

## RETROFIT of web-coating a/o laminating equipment: a turnkey service

**HIP-MITSU**, an Italian company headquartered 15 minutes from the international Venice and Treviso airports, is one of the most qualified producers of *web-coating and laminating equipment*, in which field it has operated in for many years.

### Specialisation and steady research

In particular, the high specialisation in the production of coating heads and the steady research in the product innovation are well testified by many international patents belonging to the company.

### A turnkey service for the re-engineering of existing lines

All HIP-MITSU 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 costs*.

Hereinafter it is described in detail the services offered by HIP-MITSU for the machine *re-engineering* and for the installation.

### Reduced times and costs

From the work of retrofit offered by HIP-MITSU, 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*.

### Survey of the existing system

In case the drawings of the system to be retrofitted are not available or not updated, HIP-MITSU put at its customer's disposal, worldwide, skilled professionals for the line survey in order to ensure a perfect installation in definite times.

This enables limited line standstill during the installation.

### Mechanical integration: engineering and production of customized supports.

According to the drawings of the existing line and to the specific requirements of each customer, HIP-MITSU technical office designs the integration of the existing system; that means the building of customised supports is easy and can quickly be installed on to the machine.

The support can be basic or complete with rolls and motors, according to the specific requirements related to the materials processed by the end user on its own production process.

They are provided with all devices and electrical checks for the web-coating/laminating as well as the auxiliary operations and include a working and stand-by position that can be synchronised with the main line.

The stands also provide a maintenance working position enabling an easy access to the coating head without removing it from the main line.

### Electric and pneumatic integration

All HIP-MITSU supports are provided with quick release plugs and are standardly equipped with an interface to the emergency device of the main line as well as with the inputs of the speed signals.

The electrical feeding belonging to the supports and to all related HIP-MITSU devices is completely autonomous and occur from a single independent input.

Even the pneumatic feeding is independent.

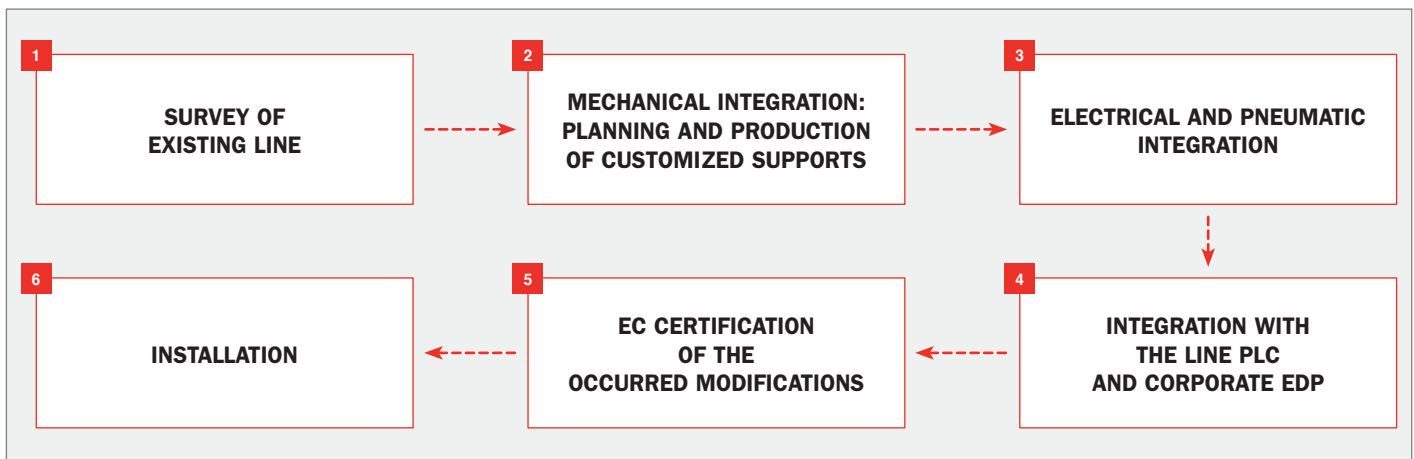
### Integration with the line PLC and corporate EDP

Should the customer wish to integrate the support and obviously all related HIP-MITSU systems and to have a connection with the line server or with the corporate EDP network, they can be equipped with the HIP-MITSU control systems, which are located on a open platform, already integrated with data exchange protocols and studied for communicating with all protocols in force.

### EC certification of the occurred modifications

This operative way also enables to get the essential EC Certification of the system integration.

### TURNKEY SERVICE: limited times and costs ensured



## Installation

HIP-MITSU service of technical assistance is performed by a team of skilled technicians operating worldwide for many years and ensures a highly professional support during the installation.

Well-tested procedures and a careful planning of all steps of intervention ensure the execution of all operations in few hours, strongly reducing machine standstills.

HIP-MITSU working team for technical assistance includes:

<i>senior process engineers</i>
<i>junior process engineers</i>
<i>mechanical maintenance staff</i>
<i>electrical maintenance staff</i>
<i>electronic maintenance staff</i>
<i>PLC software technicians</i>
<i>PC software technicians</i>

Installation

## HIP-MITSU support – BEAM model

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

### Complete synchronisation with the main line

HIP-MITSU stands model BEAM are 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 stand-by and working position, which can be synchronised with the main line.

### Working and maintenance position

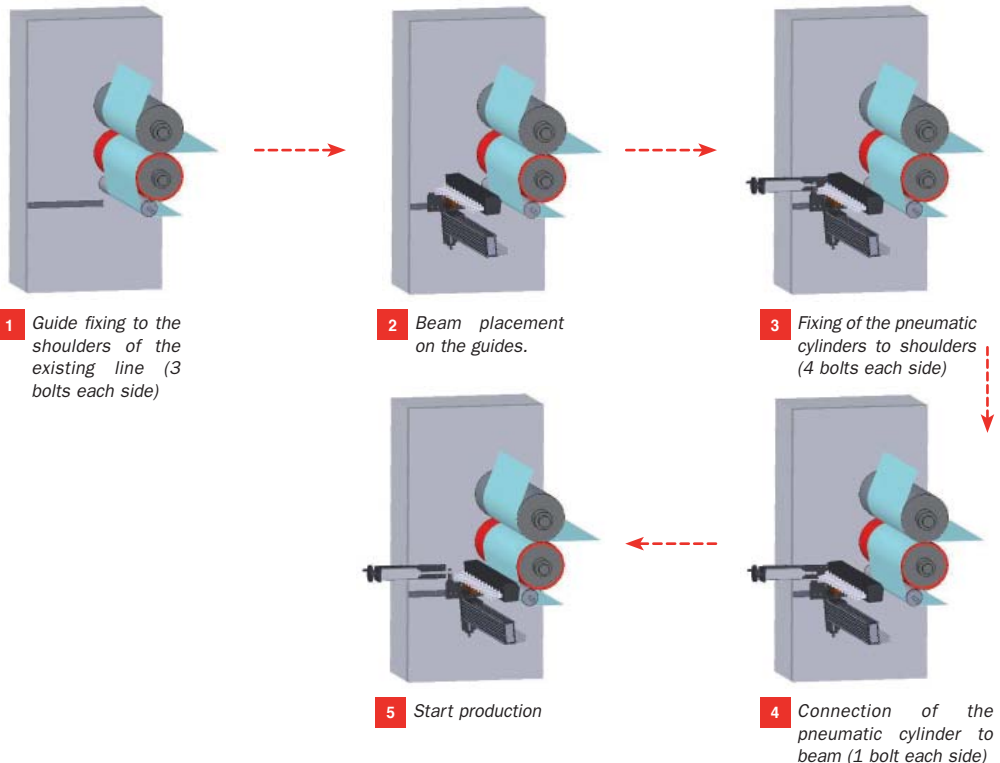
HIP-MITSU stands model BEAM provide a maintenance position enabling an easy access to the coating heads without moving them from the main line.



## Simple installation in few hours

Axial and angular regulations enable always a perfect adaptability to the systems onto which they must be positioned. All that enables a quick and non-intrusive installation, reducing the machine standstill to few hours.

HIP-MITSU support – BEAM model



BEAM: Simple installation in few hours

## HIP-MITSU supports - FRAME model

HIP-MITSU FRAME model supports are customized and made to measure in case - for structural or space reasons - the BEAM cannot be installed directly on the shoulders of the existing line or in case the user wishes to remove rapidly the HIP-MITSU web-coating system from the line or move it from a line to another one.

### Customized shoulders

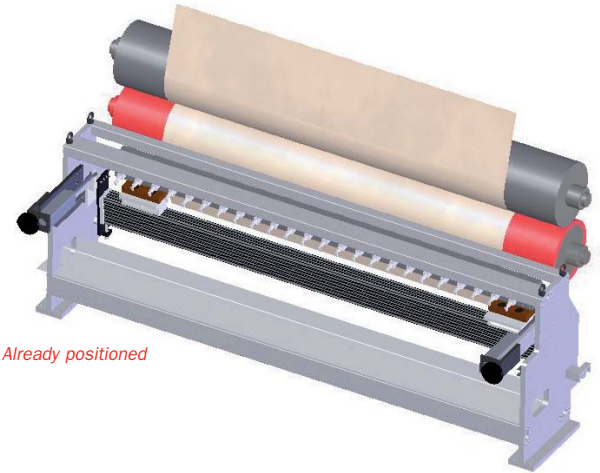
Shoulders are always designed to measure in order to integrate the system with the existing line.

### 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.



To be positioned



Already positioned

HIP-MITSU supports - FRAME model

## “Hyper-Coater” and “Hyper-Laminator”

HIP-MITSU also supplies its coating heads integrated in the “Hyper-Coater” and “Hyper-Laminator” systems, customised each time both on existing lines and on new lines, in order to integrate the system on the existing line according to the materials to be processed.

### Tested solutions

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

### Options: a complete range

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

- one or more motors
- motors/board mounted left or right
- cooled or heated rolls
- independent tension control
- UV
- chill roll

### Performances:

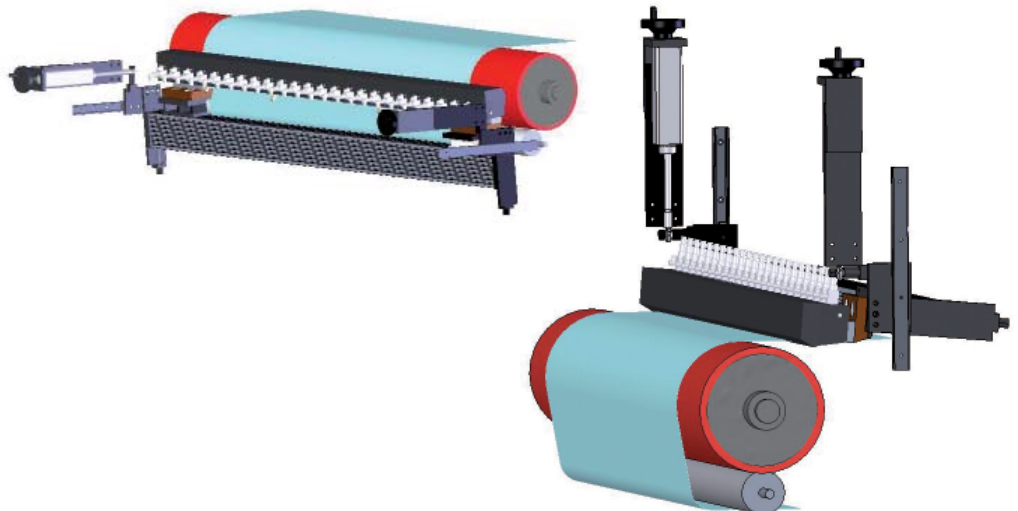
#### application range

HIP-MITSU produces the “Hyper-Coater” and “Hyper-Laminator” systems with the following performances:

- min. speed: 2 m/min
- max. speed: 900 m/min
- min. width: 100 mm
- max. width: 3.600 mm

## “Hyper-Coater”: schemes and use

HIP-MITSU “Hyper-Coaters” can be produced with the slot die placed in any position; a brief example is represented here of two standard solutions, obviously not exhaustive.

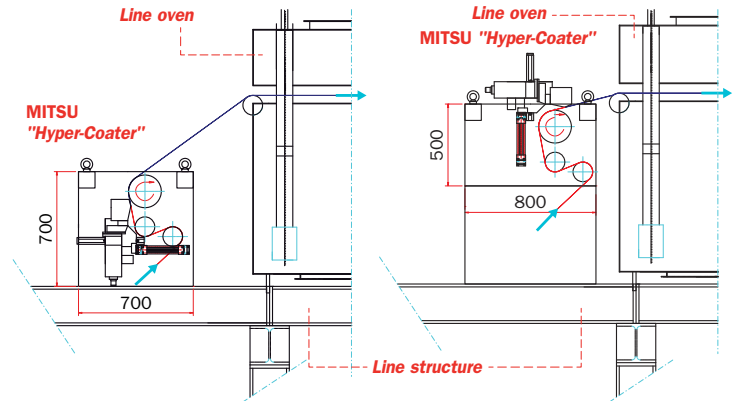


“Hyper-Coater”: schemes and use

**Here follow some suggestions for the use of an "Hyper-Coater" in case of a plant retrofit.**

Retrofit of a calender with HIP-MITSU web-coating systems for hot melt adhesives, installed on "Hyper Coater" placed above the calender.

Retrofit of traditional systems with HIP-MITSU web-coating systems for dispersion polymers/adhesives, installed on "Hyper-Coater" placed upstream the oven.

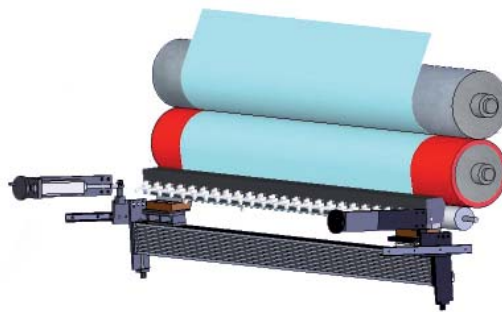


"Hyper-Coater": schemes and use

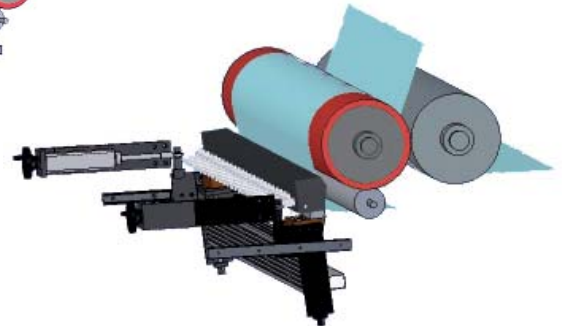
**"Hyper-Laminator": schemes and use**

HIP-MITSU "Hyper-Laminator" can be produced with horizontal or vertical opposed calendaring rolls.

"Hyper-Laminator" with vertical opposed calendaring rolls

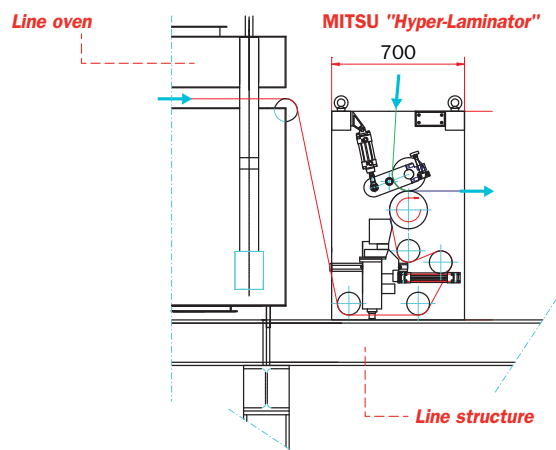


"Hyper-Laminator" with horizontal opposed calendaring rolls



**Here one suggestion for the use of an "Hyper-Laminator" in case of a plant retrofit.**

Retrofit of traditional systems with HIP-MITSU web-coating systems for hot melt adhesives, installed on "Hyper-Coater" placed downstream the oven.



"Hyper-Laminator": schemes and use



add value to your production

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