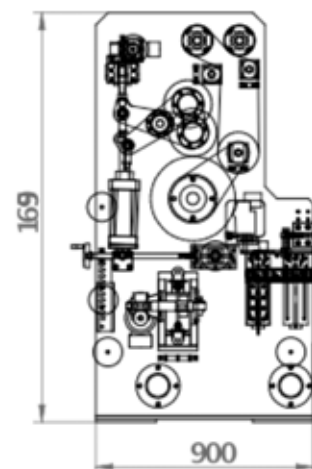
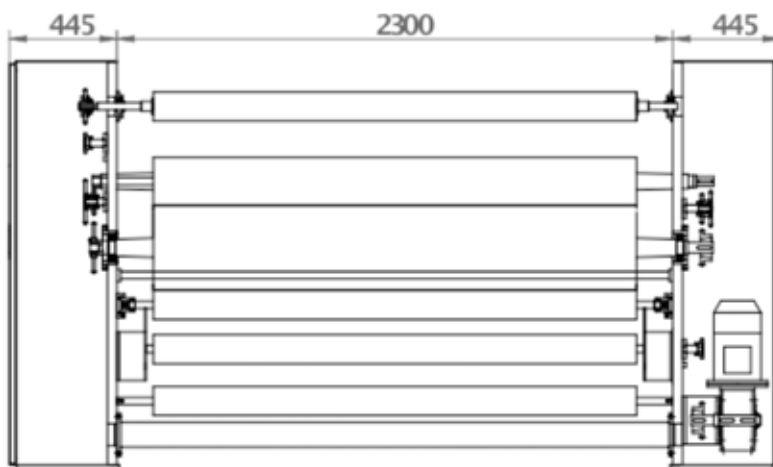
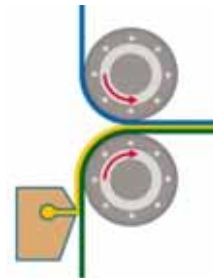
two layer roll to roll hot melt laminator

BRIEF INFORMATION ABOUT THIS MACHINE : 2 LAYERS ROLL TO ROLL LAMINATION

This compact laminator compact, in this example equipped with one Drum Melter model HIP-MITSU DM 200, is normally used for laminating with PUR adhesives.

In this case is also equipped with HIP-MITSU Automatic Cleaning System of the adhesive's circuit, to allow long machine's stops even with PUR.

Particularly versatile and easy to use, in this configuration is complete of motorized banana roll.



HIP-MITSU HOT MELT LAMINATOR and WEB-COATER



three layer roll to roll hot melt laminator

BRIEF INFORMATION ABOUT THIS MACHINE : 3 LAYERS ROLL TO ROLL LAMINATION

This laminator, in this example equipped with two Drum Melter model HIP-MITSU DM 200 for adhesives in drum and one continuous tank melter HIP-MITSU model MITSU 140 for adhesives in block or in chips, is designed for 3 layers lamination.

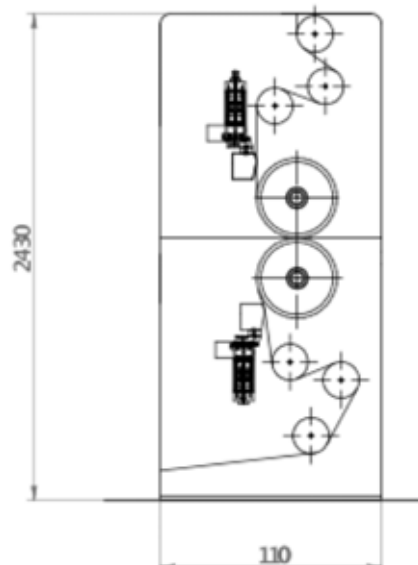
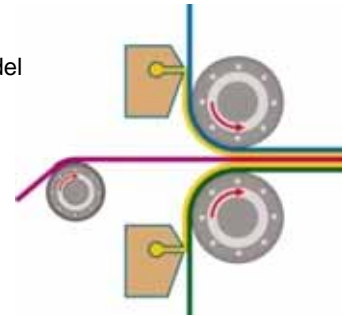
The machine apply simultaneously:

- PUR adhesive on one side
- PSA or EVA adhesive on the other side

Enabling the production of:

- 3 (three) layers laminated product (ROLL+PUR+ ROLL+EVA+ ROLL)
- self-adhesivized PUR laminated product (ROLL+PUR+ROLL+PSA+RELEASE)
- double self-adhesivized product (RELEASE+PSA+ROLL+PSA+RELEASE)

HIP-MITSU change over system enable a continuous production also when the adhesive's drum must be replaced because is empty.



HIP-MITSU HOT MELT LAMINATOR and WEB-COATER



three layer roll to roll or roll to sheet hot melt laminator

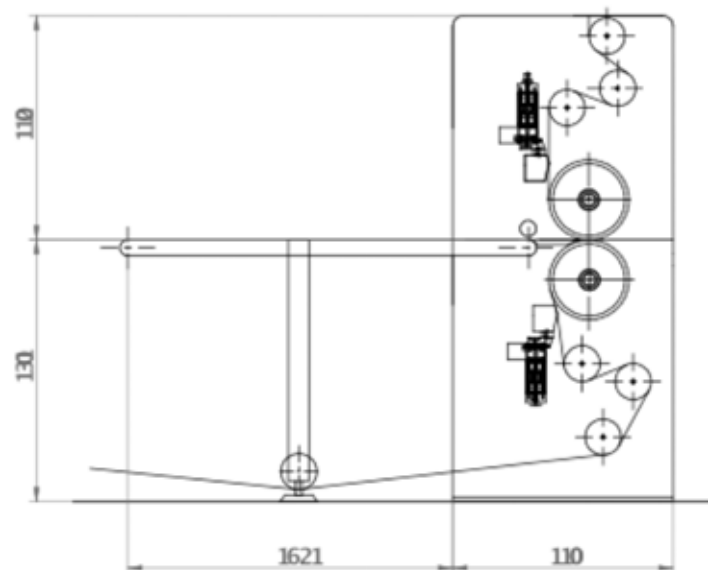
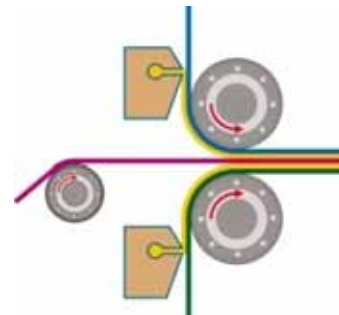
BRIEF INFORMATION ABOUT THIS MACHINE :

3 LAYERS ROLL to ROLL LAMINATION and ROLL to SHEET LAMINATION

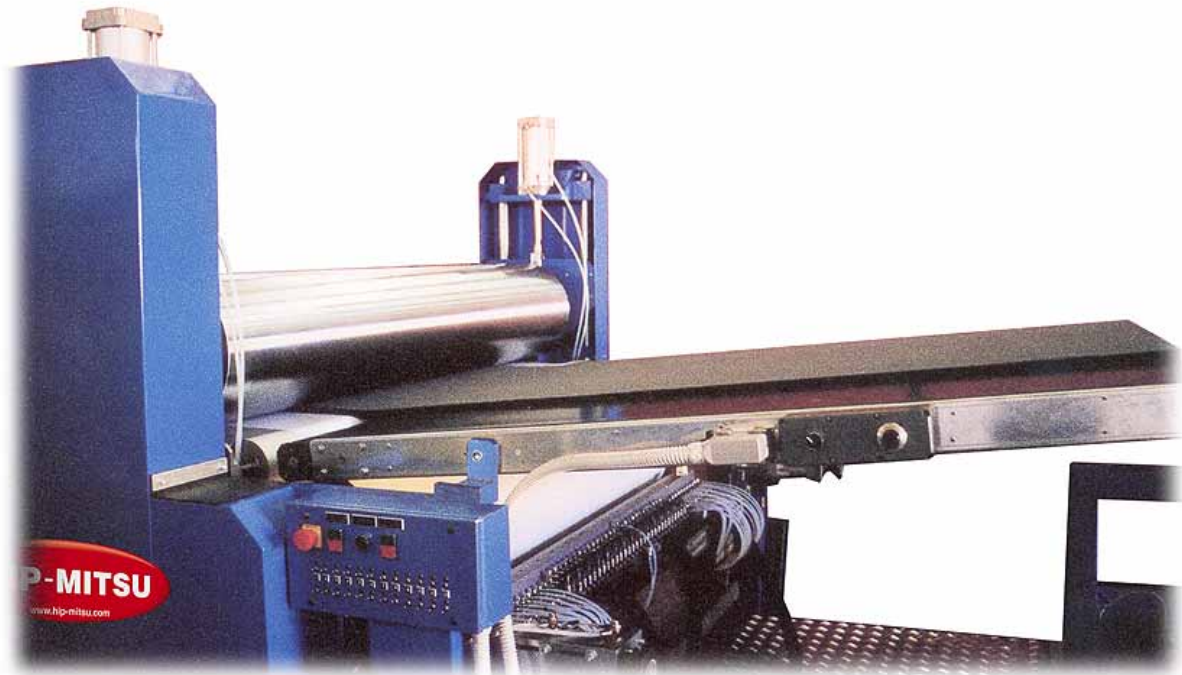
As the previous one this laminator enable the production of 3 (three) layers laminated and/or self-adhesivized product.

In this example of configuration is complete of motorized conveyor belt the design enable to work materials as reported below:

- ROLL + ROLL
- ROLL + ROLL + ROLL
- ROLL + SHEET + ROLL



HIP-MITSU HOT MELT LAMINATOR and WEB-COATER



three layer roll to roll or roll to sheet hot melt laminator

BRIEF INFORMATION ABOUT THIS MACHINE : 2 LAYERS ROLL to SHEET LAMINATION

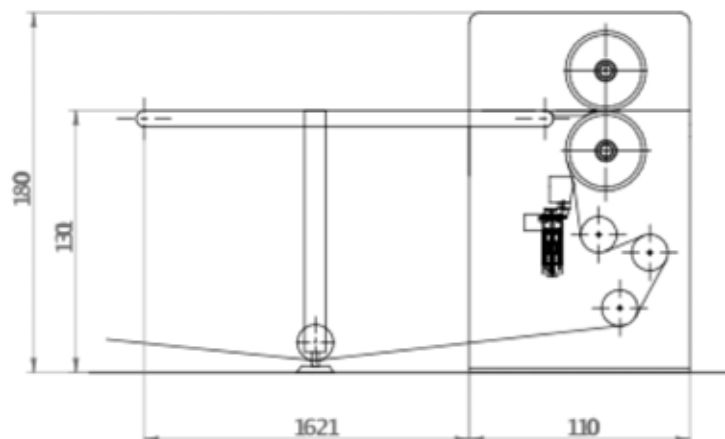
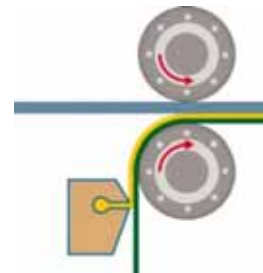
This laminator in this example of configuration, complete of motorized conveyor belt, is designed particularly for the lamination or the self-adhesion of wide materials in sheet enabling the production of:

- Laminated product: SHEET+ADHESIVE+ROLL
- Self-adhesivized end product: SHEET+PSA+RELEASE

For example this can be used with sheets made of:

- recycled nonwoven
- carded or needle punched nonwoven
- foam
- rubber

and more...



HIP-MITSU HOT MELT LAMINATOR and WEB-COATER



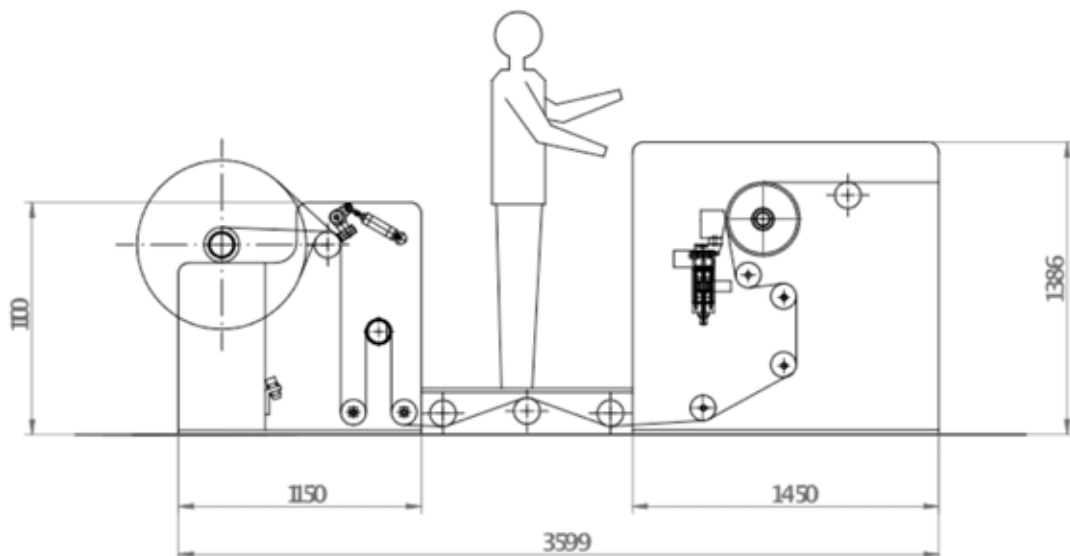
web coater

BRIEF INFORMATION ABOUT THIS MACHINE : WEB-COATER

HIP-MITSU webcoaters are designed to be integrated in existing traditional converting lines.

In this example of configuration is fully motorized and equipped with continuous output HIP-MITSU jumbo melter model M 750 for adhesives in chips or in block.

compatible with any kind of Winder and Unwinder (new or already installed), and usually integrated with control desk, is designed according to the tread-up needed for the specific material.



NARROW WEB TURN-KEY SOLUTIONS

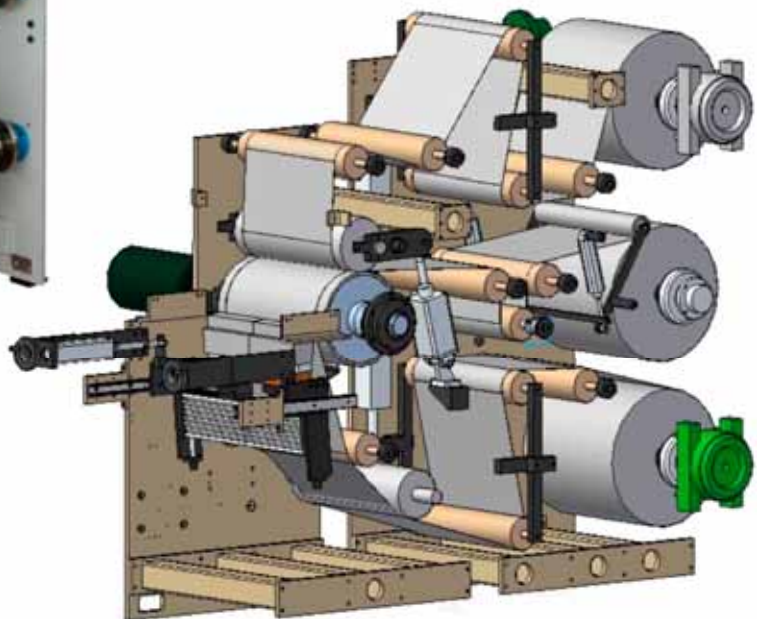
For the web-Coating and Laminating of narrow webs, HIP-MITSU offers a full range of integrated solutions.



example of narrow web converting line, easy to use, equipped of twin double breaking system for soft and hard materials. Suitable for specialty tapes, abrasive paper, paper and label, medical converter and more...



HIP-MITSU narrow Web-Coaters and Laminators can include hoses, adhesive's application devices, tank and drum melters, web-guides, winders, unwinders, nip rolls, expanding rolls, UV lamps, etc...



For further detailed information, please ask for the specific brochures of this families of machines

HIP-MITSU UNWINDERS and WINDERS

Winders and Unwinders made by HIP-MITSU are designed and manufactured specifically according to the materials that are to be processed and they are available in the following configurations.

UNWINDERS:

- Pneumatic Brake
- Powder Brake
- Motorized

WINDERS:

- Motorized with friction
- Motorized

GENERAL TECHNICAL FEATURES

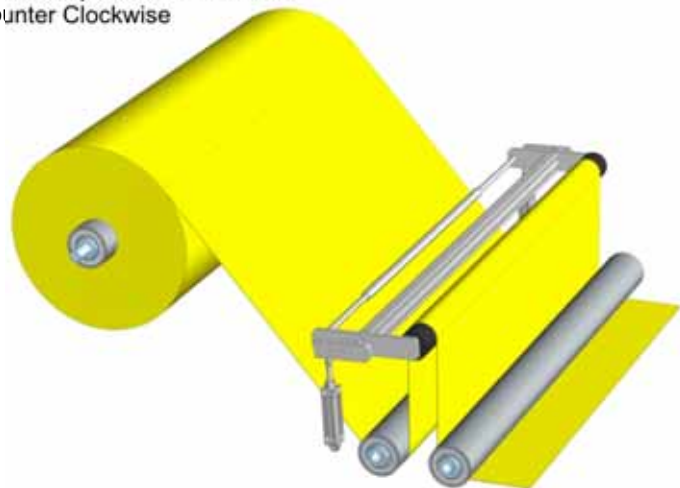
- Rider Roll Pressure and Taper Tuning settable via PLC, for a always perfect forming of the end rolls
- Adjustable slitting and edge trimming unit available, complete of bowed rolls
- Direction of rotation on the job Clockwise and Counter Clockwise
- "Web-Stop-System" for the change of the Roll
- Independent tension control for each shaft
- Integrated web guide

TENSION CONTROL CONFIGURATIONS:

- Fine Balanced Dancer
- Loading Cell
- Torque control
- Diameter Control

PLC CONTROLLED

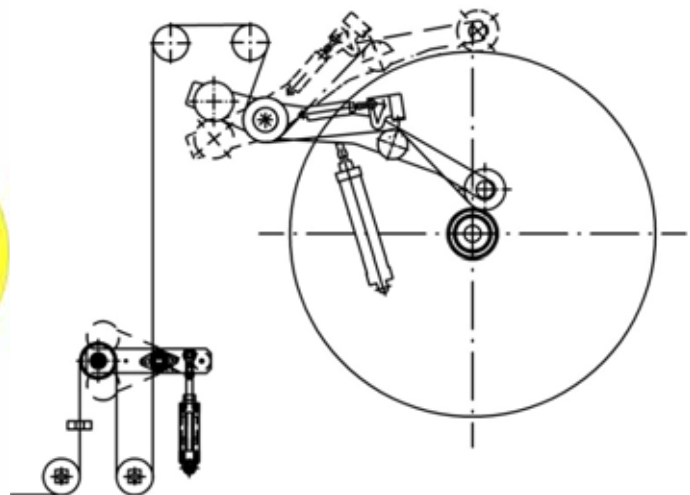
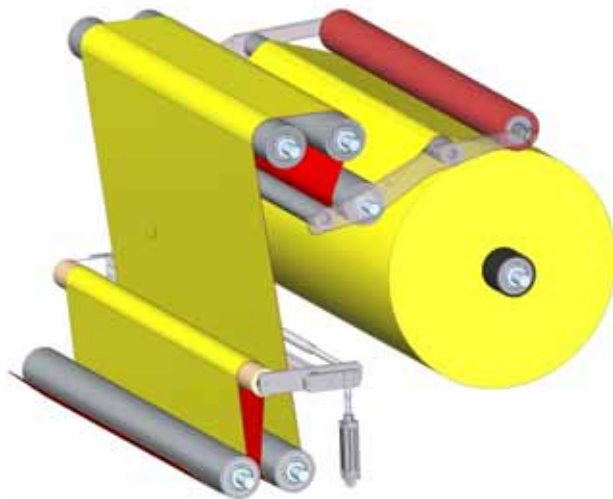
- User Friendly HMI
- PLC always at latest standard
- Tele-assistance
- Recipes



unwinder: example of machine equipped with dancer for tension control

FOR NEW or EXISTING LINES

All HIP-MITSU winder and unwinder can be easy installed on both new lines and on existing lines: in this way it is possible to achieve a meaningful increasing of the line performances as well as reducing production costs.



winder: example of machine equipped with dancer for tension control, pressure roll and "web-stop-system"

HIP-MITSU WINDER and UNWINDERS: GENERAL PERFORMANCES

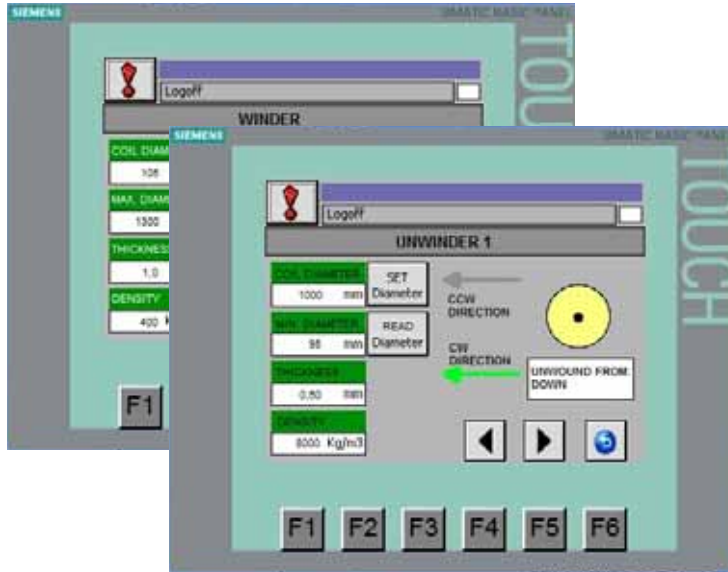
Working width (mm)	from 50 up to 6.500
Laminating speed (m/min)	from 2 up to 150
Max roll diam. (mm)	1.500
Reel diam. (inch)	3" or 6"

WEB FLOW SETTING & CONTROLS

SIEMENS and/or ROCKWELL platform ; SCADA integration	yes
Recipes	yes

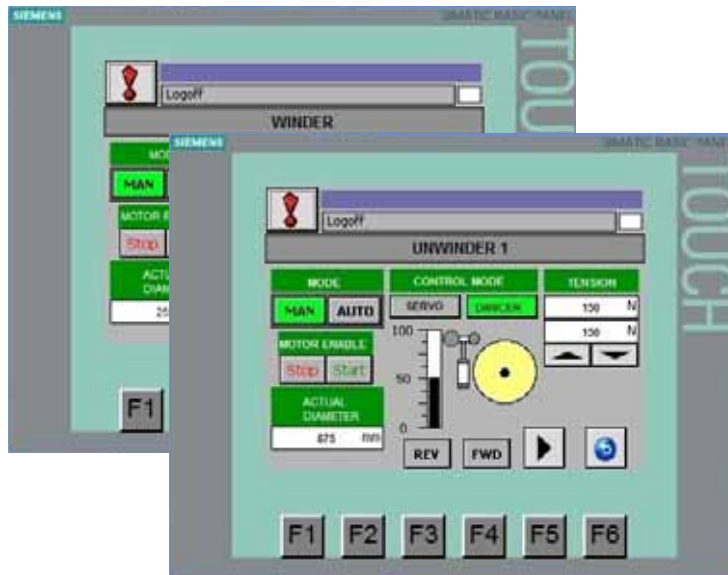
For further detailed information, please ask for the specific brochures of this families of machines

HIP-MITSU UNWINDERS and WINDERS : CONTROLS



In the screenshots above you can:

- see the last value of diameter used into the system (to be used when you switch on the machine)
- see external diameter of coil, reel diameter, material thickness and density
- select and visualize the thread-up direction
- set the diameter value



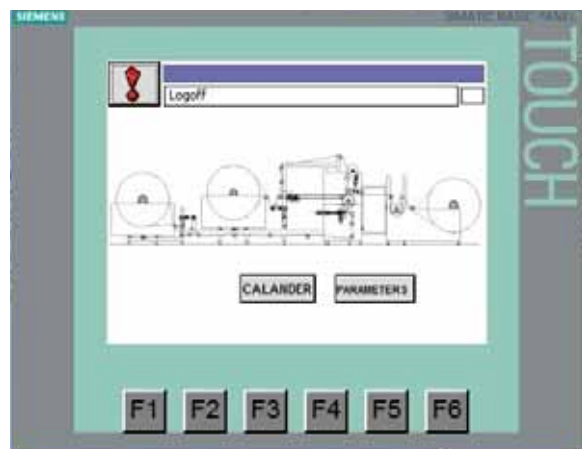
In the screenshots above you can:

- select manual mode for thread-up and auto mode for production
- select tension control type
- see the standard tension control value for the used substrate and manually set the effective tension
- visualize the actual diameter



In this screen example, you can choose between:

- man for manual
- movement or auto for production mode



touch panel interface:

- easy access to any parts of the line by pushing over it
- complete display of information

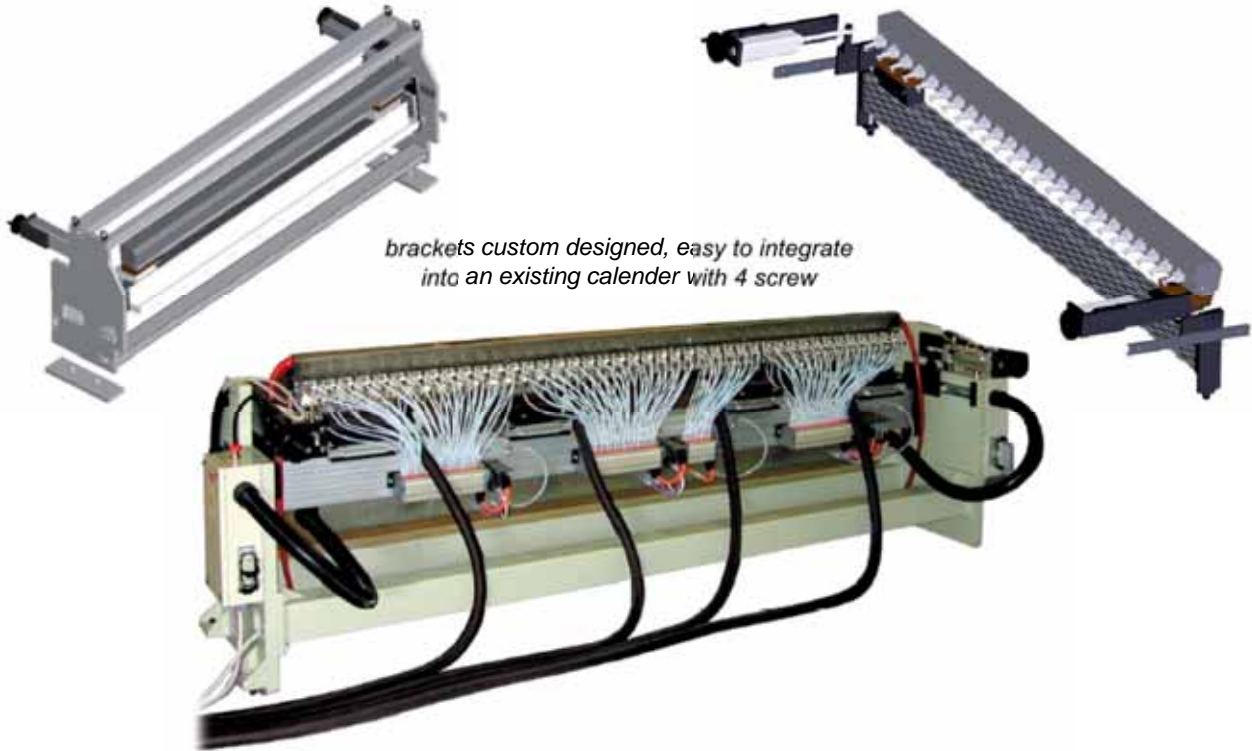
REENGINEERING of EXISTING CONVERTING or ROLL FORMING LINES

HIP-MITSU melters and dispensers systems can be easily installed on both new lines and on existing lines; in this way it is possible to achieve a meaningful increasing of the line performances as well as reducing production

cost.

In this way the end user can transfer to its own production well-tested solutions, availing itself of a team of specialists and reducing times and costs for the system integration.

HIP-MITSU HOT MELT BEAM and FRAMES for EXISTING CALENDER



HIP-MITSU SUPPORT - BEAM and FRAMES

All HIP-MITSU coating heads can be supplied on BEAM or FRAMES dedicated stands.

CUSTOMIZED SHOULDERS

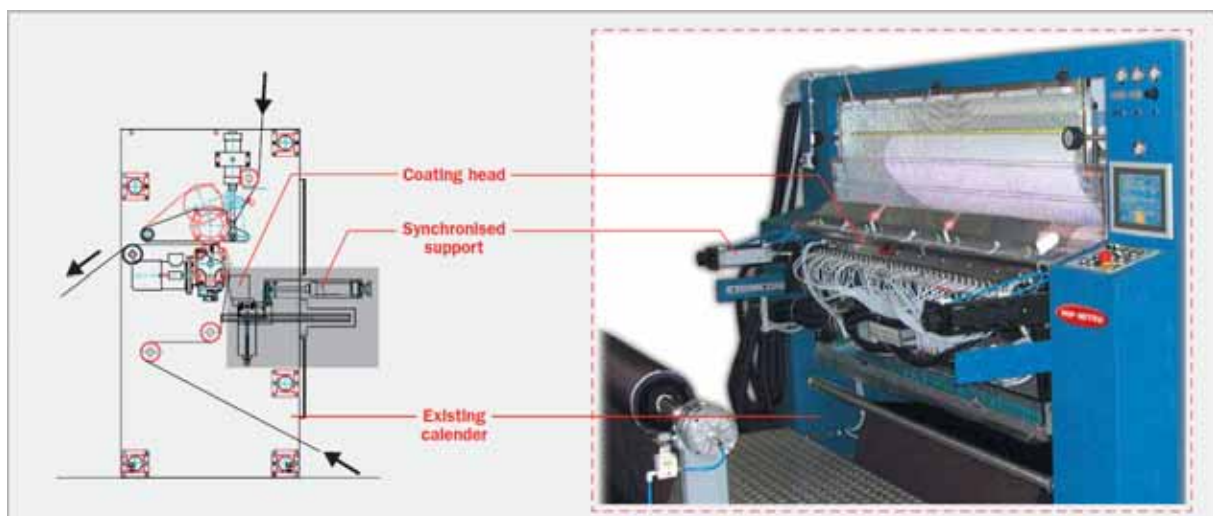
Shoulders are always designed to measure in order to integrate the system with the existing line.

SYNCHRONIZATION with the MAIN LINE

Equipped with high precision independent mechanical registers and with all devices and electrical checks for the execution of the coating/laminating and auxiliary operations and include a standby and working position, which can be synchronized with the main line.

EASY to be PLACED and MOVED

They are always planned and realized for reaching a precise and easy placement on the machine as well as for being moved in a quick and safe way, both using lift trucks or lifting hooks.



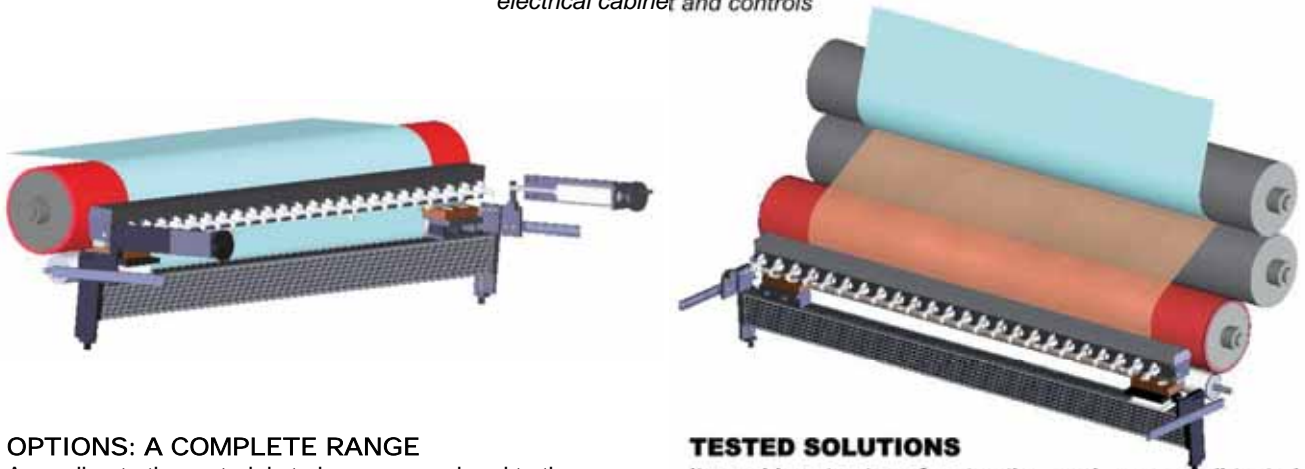
For further detailed information, please ask for the specific brochures of this families of machines

MOTORIZED WEB-COATER / LAMINATOR for EXISTING CONVERTING LINES

According to the customer's specific requirements HIP-MITSU technical department can designs a tailored solution.



solid, compact, custom designed to be integrated into a existing converting line in few hours, complete of beam for the adhesive dispenser, motorized and idle rolls, plug and play electrical integration, independent motorization, electrical cabinet and controls



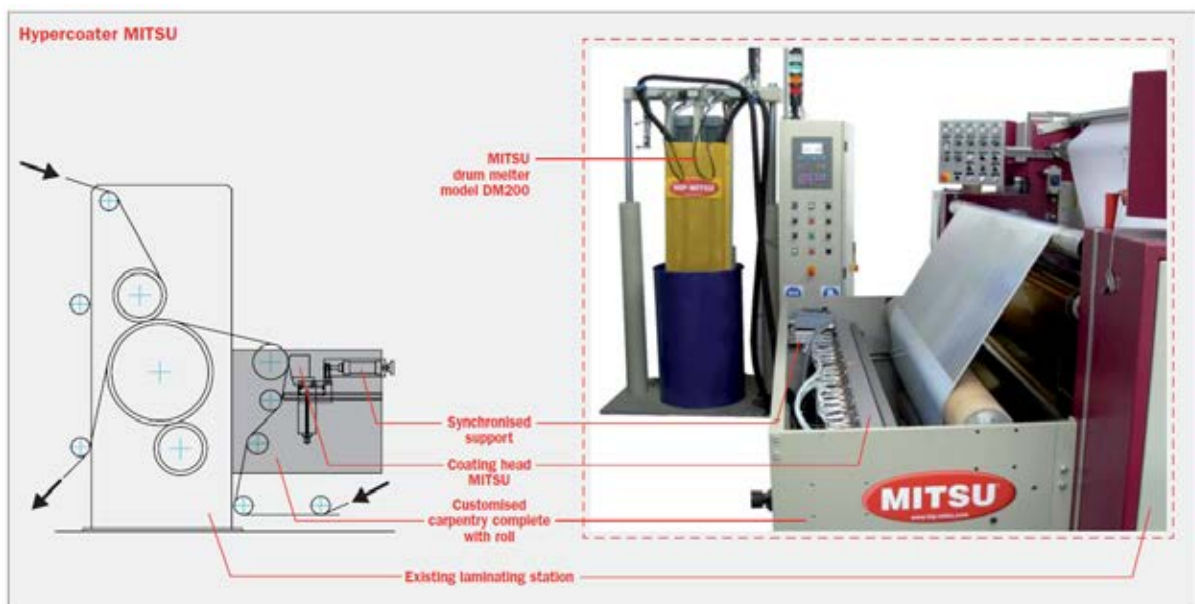
OPTIONS: A COMPLETE RANGE

According to the materials to be processed and to the line where they will be installed, can be used:

- one or more motors
- motors/board mounted left or right
- chilled or heated rolls
- independent tension control
- UV Lamps

TESTED SOLUTIONS

It enables to transfer to the end user well-tested solutions and to reduce times and costs of system integration.



For further detailed information, please ask for the specific brochures of this families of machines

MITSU ADHESIVE CONTROL SYSTEM

The controlling and supervising system developed by HIP-MITSU can monitor and feedback continuously and fully automatically the adhesive application in order to keep it constant independently from the changes of:

- viscosity values of the adhesives
- working temperature and consequently viscosity values
- substrates and sub-sequentially coating weight (gsm)
- type of adhesive in use adhesive
- circuit efficiency, for example in case of dirty filter
- pumps aging in case of prolonged use of abrasive adhesive
- coating width
- line speed

FLEXIBILITY

Allow the execution of small batches with the same efficiency of large productions

NO WASTES

- giving the guarantee that the process can take place from the beginning without any under or over dosage of the adhesive
- the operator can change the adhesive amount only inside a range set by the production responsible
- restricted access to the parameters, up to 5 levels

EASY TO USE

- the calibration of the adhesive distribution is immediate and completely automatic and can be easily obtained introducing on the display panel the desired working parameters, so as to be able to respond in a quick way to the frequent production changes
- any operator can easily use the system and can automatically take care of the adjustment of the process parameters without making mistakes

MITSU WEB FLOW CONTROL

The controlling and supervising system developed by HIP-MITSU can monitor and feedback continuously and fully automatically the web flow, and in particular:

- control of line speed
- tension control using dancer or load cell or combined
- electronic pressure control for each nip or calender
- possibility to use a pressure gap between right and left side of calender
- restricted access to the parameters, with up to 5 levels
- Alarms and events logging

FLEXIBILITY

- allowing the execution of small batches with the same efficiency of the large productions
- allowing to select different tension controls for different motors, according to the actual production
- allowing to select different line speed, using a simple button, according to the different phases of production

NO WASTES

- the operator can change the working parameters only inside a range set by the line responsible
- possibility to select slot die action during splicing

EASY TO USE

- the calibration of the load cell/dancer is quick and simple
- it's possible to use different calibration with different thread-up, selecting the configuration via recipe



- any operator can easily use the system and can automatically take care of the adjustment of the process parameters without making mistakes

MITSU ADHESIVE CONTROL SYSTEM & MITSU WEB FLOW CONTROL

RECIPES

- recipes storage is available with local management on the machine's server or LAN in connection with your Factory/Company EDP
- the change of the set value can take place as well during the work without having to stop the line, eliminating completely the machine's down time
- the recipes stores both process parameters and tolerance range, thread-up configuration, tension control configuration

OPEN PLATFORM INTERFACE

- MITSU Flow Control is planned and realized to interface in simply and intuitive way with any other line's machine
- MITSU Adhesive Control System and MITSU Flow Control is planned and realized to interface in simply and intuitive way with any PLC or informatics system

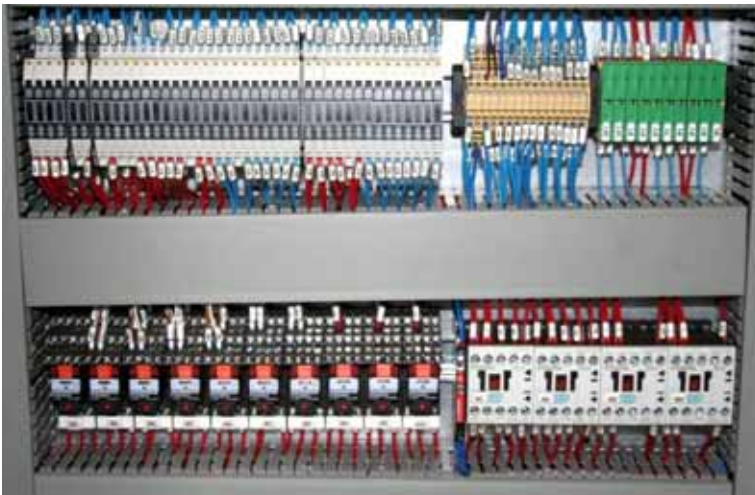
IN-LINE CERTIFICATIONS

The data used for the process control are stored, can be downloaded or checked anytime to get easily for each production batch the report of:

- certification in-line of the adhesive used
- certification in-line of the web tension
- productive performances of the machine
- production costs



RELIABILITY IS A LOGICAL CONSEQUENCE, IT IS NOT A CHANCE



electrical panels built to the highest standards



accurate machine's check out

RELIABILITY: HIP-MITSU WAY OF LIFE

The reliability of our products is the logical result of the working methods that HIP-MITSU apply to design, build and check all our machineries before they are brought on the market.

WELL TESTED BEFORE GETTING to the MARKET

All HIP-MITSU technologies are well tested before they are put to the market: that's why we can guarantee not only a fully reliable product but also a long-term consistency in the machine performances. To do that, we can reckon on our Competence Center and on the specialized lab facilities of the Universities we are cooperating with.

THE MOST ADVANCED STANDARDS

All procedures used by HIP-MITSU to design, produce and control the quality of their products, are very strictly standardized.

We are only using the newest machine tools to make our products since mechanical precision is not a buzz word but an absolute must to be pursued during all construction phases of the machine

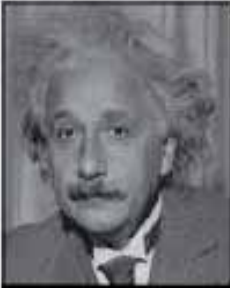
GUARANTEED CONFORMITY

This is the only way we know to deliver our customers some machines that are in strict conformity with the technical specifications guaranteed by HIP-MITSU: excellence is built by our people for you day by day.



mechanical construction: excellence in every detail, micro and macro, realized by using only the most advanced numerical control machines and assembled according to strict quality control procedures

HIP-MITSU COMPETENCE CENTER



Albert Einstein once said:

“1000 theories and analyses can be nullified by a single experimental result, but no experimental result could ever be invalidated by 1000 theories“

the moral: we must run trials

RUNNING TRIALS WITH US

Being part of HIP-MITSU World means having the opportunity to use our Competence Center which are equipped with the most advanced technologies and production lines, helping our Customers during application development and enabling adhesives, polymers and materials testing.

COMPETENCE CENTER

It is located at HIP-MITSU's headquarters, in Italy. Free demonstrations of our equipment, lines and systems in real production conditions can be arranged everyday.

A FULL ASSISTANCE DURING EACH PHASE of the PROJECT

HIP-MITSU give highly qualified support to their customers during the R&D phase, focused on the achievement of new coated and/or laminated products. The full range of services includes:

- **sampling and preliminary production series**
Tests and preliminary production series with substrates/polymers/adhesives;
- **project engineering**
HIP-MITSU multi-skilled and English-speaking team offer their customers their long and valuable experience in Project Engineering.

WELL-TESTED METHODS HELP YOU to DEVELOP a NEW PRODUCT in a SHORT TIME

Thanks to HIP-MITSU well-tested methods and criteria, which have been introduced and valued in the most important business seminars all over the world, you will be able to develop in the shortest time your new product and see it realized in our laboratories.

Available equipment at our Competence Center

- Converting line, width up to 500 mm
- Continuous output tank melter
- Drum melter for 20 and 200 liter packaging
- Single and multiple automatic guns for in contact and contact-less, also intermittent
- Slot dies for hot melt adhesives
 - model "MITSU SMF"
 - model "MITSU Custom Concept" (patented)
 - model "MITSU Smart COAT" (patented)
 - model "MITSU Check & Coat" (patented)
 - model "MITSU HF", for intermittent applications
 - model "MITSU SV"
- Roll systems for hot melt adhesives applications
- Process supervisors and electronic control systems for the application of hot melt adhesives
- Electronic control systems for intermittent applications
- Supervisors for calanders and coating a/o laminating lines

FIRST INSTALLATION

Taking advantage of the first installation service offered by HIP-MITSU means relying on a personnel who will follow the works during any single phase including the interfacing with all other machines.

HUMAN RESOURCES AVAILABLE for YOU

Depending on each Customer's needs and the operation required we offer our customers:

- senior process engineers;
- junior process engineers;
- technical experts in PLC and Drives;
- technical experts in PC supervision and LAN;
- qualified mechanicals;
- qualified electricians.

PLANNING: DEFINED INSTALLATION SCHEDULE and IMMEDIATE PLANT START-UP

The machinery installation will be discussed and planned in detail in order to guarantee:

- defined installation timing;
- immediate plant start-up.

SURVEY IN CASE OF RETROFIT

survey of the existing line	mechanical Integration
electrical-pneumatic integration	factory PLC & EDP integration
installation road map definition	new line's CE certification



trouble-free start up

TRAINING OF YOUR PERSONNEL

The high quality of the training course which HIP-MITSU offer to their Customers is commonly appreciated as one of the aspects where we do really make the difference.

We want to allow you to know the machine in-depth so that you'll be able to use it at its best production performances reducing the machine pay-back.

Being part of HIP-MITSU World will allow you to access the different training programs. They are divided as far as concern:

- machine operator;
- production manager;
- electrical maintenance manager;
- mechanical maintenance manager.



MITSU training: sailing safe in any weather conditions

GOOD BALANCE BETWEEN THEORY AND OPERATION

A particularly extensive documentation in 5 languages is available for the training; the training includes both theoretic and guided operational sessions in order to make the customer able to start their production from the very first day after the start-up of the line and will end up with a validation test and relevant certification for the attendants.

TARGET: HIGHEST LEVEL OF PRODUCTION FROM THE VERY BEGINNING

Investing on training and certification of your staff means obtaining the highest production grade from the very first day and shortening the machine pay-back time.

TARGET: PRESERVE THE INVESTMENT VALUE

Investing on training and certification of your maintenance technician means preserving your investment value along the time.

TECHNICAL ASSISTANCE

Buying a HIP-MITSU machine means being able to rely on technical assistance exclusive service ensuring the plant operation continuity.

SKILLED HUMAN RESOURCES

HIP-MITSU reserves significant resources on training and certification for technical assistance personnel.

Our specialists are trained to work in short term in any operation circumstance, either alone or on a working team.

They have multi-years experience with good english language skills.

TECHNICAL SKILLS AVAILABLE on SITE

- senior process engineer
- junior process engineer
- technical expert in PLC and Drives
- technical experts in PC supervision and network
- qualified mechanicals
- qualified electricians

ON-SITE ASSISTANCE in SHORT TIME

The international Venice and Treviso airports, located few minutes driving from HIP-MITSU's headquarters, assure easy and quick connections with all the major European city thanks to almost 1000 weekly flights.

SCHEDULED TECHNICAL ASSISTANCE

Being part of HIP-MITSU world means having the possibility to use our scheduled technical assistance programs.

We normally take this opportunity also to test your personnel again (machine and maintenance operators); according to the results of the test, we will go through all aspects which need to be improved.

Our technician are available for all scheduled maintenance operations.



professional and immediate



always close to you

PHONE ASSISTANCE AROUND THE CLOCK

For our customers who typically work 24 hours a day for 365 days a year, a telephone technical assistance service is available around the clock with English-speaking skilled personnel.

Because we always have a solution to all your problems.

REMOTE ASSISTANCE VIA WEB

Being part of HIP-MTSU World means the possibility to have always plants using the most advanced technologies.

All the machine are made on a platform including remote assistance and monitoring via web.

The activation can be made even after the first installation and requires just a on-site phone connection.

We can operate via web on your machines in order to:

- verify the correct operation;
- verify the setting;
- collect alarms log;
- customize the software.

The last aspect is particularly useful if you want to implement some modifications to the software; this normally occurs after some years when you maybe need to install other equipment which must be interfaced with the laminator, e.g. optical inspection system.

SPARE PARTS

Our spare parts service is supported by the major couriers working worldwide, ensuring the delivery of goods in the morning after the order receipt.

We can leave pay-per-use spare parts at our customers facilities. In this case you only pay for the spare parts that you need (this option is valid if you have subscribed a scheduled check-up program).



24 / 24 assistance



remote assistance



spare parts always available



HEAD OFFICE

I – 31027 Spresiano (TV) Italy • Via A. Volta 1
Tel. +39 0422 887.566 r.a. • Fax +39 0422 887.337
www.hip-mitsu.com • info@hip-mitsu.com

How

IMPROVE

PRODUCTIVITY

MELTING COATING & LAMINATING BETTER

INCREASING SPEED, FLEXIBILITY & QUALITY

TOTAL PROCESS CONTROL

SHORT MACHINE'S PAYBACK

USER FRIENDLY TECHNOLOGIES