MACHINES for TECHNICAL TEXTILE CONVERTER
Turn-Key Converting Line, Melter, Dispenser & 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 melter, dispenser and converting lines 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.

**HIP-MITSU into technical textile converting**

We have installed machines worldwide for hot melt coating and lamination of technical textile

Our customers are global and/or small Companies producing exclusively excellence materials, without any defects and stable in terms of quality; when they invest into technology they always look for top performances, reliability and flexibility.

We are pleased to mention that since 1996 the machines we have installed are producing millions of square meters of high quality end product at very competitive production costs every day.

It will be our pleasure to show you an installation in operation at one of our customers.

To have the full list of our references in Europe, Asia, North and South America on the field of technical textile and more please contact our sales department.
Skilled in materials for technical textile
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 for converting
Since 1994 HIP-MITSU systems can apply the hot melt adhesives which are commonly used for technical textiles:
- PSA
- PUR
- ACRYLIC
- EVA
- COPE

end product:
- lamination
- self adhesivation
- thermoadhesivation

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.

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

Industrial fields where we have references and a wide experience
- Hygiene and Medical
- Automotive
- Membrane
- Building
- Roofing
- Abrasive and Car Polish
- Carpet Backing
- Technical Textiles
- Filtration
- Plastic Film
- Reinforced Plastic
- Foam Lamination
- Shoes and sport shoes
- Lingerie
- Geotextiles
- Antivibrating
- Thermal and Acoustic Insulation
- 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 + Aluminium 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
- Thermo adhesivation

and more …

Latex free carpet backing and pre-coating

just some examples:
- Pre-Coating on tufted carpet
- Backing on tufted carpet
- Backing on artificial tuff
HIP-MITSU melter and dispenser

<table>
<thead>
<tr>
<th>MELTING and PUMPING PERFORMANCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tank melter (kg/hour)</td>
</tr>
<tr>
<td>Drum melter (EU std)</td>
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<tr>
<td>Drum melter (US std)</td>
</tr>
<tr>
<td>Metering pumping station</td>
</tr>
</tbody>
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<th>AUTOMATIC SETTING and CONTROLS</th>
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<tr>
<td>Automatic setting</td>
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<td>Stable application independent from:</td>
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<td>- viscosity variation</td>
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<tr>
<td>- adhesive's changes</td>
</tr>
<tr>
<td>- temperature changes</td>
</tr>
<tr>
<td>- dirty filters</td>
</tr>
<tr>
<td>- gear pump aging</td>
</tr>
<tr>
<td>Recipes of each batch</td>
</tr>
<tr>
<td>In-line process monitoring and control</td>
</tr>
<tr>
<td>Reporting batch by batch</td>
</tr>
<tr>
<td>Remote control</td>
</tr>
<tr>
<td>Automatic setting</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>COATING PERFORMANCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min coating width (mm)</td>
</tr>
<tr>
<td>Max coating width (mm)</td>
</tr>
<tr>
<td>Coating width change (sec)</td>
</tr>
<tr>
<td>Coating weight change (sec)</td>
</tr>
<tr>
<td>Adhesive's add-on level (gsm)</td>
</tr>
<tr>
<td>Sigma in CD (%)</td>
</tr>
<tr>
<td>Sigma in MD (%)</td>
</tr>
<tr>
<td>Intermittence</td>
</tr>
<tr>
<td>Pattern available</td>
</tr>
<tr>
<td>Pattern's change (sec)</td>
</tr>
<tr>
<td>Adhesive's change (sec)</td>
</tr>
<tr>
<td>Automatic cleaning system</td>
</tr>
</tbody>
</table>

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

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 more 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

**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 …**

**Standard or 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.

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**TURN-KEY HOTMELT CONVERTING LINES:**

**GENERAL PERFORMANCES**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working width (mm)</td>
<td>from 50 up to 6,500</td>
</tr>
<tr>
<td>Laminating speed (m/min)</td>
<td>from 2 up to 150</td>
</tr>
<tr>
<td>Web tension control</td>
<td>yes</td>
</tr>
<tr>
<td>Calandering pressure (kg/cm)</td>
<td>from 0 up to 20</td>
</tr>
<tr>
<td>Winders and Unwinders roll max diam. (mm)</td>
<td>1,500</td>
</tr>
<tr>
<td>Reel diameter (inch)</td>
<td>3&quot; or 6&quot;</td>
</tr>
<tr>
<td>Integrated web-guide</td>
<td>yes</td>
</tr>
<tr>
<td>In-line slitting unit</td>
<td>yes</td>
</tr>
<tr>
<td>Edge trimming unit</td>
<td>yes</td>
</tr>
</tbody>
</table>

**WEB FLOW SETTING & CONTROLS**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIEMENS and/or ROCKWELL platform</td>
<td>yes</td>
</tr>
<tr>
<td>SCADA integration</td>
<td>yes</td>
</tr>
<tr>
<td>Recipes</td>
<td>yes</td>
</tr>
</tbody>
</table>
Hot melt adhesives turn-key converting lines for technical textile converter

Example of two layer converting line for material in roll, included two unwinder, web-guide system, slot die, calender, winder, por and edge path control, traditional.

Suitable for automotive, shoes, textile, furniture converter and more.
Hot melt adhesives turn-key converting lines for technical textile converter

Example of three layers converting line for material in roll, included unwind, 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 textile converter

MACHINES for TECHNICAL TEXTILE CONVERTER

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Turn-key converting lines for hot melt adhesives for technical textile 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, dancer and 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 unwindern with dancer, web-guide system, slot die, calender integrated of unwindern 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 unwinderns and winder
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 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

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-adhesivation, top calander's roll with antistick coating
**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.

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**HOTMELT LAMINATOR and WEB-COATER: GENERAL PERFORMANCES**

<table>
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<tr>
<td>Working width (mm)</td>
<td>from 50 up to 6,500</td>
</tr>
<tr>
<td>Laminating speed (m/min)</td>
<td>any</td>
</tr>
<tr>
<td>Tension control</td>
<td>yes</td>
</tr>
<tr>
<td>Calandering pressure (kg/cm)</td>
<td>from 0 up to 20</td>
</tr>
<tr>
<td>Heating/cooling rolls</td>
<td>yes</td>
</tr>
<tr>
<td>Independent nip</td>
<td>yes</td>
</tr>
</tbody>
</table>

**WEB FLOW SETTING & CONTROLS**

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<th>Feature</th>
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<tr>
<td>SIEMENS and/or ROCKWELL platform ; SCADA integration</td>
<td>yes</td>
</tr>
<tr>
<td>Recipes</td>
<td>yes</td>
</tr>
</tbody>
</table>

For more detailed information, please ask for the specific brochures of this families of machines.
**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

For more 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.
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 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-adhesivation 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…
Brief information’s 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 more 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

**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.

<table>
<thead>
<tr>
<th>HIP-MITSU WINDER and UNWINDERS: GENERAL PERFORMANCES</th>
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<tbody>
<tr>
<td>Working width (mm)</td>
</tr>
<tr>
<td>Laminating speed (m/min)</td>
</tr>
<tr>
<td>Max roll diam. (mm)</td>
</tr>
<tr>
<td>Reel diam. (inch)</td>
</tr>
</tbody>
</table>

**WEB FLOW SETTING & CONTROLS**

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

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

MACHINES for TECHNICAL TEXTILE CONVERTER  © www.hip-mitsu.com
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
**Turn-key solution for the reengineering of existing converting lines or roll forming lines**

HIP-MITSU melters and dispensers systems 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 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.

**Complete 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.

**Customized shoulders**

Shoulders are always designed to measure in order to integrate the system with the existing 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 more detailed information, please ask for the specific brochures of this families of machines.
HIP-MITSU motorized hot melt webcoater and weblaminator 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 more 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 particularly:
- 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
A precise and constant adhesive’s application
HIP-MITSU coating systems and lines ensure an extremely precise adhesive application (gr/sqm) in any working condition, to get always a perfect and stable production in every batch and over the time.

Upgrading of existing lines
Hot melt systems realized by HIP-MITSU can be easily installed also onto existing converting lines.

Automated production setting
Human errors can happen! The inline servers that can be installed onto our lines never fail and enable automatic settings without any errors, to get always a perfect production.

On-line certification of production batches
Our systems enable on line certification of product features: costs and quality always under control.

Always perfect rolls!
Web tension is kept under control during each process phase to always obtain perfectly wound rolls.

Where can you see our systems running?
We are used to support our customers into R&D: at our competence center, specialized in poly/nonwoven/tissue lamination you can test all our technologies on your lamination, materials up to 600 m/min working speed.

electrical panels built to the highest standards
accurate machine’s check out

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
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? No sooner said then done! 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 to grant 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

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
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 electricals

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.
**Telephone 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 machines 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 your 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).