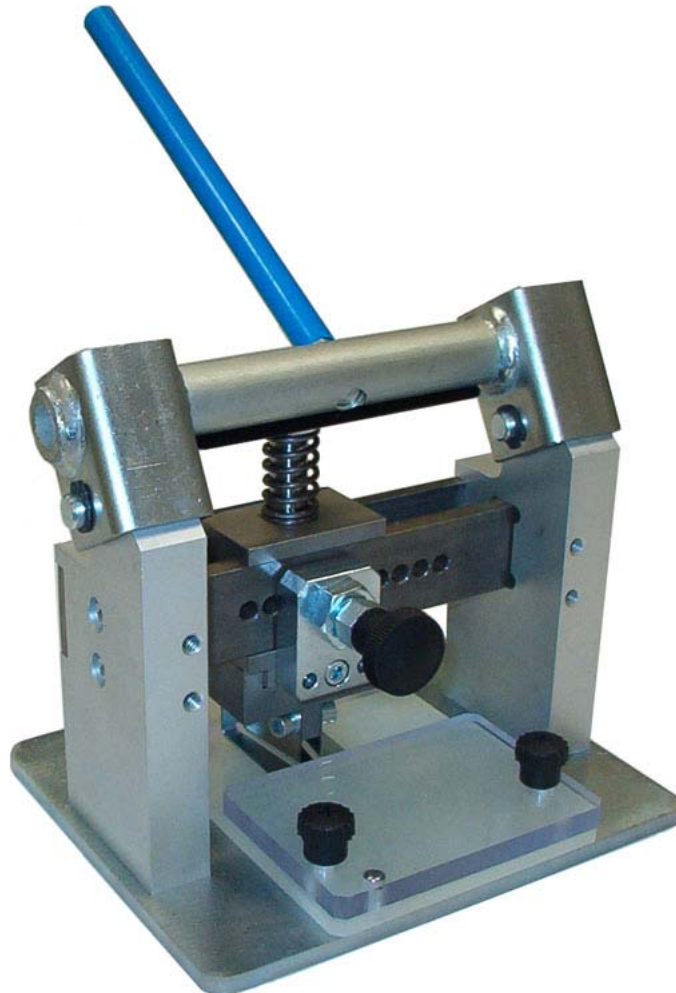




Flexproof-Cutter AF-61/6x30



The AF-61/6x30 is a preparing device (die-cutting tool) for 6x30 mm Flexproof finger geometry. It is designed mainly for Habasit machine tapes and belts up to 3 mm thickness.

The AF-61/6x30 has a movable cutting head with two blades. It can be positioned by a pin in steps of 6 mm, ensuring the required accuracy. The fingers are thus cut manually step by step by means of a lever.

The AF-61/6x30 is designed and suitable for occasional on-site preparation of Hamid tapes and belts.



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Appendix:

- Preventive maintenance, checklist and record sheets
- Product liability



1. General information

1.1 Application

The Flexproof-Cutter AF-61/6x30 was specifically designed for the rapid and safe preparation (die-cutting) of Habasit spindle tapes and Hamid machine tapes using the Flexproof procedure. The belts/tapes can be up to 60 mm/2.36 in. width and 3 mm/0.12 in. thickness. It is suitable for Habasit standard finger geometry with the pitch of 6 x 30 mm. Die-cutting is done in manual strokes, resulting in the most precise finger cut and therefore optimum joint strength.

The Flexproof-Cutter AF-61/6x30 was developed solely for the purposes described in the operating instructions. Improper use, or use for other applications than those described in the instructions, is not permissible. Habasit accepts no liability for the consequences of improper application.

The AF-61/6x30 is manufactured according to the state-of-the-art and fulfills the EC safety regulations.

These operating instructions imply that all assembly, maintenance, and repair work, as well as operation of the die-cutting device, be 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 tools according to their designated purpose by skilled personnel.

In case of doubt or if further detailed information is required, please contact the manufacturer (Section 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 this device, as well as all technical data! This will prevent possible trouble and/or damage to people or materials.

Skilled personnel refers 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	AF-61/6x30 Flexproof-Cutter
1	Operating instructions

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 specify the ordered parts clearly, referring to the part numbers and if necessary to the illustrations in this manual.

WARNING

The use of foreign parts not meeting Habasit specifications is not admissible. Habasit declines all responsibility for the consequences if non-Habasit parts are used.

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 Flexproof-Cutter, please contact the manufacturer (Section 1.4).



2. Mode of operation

The fingers for the Flexproof joining method are manufactured at the belt ends by means of a special cutting head with two blades positioned in a certain angle.

To achieve the required accuracy the die-cutting head is precisely positioned by means of an indexing pin. The belt/tape is positioned and securely clamped on the cutting pad using two plates.

Fingers are then cut manually in subsequent steps by a die-cutting operation performed with the two blades of the cutting head.

The max. belt/tape thickness that can be cut is 3 mm/*0.12 in.* and 60 mm/*2.4 in.* is the max. possible belt/tape width.

3. Initial start-up

- For safe operation, place the Flexproof-Cutter AF-61/6x30 on a solid workbench or table.
- If it is used only stationary it is recommended to fix the stand.
- Screw the lever (16) to the pressing structure (15).
- Check to make sure that the surface of the cutting pad (2) where the belts/tapes are to be cut is clean.
- Check sharpness of the cutting blades (26).



4. Cutting of belt/tape ends

Process: Flexproof guidelines and individual product datasheets

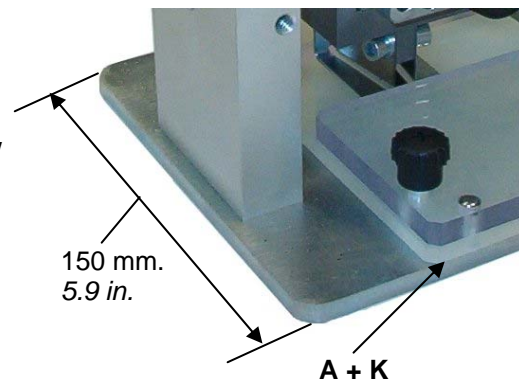
4.1 Flexproof cutting of the belt/tape

- Pull the indexing plunger (21) and move the cutting head slider (11) to the middle of the cutting pad (2).
- Adjust the height of the blank holder (13) by the two screws depending on the belt/tape thickness.
- Unscrew the four knobs (18) and lift the two belt clamps (transparent plates) (3/4).
- Insert belt/tape and align properly its edge to the four side pins. Watch for good alignment. Otherwise the fingers of the cut belt/tape ends might not match properly.
- Pull the indexing plunger (21) and move the cutting head slider (11) to the alignment pins direction. Release the indexing plunger (21) in the way that the pin enters the first hole.
- Carry out first cutting stroke by pressing down lever (16).
- Pull the indexing plunger (21) and move the cutting head slider (11) one step to the next indexing hole. Release the indexing plunger (21) in the way that the pin enters the hole.
- Carry out the successive cutting stroke by pressing down lever (16).
- Repeat the operations until the belt/tape is completely cut.

INDICATION Do not turn the belt/tape for the second Flexproof cutting operation. Otherwise the cut fingers of both ends will not match!
Check that the upper belt/tape side is always the same!

4.2 The first operation starting from a new belt/tape coil

- Measure 150 mm / 5.9 in. from the belt/tape end. Draw a line in a right angle across the belt/tape (see illustration 1). This is point A. The 150 mm / 5.9 in. long belt/tape piece serves for safe fixing under the clamps (3-4). It is only needed once at the beginning of every new coil, if there is not yet an already cut finger splice.
- Measure the required belt/tape length x from the mark A and draw a second line in a right angle to the belt/tape. This is point B.
- Insert belt/tape in the Flexproof-Cutter and align mark A on the edge K of the cutting pad.
- Carry out the cutting operation (see 4.1).





4.3 Continuing Flexproof cutting

- The belt/tape end has already fingers cut in correct shape.
- From last cutting operation, the mark B is visible. This mark is used as a reference for the following measuring and cutting procedure according to 4.2 (see illustration 2).

4.4 Serial Flexproof cutting process

- If series of belts/tapes are to be cut, the lengths can be marked prior to cutting operation as shown on illustration 2.
- Insert belt/tape in Flexproof-Cutter and align mark B on the edge K of the cutting pad.

Carry out the cutting operation (see 4.1) and repeat this operation for every following mark B₁, B₂.....

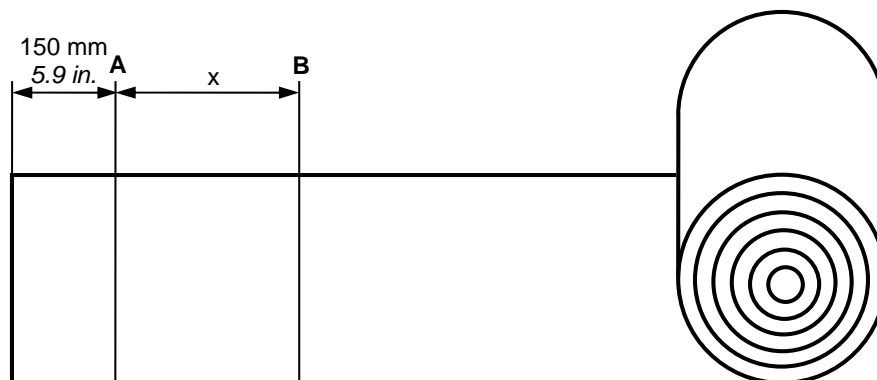


Illustration 1: Cutting start from a new coil

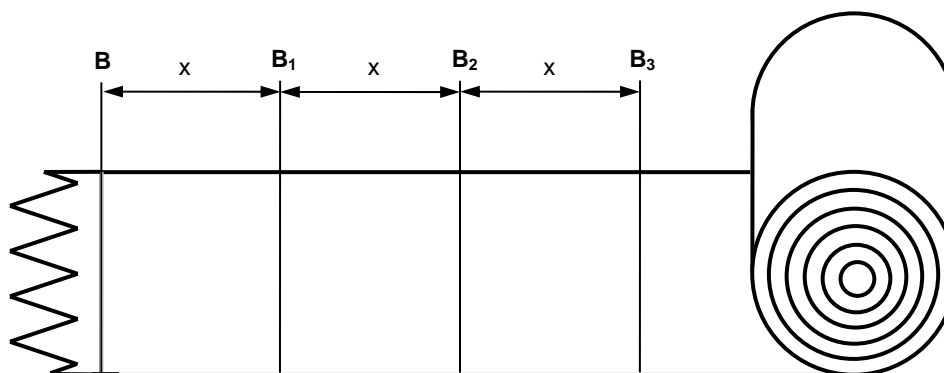


Illustration 2: Continuing and serial cutting

INDICATION

In case of frequent cutting the same belt/tape length it may be helpful to design an adjustable stop for length measuring without the need to mark the belt/tape.



5. Service

5.1 Preventive Maintenance

- Keep the cutting pad (2) clean at all times. Clean it regularly and remove material residues.
- Check the cutting blades (26) periodically for their sharpness and replace with the correct type if necessary.
- Slightly lubricate the hinge of the preparing device with oil at periodic intervals.
- See also checklist and record sheet enclosed.

5.2 Replacement of cutting blades

- Remove the base plate (1) unscrewing the four screws.
- Remove the two screws which fix the blank holder (13) and remove it.
- Remove the four screws which fix the two blades (26).
- Remove the blades (26).

WARNING	Handle cutting blades with special care. The blades can cause injury even if they are worn out.
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- Replace the cutting blades making the same operations in reverse order.

CAUTION	Be sure not to damage blade edges.
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5.3 Replacement of the cutting pad

- Remove the base plate (1) unscrewing the four screws.
- Replace the cutting pad (2).
- Fix the base plate.

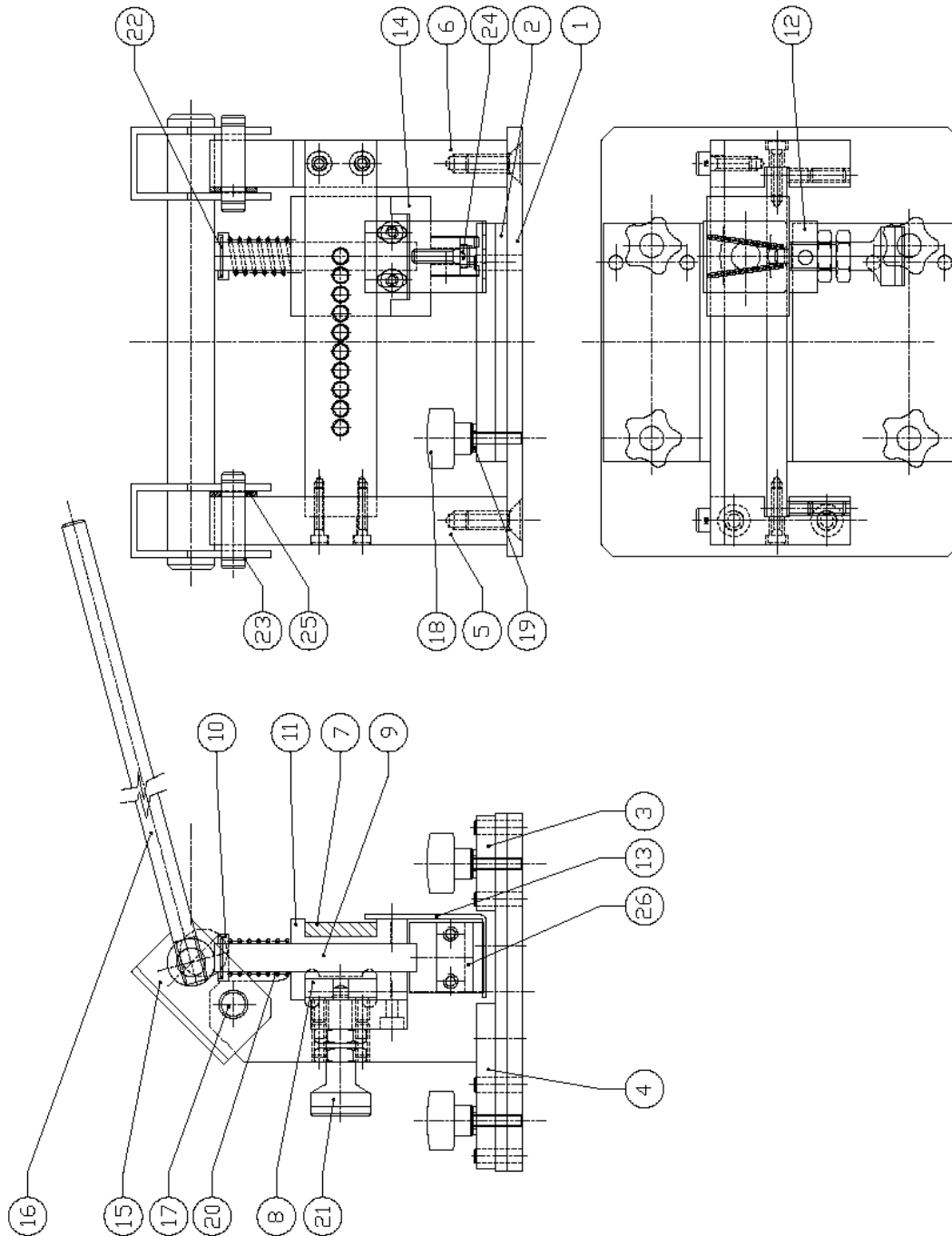


6. Technical data

Max. belt/tape width [mm] [<i>in.</i>]	60	2.4
Max. belt/tape thickness [mm] [<i>in.</i>]	3	0.12
Dimensions without lever (L x W x H) [mm] [<i>in.</i>]	180 x 150 x 170	7 x 5.9 x 6.7
Net weight [kg] [<i>lbs.</i>]	4.2	9.25



7. Drawings





7.1 Spare parts

POSITION	CODE	DESCRIPTION
1	H08D003076	Base plate
2	H08D003077	Cutting pad
3	H08D003078	Front belt clamp
4	H08D003079	Rear belt clamp
5	H08D003080	Side support
6	H08D003081	Side support
7	H08D003082	Front locking plate
8	H08D003200	Rear locking plate
9	H08D003201	Guide rod
10	H08D003085	Washer
11	H08D003086	Slider
12	H08D003202	Plunger support
13	H08D003203	Blank holder
14	H08D003204	Blades support
15	H08D003090	Pressing structure
16	H08D003091	Lever
17	H08D003092	Pressing structure pin
18	H08N011965	Knob
19	H08N010065	Washer
20	H08N011966	Spring
21	H08N011967	Indexing plunger
22	H08N010149	Seeger ring e12
23	H08N010140	Seeger ring e10
24	H08D003205	Screw UNI-9327 M6x30
25	H08N010006	Washer
26	H080700079	Blade



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 Flexproof-Cutter after use, remove residual matter	A				
2. Inspection of the cutting pad					
2.1 Check the condition of the cutting pad. If excessive wear and/or insufficient cutting quality is found, the cutting pad has to be replaced.		B			
3. Checking of die-cuts					
3.1 Check quality of cuts and inspect cutting blades for damages. If necessary replace. See 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	Performed		Next	Performed		Next	Performed		Next	Performed	
	Check	Initials	Date	Check	Initials	Date	Check	Initials	Date	Check	Initials	Date
2.1 Inspect condition of cutting pad. If excessive wear and/or insufficient cutting quality is found, the cutting pad has to be replaced.												
3.1 Check quality of cut and inspect cutting blade for damages. If necessary replace.												

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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