HIP-MITSU

equipment & turn-key lines
for hot melt adhesive application

add value to your production

mitsu assembly world
MELTERS for HOT MELT ADHESIVES

CONTINUOUS OUTPUT MELTING UNITS FOR HOT MELT ADHESIVES
MODEL MITSU and BA

HIP-MITSU continuous output melting units model MITSU and model BA for hot melt adhesives, also UV curable, give an appropriate answer to all needs concerning medium and low melting capacity. High precision gear pumps guarantee maximum precision in all conditions of use. The standardized and integrated design enables an easy use and quick and simple interface with the main line.

PERFORMANCES
Melt rate:
from 2,5 up to 160 kg/hour
Standard gear pumps available:
from 1 up to 66 cc/rev
Applications:
both continuous and intermittent

CONTINUOUS OUTPUT MELTING UNITS FOR HOT MELT ADHESIVES
FOR HIGH MELTING RATES

HIP-MITSU continuous output melting units model MITSU for hot melt adhesives, also reactive PUR and UV curable, give an appropriate answer to all needs concerning medium and high melting capacity. They are equipped with high precision gear pumps and guarantee maximum precision in all conditions of use, both continuous and intermittent. The standardized and integrated design enables an easy use and a quick and simple interface with the main line.

PERFORMANCES
Melt rate:
from 160 up to 1,000 kg/hour
Standard gear pumps available:
from 1 up to 420 cc/rev
Applications:
both continuous and intermittent
MELTERS for HOT MELT ADHESIVES

SCREW EXTRUDER for HOT MELT ADHESIVES
MODEL MITSU XX

HIP-MITSU’s screw extruders for hot melt adhesives give an appropriate answer to all needs concerning small, medium and high melting capacity and adhesive’s compounding. Accurate mechanical construction guarantee maximum precision in all conditions of use. The standardized and integrated design enables an easy use and quick and simple interface with the main line.

PERFORMANCES

Customised on demand

THERMO-REGULATED HOSES

HIP-MITSU produces a full range of thermo-regulated hoses, that turn out to be particularly suitable to convey hot melt adhesives and thermoplastic polymers. Always supplied with Plug & Play connections for a rapid commissioning. Perfectly insulated, they minimize energy spending combined with consequent reduction of production costs. Compatible with every kind of hot melt systems, they are available both in the standard and in the customised version.

STANDARD RANGE

Standard diameters available: 8; 13; 25 mm
Standard lengths available: from 500 up to 40,000 mm
Electrical feeding: either 380 Vac 50 Hz or on demand
Working temperature: from 30 up to 210 °C (standard)
up to 300 °C in special operating mode
HIP-MITSU drum melters model DM 20 and DM 5 enable the use of hot melt adhesives, also reactive PUR and UV curable, butyls and sealants from 20-litre and 5-gallon drums. They are equipped with high precision gear pumps and guarantee maximum precision in all conditions of use, both continuous and intermittent. The standardized and integrated design enables an easy use and a quick and simple interface with the main line.

**PERFORMANCES**

- **Adhesive packaging:**
  - 20 litres and 5 gallons
  - (depending from the model)
- **Standard gear pumps available:**
  - from 1 up to 66 cc/rev
- **Applications:**
  - both continuous and intermittent

HIP-MITSU drum melters model DM 200 and DM 55 enable the use of hot melt adhesives, also reactive PUR and UV curable, butyls and sealants from 200-litre and 55-gallon drums. They are equipped with high precision gear pumps and guarantee maximum precision in all conditions of use, both continuous and intermittent. The standardized and integrated design enables an easy use and a quick and simple interface with the main line.

**PERFORMANCES**

- **Adhesive packaging:**
  - 200 litres and 55 gallons
- **Applications:**
  - both continuous and intermittent
- **Number of gear pumps:**
  - up to 2 independent ones
SLOT DIES FOR HOT MELT ADHESIVES

HIP-MITSU Slot Dies for hot melt adhesives – also UV curable and reactive PUR - enable a precise and accurate adhesive application onto the substrate’s surface. They can be installed within a limited space and enable a wide application range (see examples below). As they do not work in contact with any cylinder, no adjustment is required so coating width variations can take place within a few minutes. They are fully synchronised with the main line leading to no contamination of the main line while coating.

- Working temperature : up to 240 °C
- Viscosity : up to 120.000 mpas
- Working width : from 0,3 to 6.000 mm
- Coating weight : from 0,02 up to 1.500 gr/sqm
- Working speed : from 2 to 900 m/min

Applications achievable with HIP-MITSU high-precision Slot-Dies

- Coating
- Laminating
- UV applications
- Continuous coatings
- Intermittent coatings
- Step coatings
- “full coating” applications
- “multi-line” applications
- Coating of “breathable” or “filtration” membranes
HIP-MITSU high precision slot dies for wide webs using hot melt adhesives, also reactive PUR and UV curable, enable a precise and accurate adhesive application onto the substrate’s surface. Very flexible, versatile and easy to use, they enable a wide application range.

**PERFORMANCES**

- **Coating width**: from 0.3 up to 6.000 mm
- **Adhesive coating weight**: from 0.02 up to 1.500 gr/sqm
- **Working speed**: from 2 up to 900 m/min
- **Applications**: both continuous and intermittent
- **Working temperature**: from 30 up to 240°C
- **Application tolerance**: extremely precise
- **Adhesive pattern**: full coating, breathable, multiline
- **Adhesive type**: hot melt, PUR and UV curable too
- **Adhesive application**: on roll and off roll
- **Change of working width**: up to 1 sec
- **Setting of coating weight**: 1 sec
- **Change of adhesive pattern**: 5 min
- **Change of adhesive type**: 10 min
- **Slot die cleaning**: automatic, 10 min
- **Intermittence**: up to 150 Hz
- **Pumps for adhesive injection**: external or integrated
- **Line supervisor**: various models and levels available

HIP-MITSU high precision slot dies for narrow webs using hot melt adhesives, also reactive PUR and UV curable, enable a precise and accurate adhesive application onto the substrate’s surface. Very flexible, versatile and easy to use, they enable a wide application range.

**PERFORMANCES**

- **Coating width**: from 0.3 up to 1.000 mm
- **Coating weight**: from 0.02 up to 1.500 gr/sqm
- **Working speed**: from 2 up to 900 m/min
- **Applications**: both continuous and intermittent
- **Working temperature**: from 30 up to 240°C
- **Application tolerance**: extremely precise
- **Adhesive pattern**: full coating, breathable, multiline
- **Adhesive type**: hot melt, hot melt PUR, UV curable
- **Adhesive application**: on roll and off roll
- **Change of working width**: up to 1 sec
- **Setting of coating weight**: 1 sec
- **Change of adhesive pattern**: 5 min
- **Change of adhesive type**: 10 min
- **Slot die cleaning**: automatic, 10 min
- **Intermittence**: up to 150 Hz
- **Pumps for adhesive injection**: external or integrated
- **Line supervisor**: various models and levels available
HIGH PRECISION SLOT DIES FOR HOT MELT ADHESIVES
MODEL CUSTOM CONCEPT (INTERNATIONAL PATENT)

HIP-MITSU “Custom Concept” slot dies for hot melt adhesives – international patent – represent the most advanced coating technology as regards application precision and consistency.

The absolute precision in adhesive application enables:
- strong cut-down in production costs
- soft hand improvement
- better breathability/absorbency/filtration properties

In all comparative tests performed in the most different areas in real production conditions, HIP-MITSU “Custom Concept” slot dies have always shown a significant saving in the applied adhesive’s quantity.

The absolute precision and consistency in adhesive application (gr/sqm), both in CD and MD, enable to combine lower production costs with enhanced quality of the coated or laminated end products.

CONTROLLED FLOW SLOT DIES FOR HOT MELT ADHESIVES
MODEL CHECK AND COAT (INTERNATIONAL PATENT)

HIP-MITSU “Check & Coat” slot dies - international patent - enable to control and to monitor the correct adhesive flow into the die.

Continuous and intermittent applications permitted.

“Check & Coat” slot dies always guarantee a perfect application without defects and production free from wastes.

Compatible with all types of melters, they can easily replace old generation coating dies in use.

This enables the upgrading of your production lines with limited investment, keeping the melting units in use.

They can also be equipped with a reporting system for the on-line process certification and can be open to all communication protocols for an easy integration with the existing supervision systems available within the factory.
SLOT DIES FOR HOT MELT ADHESIVES

QUICK PATTERN CHANGE SLOT DIES FOR HOT MELT ADHESIVES
MODEL QUICK PATTERN CHANGE (INTERNATIONAL PATENT)

HIP-MITSU “Quick pattern Change” slot dies – international patent – for hot melt adhesives represent the most advanced coating technology as regards quick pattern change.

They enable a very quick setting of:
- working width
- pattern, from “full coating” to “multiline” and “breathable”
- adhesive type

For instance, for a 3.200 mm working width slot die, all a.m. operations can take place in less than 5 minutes.

Therefore they allow a significant increase in production line flexibility. The main line can also be programmed on demand even for small batches, without affecting the productivity.

SLOT DIES FOR HOT MELT ADHESIVES FOR VERY HIGH PRODUCTION RATES PER HOUR
MODEL KOMPAK

HIP-MITSU “Kompak” slot dies for hot melt adhesives are designed and realized for productions requiring very high adhesive's flow rates per hour.

Usable with hot melt adhesives, also PUR and UV curable.

They are complete with both manifold and high precision pumping station. They turn out to be particularly suitable to polymers/adhesives already being at their melting state, as they are produced e.g. on extrusion lines.

Manifold can be either integrated or separated, depending on space available in the line.

Easy to install: all HIP-MITSU “Kompak” slot dies are equipped with customized and self-supporting mechanical stands, enabling easy and quick installation both on existing and new lines.

Electrical and electronic integration is based on an “open source” platform, enabling a very simple and quick interface to the main line.

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HIP-MITSU “HF” slot dies for hot melt adhesives are designed and realized for very high frequency intermittent applications in Machine Direction (MD).

The particular design and the use of advanced materials guarantee a always precise and accurate adhesive application without overflow, combined with absolute long lasting and consistency performances.

Electrical and electronic integration is based on an “open source” platform, enabling a simple and quick interface to the main line.

HIP-MITSU “SV” slot dies with continuous adjustable coating width enable the application of hot melt and hot melt reactive PUR adhesives.

Easy installation and use: electrical and electronic integration is based on an “open source” platform, enabling a simple and quick interface to the main line.
HIP-MITSU self-cleaning automatic guns model GGL have been designed for continuous or intermittent application of lines and dots with hot melt adhesives, also reactive PUR and UV curable.

Precise application and no adhesive leaks are always ensured at any working conditions, also at high frequency and high operating speeds.

HIP-MITSU automatic guns for spray and spiro contact-less continuous or intermittent applications of hot melt adhesives, also reactive PUR and UV curable, at low and medium viscosities.

Precise application and no adhesive leaks are always ensured at any working conditions, also at high frequency and high operating speeds.
HIP-MITSU self-cleaning multiple automatic guns have been designed for continuous a/o intermittent applications of hot melt and reactive hot melt PUR adhesives in form of lines and dots.

A precise application and no adhesive leaks are always ensured at any working conditions, also at high frequency and high operating speeds.

HIP-MITSU self-cleaning multiple automatic guns have been designed for continuous a/o intermittent applications of hot melt, reactive PUR and UV curable adhesives at low and medium viscosities.

A precise application and no adhesive leaks are always ensured at any working conditions, also at high frequency and high operating speeds.
Competence Center – Production Lines for tests execution
HIP-MITSU Competence Center, equipped with the most advanced technologies and production lines, helps Customers during the application development enabling adhesive, polymers and materials testing.

Free Demo in real production’s conditions are available every day on HIP-MITSU equipment, lines and systems.

A full assistance to customers during each phase of the project
- Polymer/adhesive’s research
- Sampling
- Project engineering

Training Courses for end users
HIP-MITSU offers to its Customers complete training courses including both theoretical and practical sections.

Full papers - available in five languages - are supplied at each course to all participants.

Courses available for: line operator; mechanical maintenance staff; electrical maintenance staff.

Periodical Maintenance Service
Complete programs of periodical maintenance, which can take place both at HIP-MITSU and customer’s site.

Spare Parts
HIP-MITSU spare parts service avails itself of the main international couriers ensuring spare parts delivery the day after the order receipt

A worldwide sales network
HIP-MITSU is worldwide locally present with a network of highly skilled professionals, who ensure a quick and qualified answer.

First Installation and Technical Assistance
HIP-MITSU technical assistance service is hold by a team of skilled English-speaking technicians operating worldwide for many years, who ensures a highly professional support both during the installation and the technical assistance.

HIP-MITSU working team includes: process engineers; mechanical maintenance staff; electrical maintenance staff; electronic maintenance staff; PLC software technicians; PC software technicians.

HIP-MITSU: a “Cappuccino“ Idea
HIP-MITSU technology is really a "cappuccino" idea: as milk adds value to a coffee cup, so it adds value to the roll goods produced by the end user.