

Hot-pressing device PT-103S



The PT-103S is a hot pressing device for Thermofix joining Habasit belts and tapes up to a width of 100 mm / 4 in. and a thickness of 2.5 mm / 0.1 in. The lower press plate is equipped with a set-up plate with clamping springs for secure positioning of the belt ends.

The device is extremely compact. Top and bottom parts can be separated with a handle, allowing belts to be joined also in locations with limited space. It is especially suitable for joining spindle tapes and for many applications in the printing industry.

The PT-103S is mostly suitable for on-site installation.

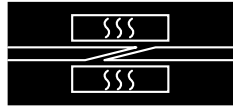


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- Checklist; preventive maintenance
- Report sheet for preventive maintenance
- Product liability, application considerations



1. General information

1.1 Application

Hot-pressing device PT-103S was specifically designed for the rapid and safe hot-pressing of Thermofix joints for Habasit belts and tapes up to a width of 100 mm / 4 in. The maximum belt thickness is 2.5 mm / 0.1 in..

The PT-103S hot-pressing device was developed solely for the purposes described in the operating instructions. Improper use, or use for other reasons than those described in the instructions, is not permissible. Habasit accepts no liability for the consequences of improper application.

The hot-pressing device PT-103S is manufactured according to recognized engineering principles and state-of-the-art technology, and complies with applicable regulations.

It is understood in these operating instructions that all assembly, maintenance, and repair work, as well as operation of the press, is carried out by skilled personnel or monitored by responsible specialists.

For reasons of scope, these instructions cannot cover all possible aspects of operation, maintenance, or repair. The indications given herein refer to the use of the machines according to their designated purpose by skilled personnel.

In case of doubt or if further detailed information is required, please consult the manufacturer (Chapter 1.4).

1.2 Important safety terms

In these operating instructions, you will find the terms WARNING, CAUTION, and INDICATION. They signal dangers or special information to be borne in mind.

WARNING If disregarded, there is a danger of severe injury and/or severe material damage.

CAUTION If disregarded, there is a danger of injury, and/or material damage may be caused.

INDICATION Technical information is emphasized if it is important and not readily apparent, even for skilled personnel.

Please observe all indications for assembling, operating, and maintaining the machines, as well as all technical data! This will prevent possible trouble and/or damage to people or materials.

Skilled personnel refer to persons authorized to perform the required work. These people have been sufficiently trained and introduced to their field of activity so that they are able to recognize and prevent dangers. They are aware of the pertinent provisions and safety regulations.



1.3 Scope of supply

Qty.	Item
1	PT-103S hot-pressing device packed in a cardboard box
1	Operating instructions

1.3.1 Available accessories

Also refer to chapter 9.

- Skiving tool AT-60 (690050)
- Skiving tool AT-200 (690160)
- Temperature measuring device (N-28714 or N-28715) for checking the pressing temperature

1.4 Ordering of accessories / spare parts

Spare parts and accessories can be ordered directly from the manufacturer.

Address:

Habasit Italiana S.p.A.
Via A. Meucci 8, Zona Industriale
I-31029 Vittorio Veneto/TV
Tel. ++39 438 91 13
Fax ++39 438 91 2374

Please accurately describe the parts required.

State the numbers according to Section 8.1, Drawings – Assembly of press.

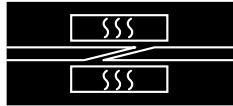
WARNING	The use of parts by other manufacturers not meeting Habasit specifications is not admissible. Habasit declines all responsibility for the consequences if non-Habasit parts are used.
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1.5 Warranty

All tools undergo a strict final inspection. On the assumption of correct handling, they are warranted against material and manufacturing defects for 1 year.

1.6 Technical advice

Our specialists will be pleased to advise you. For technical questions concerning function and condition of the hot-pressing device, please contact the manufacturer (see Chapter 1.4 for the address).



2. Mode of operation

The hot-pressing device PT-103S operates at a pressing temperature of 120 °C / 250 °F.

By pressing both handles (10, 11) together, the locking hook (9) snaps in and the compression springs acting on the heating plate (5) generate the required pressing power. The exchangeable heating plate (5) and the temperature regulator (thermostat) are located in the removable upper press part (6).

The lower pressing part (1) features a set-up plate (3) with two clamps (2) for fixing the prepared belt / tape ends. The belt clamps can be set in three different positions according to the belt / tape width.

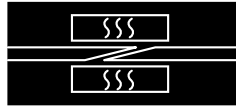
3. Initial start-up

- Check to make sure that the voltage indicated on the rating plate (7) conforms to the electrical connection voltage.
- Check to make sure that the set-up plate (3) and the metal heating plate (5) are clean.

INDICATION	For safe operation, place hot-pressing device PT-103 always upright.
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- For stationary operation, place hot-pressing device PT-103S on a solid and heat-resistant support.
- For safe operation, the hot-pressing device can be screw mounted to a bench/frame. Threaded holes M6 (12) are located on the underside of the bottom part (1) of the press.

WARNING	Do not suspend the hot-pressing device from its cable! During pauses in work, place the hot-pressing device on a level surface with the marked face upwards.
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4. Hot-pressing of belts / tapes

Process: Thermofix guidelines and individual product datasheets.

- Open hot-pressing device by squeezing the handles (10, 11) and unlatch locking hock (9).
- Flip up the upper press part (6) and hook out the hinge (4) from the lower press part (1).
- Put down upper press part (6) with heating plate (5) facing up.
- Fix the belt clamps (2) in the position which aligns the belt / tape nearest to the middle of the press and the set-up plate (3).
Inner position: belts / tapes up to 35 mm / 1.4 in.
Medial position: belts / tapes up to 70 mm / 2.8 in.
Outer position: belts / tapes wider than 70 mm / 2.8 in.
- Apply adhesive(s) to the prepared (skived) belt/tape ends.

INDICATION	Adhesive is only to be applied outside the hot-pressing device.
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- Insert one belt / tape end (skived surface upwards) under one of the belt clamps (2) and position the skived surface exactly in the middle of the set-up plate (3).
- Insert the second belt / tape end under the other belt clamp (2) and adjust its position so that the two skived surfaces are accurately superimposed.
- Hook in upper press part (6) with hinge (4) to lower press part (1) and flip it down.
- Close hot-pressing device and engage the locking hook (9) by pressing down the upper handle (10).

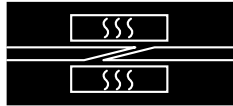
INDICATION	To protect the heating plate from contamination, placing a piece of paper over the belt / tape is recommended.
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- Plug in the connector cable and preheat the hot-pressing device. Respect preheating time of approx. 10 min.

WARNING	Do not touch the hot-pressing zone (8). Keep away from water and meltable substances.
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- Observe the dwelling time in the press (pressing time + 10 minutes preheating time). Leave pressing device plugged in until hot-pressing process is completed.
- After completion of the hot-pressing process pull out the electrical connecting plug.
- Open hot-pressing device (as described above) and remove joined belt / tape from set-up plate (3).
- Allow the belt / tape to cool for a few minutes.

WARNING	After use, disconnect the hot-pressing device from the power supply and allow it to cool completely before storing it.
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5. Service

5.1 Maintenance

- Keep the hot-pressing device clean at all times. Clean the set-up plate (3) and the heating plate (5) regularly and remove all material residues.

WARNING	For cleaning with a cloth moistened with water or solvent, the press must be disconnected from the power supply. Do not reconnect to the power supply until the press is completely dry.
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- Periodically inspect the power supply cable and connector plug for defects (insulation damage, etc.) and have it replaced if necessary.

5.2 Measuring the plate temperature

Check the operating temperature of the hot-pressing device once a month.

- Carry out this check in an interior room in a draft-free environment with an ambient temperature of between 18 °C / 64 °F and 25 °C / 77 °F.
- Place a heat-resistant silicone-foam rubber mat (2...4 mm / 0.08...0.16 in. thick) on the set-up plate (3).
- Clamp sensor of a temperature gauge between this silicone-foam rubber mat and the heating plate (5). → Illustration (1)
- Heat up press for at least 10 minutes.
- The temperature measuring device should indicate 120 °C +10/-10 °C / 250 °F +18/-18 °F. → Ill. (2)



Illustration 1



Illustration 2



5.3 Remedial action in the case of a temperature deviation

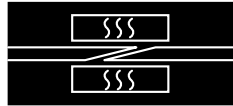
WARNING	All work on the hot-pressing device involving electrical parts has to be carried out by the respective specialists only. Observe your local laws about required training of such personnel.
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If the temperature deviates from a maximum value of 130 °C / 266 °F or a minimum value of 110 °C / 230 °F, the heating element is defective and must be replaced.

5.4 Replacement of the power cord

Check power cord periodically. In case of damage, replace with the same type (H05-RNF).

WARNING	All work on the hot-pressing device involving electrical parts has to be carried out by the respective specialists only. Observe your local laws about required training of such personnel.
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6. Illustrations

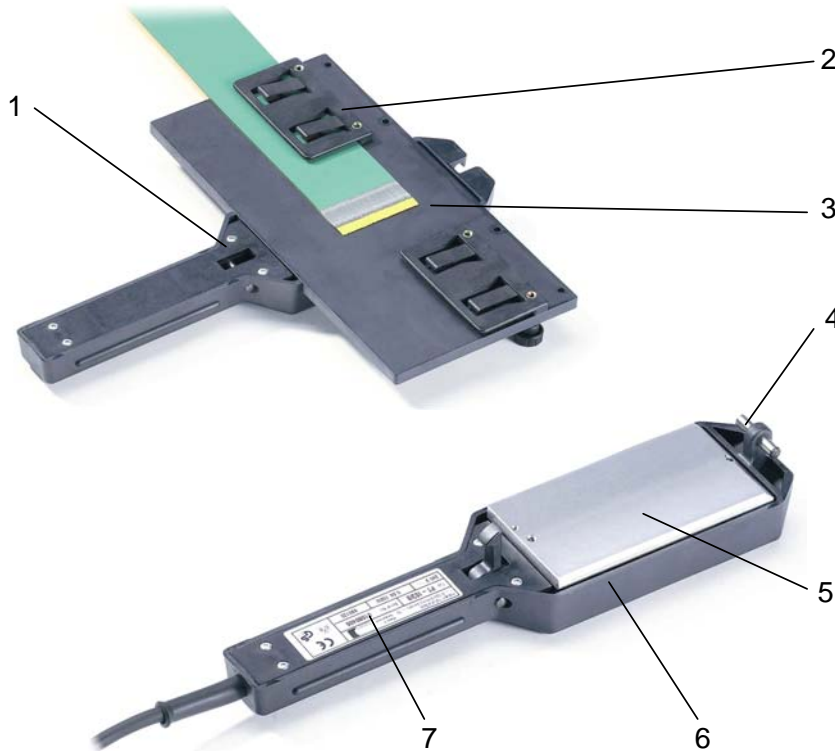


Illustration 3

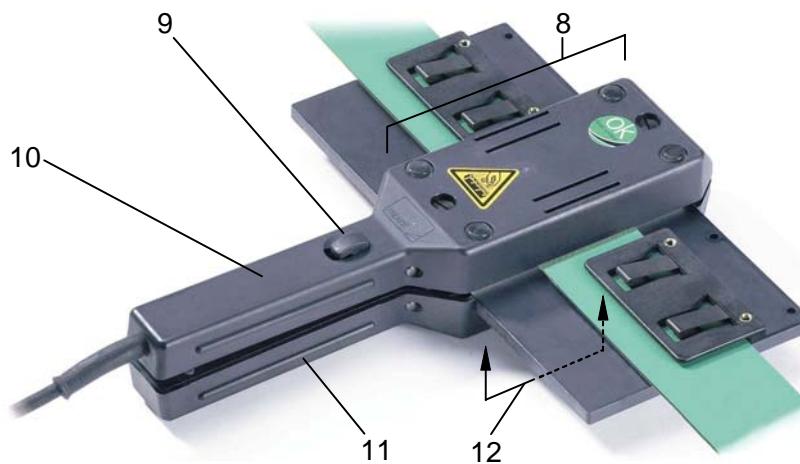


Illustration 4

Legend Illustrations 3 and 4

- | | | | |
|---|----------------------|----|-------------------|
| 1 | Bottom part of press | 7 | Rating plate |
| 2 | Belt clamp | 8 | Hot-pressing zone |
| 3 | Set-up plate | 9 | Locking hook |
| 4 | Hinge | 10 | Upper handle |
| 5 | Metal heating plate | 11 | Lower handle |
| 6 | Top part of press | 12 | Threaded holes M6 |



7. Technical data

Max. belt/tape width [mm] [<i>in.</i>] at 90° joining angle	100	4.0
Max. belt/tape width [mm] [<i>in.</i>] at 75° joining angle	75	3.0
Max. belt/tape thickness [mm] [<i>in.</i>]	2.5	0.1
Max. skiving length [mm] [<i>in.</i>]	50	2.0
Min. continuous belt/tape length [mm] [<i>in.</i>]	300	12
Max. deviation of plate temperature [°C] [°F]	+ 10 / - 10	+ 18 / - 18
Heating up time to 120 °C / 250 °F [min.]	12 at 120 V	
Heating up time to 120 °C / 250 °F [min.]	10 at 230 V	
Power consumption [W]	150	
Voltage [V~]	230 (PT-103S/8) or 120 (PT-103S/6)	
Dimensions (L x W x H) [mm] [<i>in.</i>]	300 x 250 x 57	12 x 10 x 2.2
Net weight [kg] [<i>lbs.</i>]	1.0	2.2



8. Drawings

8.1 Assembly of press

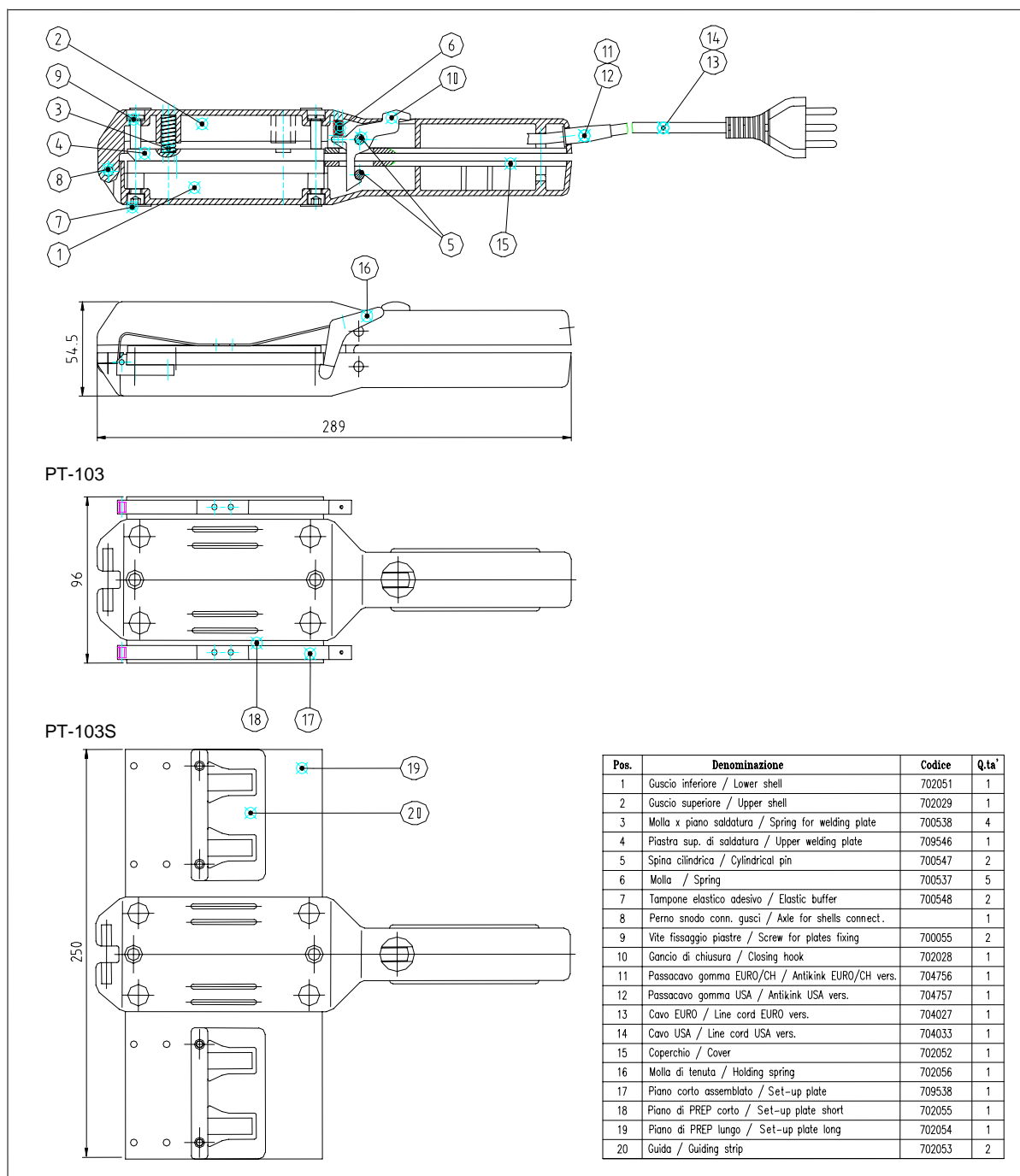


Illustration 5



8.2 Circuit diagram

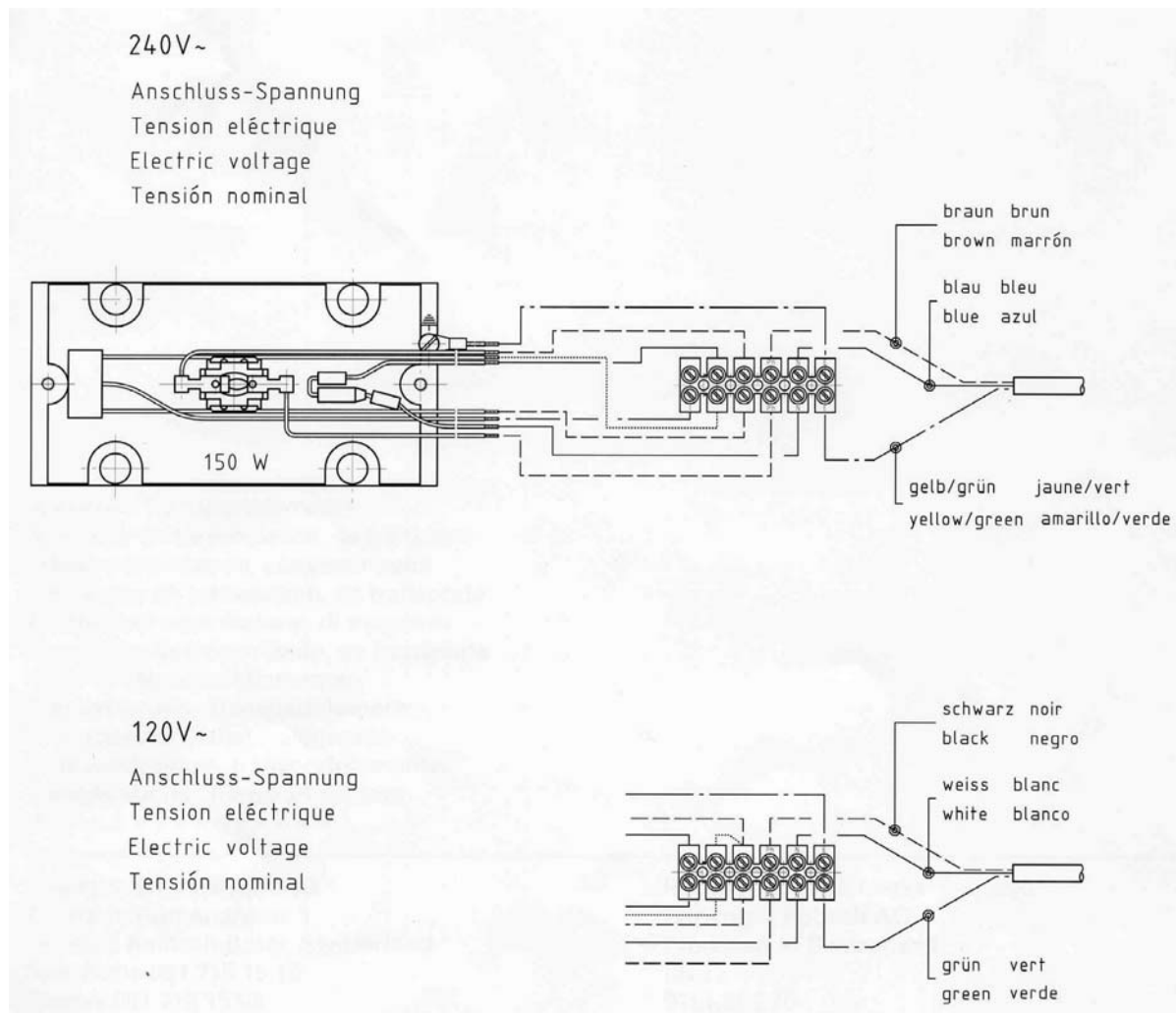


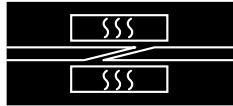
Illustration 6

With **EURO**-connector plug:

L) = brown
Ground = yellow-green
N) = blue

With **US**-connector plug:

L) = black
Ground = green
N) = white



9. Accessories

9.1 Preparing devices

9.1.1 Manual skiving tool AT-60

The AT-60 is a preparing device for skiving of Habasit belts and tapes up to a width of 60 mm / 2.4 in. and a thickness of 2 mm / 0.08 in. The belt / tape is clamped and stuck on a steel plate. It is ground manually by means of a skiving disc. Adjustment is done with two different settings.

The AT-60 is especially suitable for occasional preparation of single belts or spindle tapes on site in maintenance. → Illustration (7)

9.1.2 Skiving tool AT-200

The AT-200 is a preparing device for skiving of Habasit belts and tapes up to a width of 200 mm and a thickness of 7 mm. The belt is clamped and stuck on a steel table. The tilt of this table is adjustable in six steps; it is fed under a grinding drum on precise guides. For the drive of the unit, there are two options: The device is equipped with a high-torque power drill, or with a stub axle to be driven / motorized according to the desires of the customer. Feed of the table is by means of a hand wheel.

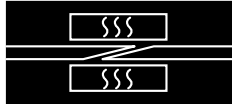
The AT-200 is suitable for preparation of belts and tapes in small to medium series. → Illustration (8)



Illustration 7



Illustration 8



Responsible persons: A: Machine Operator
 B: Maintenance Technician

Work to be carried out (see operating instructions for further information and reference numbers)	Daily	Performance periodically (monthly)		Remarks	Spares number Evaluation criterion
		1	6		
1. Cleaning					
1.1 Clean the press after use, remove residual deposits	A				
2. Inspect the connector cable					
2.1 Examine the cable and connector plug for defects, replace if damaged		B			damaged insulation, defective couplings
3. Measurement of the heater plate temperature					
3.1 Proceed as detailed in operating instructions, Section 5.2		B			

Remarks and notes:



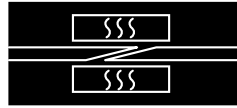
Machine type:

Machine no.:

Date of first placing in operation:

Actions to be performed – see checklist (daily work not recorded)	Next Check		Performed		Next Check		Performed		Next Check		Performed	
	Initials	Date	Initials	Date	Initials	Date	Initials	Date	Initials	Date	Initials	Date
2.1 Inspect the cable for damage												
3.1 Measure the heater plate temperature												

Observations, repairs:



Product liability, application considerations

If the proper selection and application of Habasit products are not recommended by an authorized Habasit sales specialist, the selection and application of Habasit products, including the related area of product safety, are the responsibility of the customer.

All indications / information are recommendations and believed to be reliable, but no representations, guarantees, or warranties of any kind are made as to their accuracy or suitability for particular applications. The data provided herein are based on laboratory work with small-scale test equipment, running at standard conditions, and do not necessarily match product performance in industrial use. New knowledge and experiences can lead to modifications and changes within a short time without prior notice.

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