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multifeed 3208

Operator's Manual

CONTENTS

1. General Description	5
2. Specifications	5
3. Proper Handling of the Machine	6
4. Safety Instructions	7
5. Safety Features	11
6. Space Required	11
7. Working Positions	11
8. Mounting Instructions	12
Mounting of Transfer Arm	12
Adjusting the Delivery Height	12
Mounting of Photodetectors	13
Triggering the Machine by Outside Signals	13
9. Operating Instructions	14
Description	14
Setting the Stacker Table to Paper Size	14
Setting the Paper Transport	15
Setting the Transport Rollers to Paper Size	15
multifeed 3208/F	17
Description	17
Stacker Table	17
Paper Transport	17
Paper Length	17
Paper Width	17
Paper Thickness	18
Double Sheet Control	18
Speed	18
10. Operation and Test Run	19

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1. GENERAL DESCRIPTION

The continuous loading devices multifeed 3208 and multifeed 3208/F are mobile attachments which are used in conjunction with paper handling machines. They automatically supply these machines with single sheets, which means that continuous operation is possible without interruption for replenishing the paper stack and without the constant need for supervision.

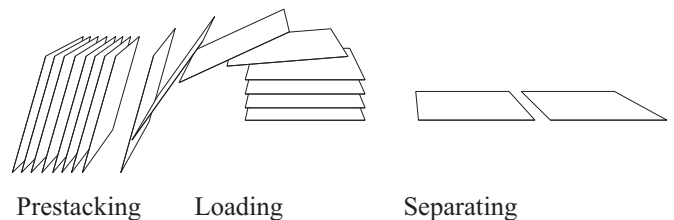
Sensors continuously monitor the height of the paper stack in the feeder.

When the stack drops below a predetermined level, the multifeed 3208 automatically reloads the feeder with the required number of sheets.

Since this process is repeated automatically in repetitive cycles, the feeder is always loaded with an optimal number of sheets.

The continuous loading device is equipped with a stacker for about 4,000 sheets.

Method of operation:



There are two versions of the continuous loading device:

- multifeed 3208: For loading a separate feeder (MB-feeder or top-loading feeder by another manufacturer)
- multifeed 3208/F: with integrated feeder

2. SPECIFICATIONS

Paper size:	max. 305 x 356 mm min. 178 x 203 mm
Paper weight:	70 - 110 GSM
Performance:	65,000 sheets/h (A4, 80 GSM)
Stack capacity:	600mm - approx. 5,000 sheets, 80 GSM
Infeed height:	Version I: from 870 mm to 990 mm Version II: from 990 mm to 1110 mm
Electrical:	230V, 50Hz 115V, 60Hz
Motor performance:	300W
Weight:	100 kg
Noise emission:	

3. PROPER HANDLING OF THE MACHINE

The sole purpose of the multifeed 3208 and multifeed 3208/F is loading feeders with paper. The continuous loading device is unsuitable for handling other materials, such as foils, plastics and textiles. The manufacturer/distributor is not responsible for damages resulting from such unsuitable applications. Responsibility lies alone with the user.

Reading the operator's manual and observing the conditions for inspection and maintenance are part of the proper handling of the machine.

Installation of the machine, i.e. assembling as well as electrical work should be carried out only by skilled personnel authorized by the manufacturer or his representatives. Additional instructions are provided for this purpose.

Repairs and service should be carried out only by skilled personnel of the manufacturer or his representatives.

The interval between inspections for safety depends on the machine utilization. For regular one-shift-operation, one inspection per year is recommended.

The machine needs a flat surface for installation.

The machine weight should be considered when choosing a location for the machine.

Levelling screws in the base of the multifeed 3208/F ensure the stability of the machine during operation.

The line voltage must correspond to the values on the name plate.

No harmful emissions are produced.

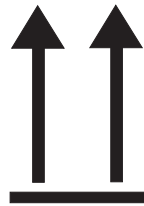
Read the operator's manual before operating the machine!

We recommend to carry out all operations and settings in the sequence mentioned in this manual.

4. SAFETY INSTRUCTIONS

4.1 Safety Instructions for Transport and Set-Up

The following instructions and warnings are applied to the packing to ensure appropriate and safe transport:



Top! - Transport in upright position only!



Protect from humidity!



Fragile! - Handle with care!

These instructions and warnings must also be observed for transport within the user's premises.

For transport to other premises resp. for return shipment the machines must be packed and provided with the same markings.

4.2 Fundamental Safety Instructions

Warnings and Symbols

The following symbols and designations are used in the manual to identify instructions of particular importance.



General instructions and special information how to use the machine most efficiently



Instructions designed to prevent injury or extensive equipment damage

Basic Operation

The machine has been built in accordance with state-of-the art standards and the recognized safety rules.

Nevertheless, operators and third parties may get injured when working with the machine, or damage to the machine and to other material property may result.

The machine must only be used in technically perfect condition in accordance with its designated use and the instructions set out in the operator's manual.

Any malfunctions, especially those affecting the safety of the machine, should therefore be rectified immediately.

Organizational Measures

The operator's manual must always be available near the machine.

In addition to reading the operator's manual, observe and instruct the user in all other generally applicable legal and other mandatory regulations relevant to accident prevention and environmental protection.

The operator's manual must be supplemented by instructions covering the duties involved in supervising and notifying special organizational features, such as job organization, working sequences or the personnel entrusted with the work.

Personnel entrusted with work on the machine must have read the operator's manual and in particular the chapter on safety before beginning the work.

Reading the instructions after work has begun is too late.

This applies especially to persons working occasionally on the machine, e.g. during setting up or maintenance.

Check, at least from time to time, whether the personnel is carrying out the work in compliance with the operator's manual and paying attention to risks and safety factors.

For reasons of safety, long hair must be tied back or otherwise secured, garments must be close-fitting and no jewellery - such as rings - may be worn.

Injury may result from being caught on moving parts.

Observe all safety instructions and warnings attached to the machine.

See to it that safety instructions and warnings attached to the machine are always complete and perfectly legible.

Organizational Measures

In the event of safety-relevant modifications or changes in the performance of the machine during operation, stop the machine immediately and report the malfunction to the competent person.

Never make any modifications, additions or conversions which might affect safety without the manufacturer's approval. Adhere to prescribed intervals or those specified in the operator's manual for routine checks and inspections.

Selection of Personnel, Basic Responsibilities

Employ only trained or instructed staff and set out clearly the individual responsibilities of the personnel for operation, set-up, maintenance and repair.

Work on the electrical system and equipment of the machine must be carried out only by a skilled electrician or by instructed persons under the supervision and guidance of a skilled electrician and in accordance with electrical engineering rules and regulations.

Standard Operation

Avoid any operational mode that might be detrimental to safety.

Take the necessary precautions to ensure that the machine is used only in a safe and reliable state. Operate the machine only if all protective and safety-oriented devices, such as removable safety devices, emergency stops, sound proofing elements, are in place and fully functional.

In the event of malfunctions stop the machine immediately and prevent further use.

Have any defects rectified immediately.

During start-up and shut down procedures always watch display in accordance with the operator's manual.

Before starting up or setting the machine in motion, make sure that nobody is in danger.

Special Work, Maintenance, Repair

Observe the adjusting, maintenance and inspection activities and intervals set out in the operator's manual, including information on the replacement of parts and equipment.

If the machine is completely shut down for maintenance and repair work, it must be secured against inadvertent starting by attaching a warning sign to the main switch. Always tighten any screw connections that have been loosened during maintenance and repair.

Special Dangers

The electric equipment of machines is to be inspected and checked at regular intervals.

Defects such as loose connections or scorched cables must be rectified immediately.

4.3 Product-specific safety instructions



**Exercise caution in the vicinity of rotating shafts, rollers and moving belts!
Hair, loose garments or jewellery may get caught - SERIOUS INJURY
MAY RESULT!**

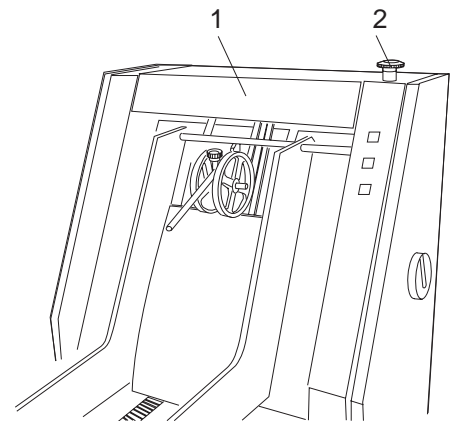
5. SAFETY FEATURES

The multifeed 3208 and multifeed 3208/F are equipped with various safety features. They ensure the safety of the persons working with the machine.

The machines are equipped with the following safety features:

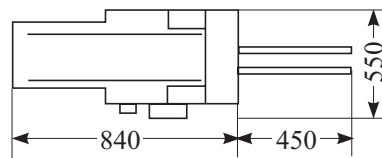
- 1 Swing-up protective cover (the machine stops when the cover is opened)
- 2 Emergency stop button

Possible remaining danger areas during set-up and operation are pointed out in the respective sections of this manual.

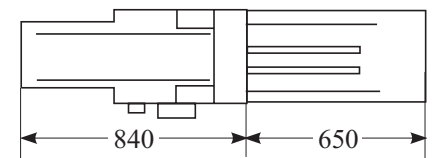


6. SPACE REQUIRED

multifeed 3208



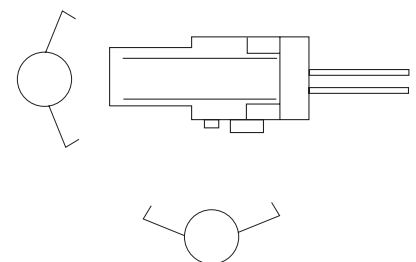
multifeed 3208/F



7. OPERATING POSITIONS

The machine has two main operating positions:

In addition, the machine is accessible from any other position for cleaning, resettings, jam clearance, service jobs etc.

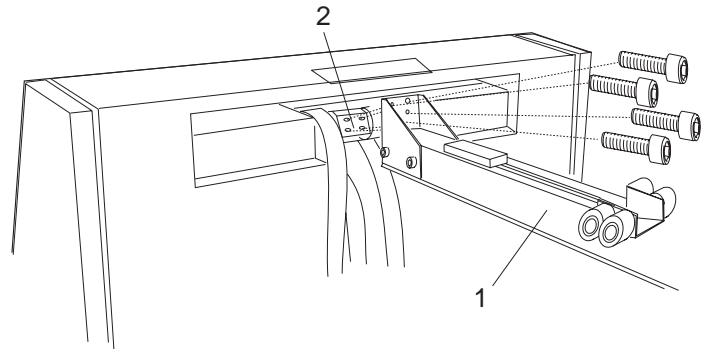


8. MOUNTING INSTRUCTIONS (for model 3208 only)

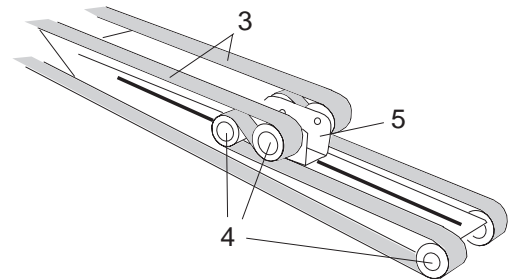
Mounting of the Transfer Arm

With version multifeed 3208, the transfer arm has been removed for transport. To attach it, proceed as follows:

- Mount the transfer arm (1) on the mobile block (2) by means of four 3-mm-Allen screws.

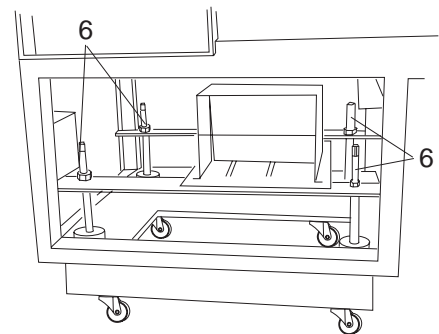


- Guide the transport belts (3) around the transport rollers (4)
- Attach the support (5) for the sheet guide rollers to the frame by means of two 4-mm-Allen screws.



Setting of Delivery Height

The delivery height can be adapted to the feeder by turning the 4 spindles (6) inside the cabinet.



Mounting the Photo-detectors

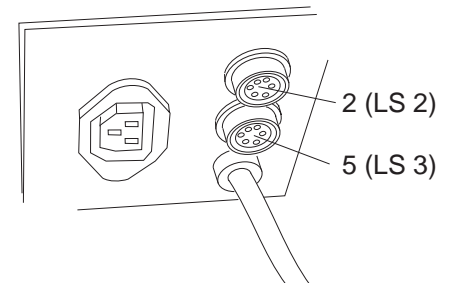
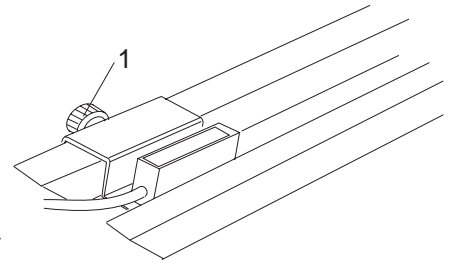
Two photodetectors control the automatic loading and monitor the transport of the shingled sheets.

- Photodetector LS 2: Monitoring and control of the height of the paper stack in the feeder and paper feed control
- Photodetector LS 3: Monitoring of the correct sequence of the sheets

For installing the photodetectors proceed as follows:

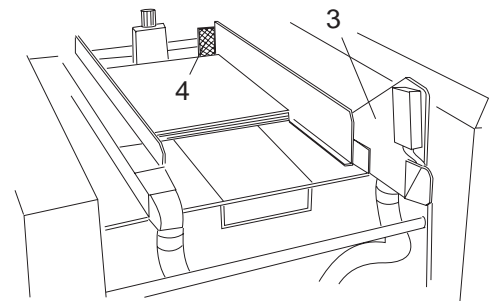
Photodetector LS 2:

- Position the photodetector above the reflector of the transfer arm.
- Secure the photodetector to the support of the transfer arm by means of a clamp screw (1).
- Insert the plug into the socket at the rear of the continuous loading device (2).



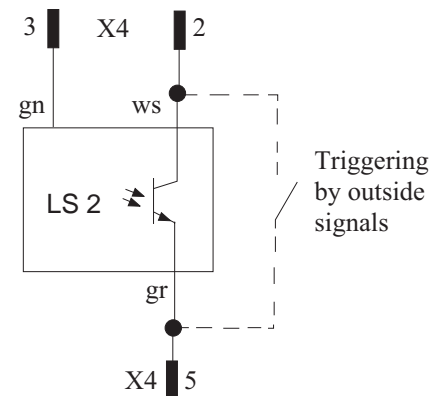
Photodetector LS 3:

- Screw the mounting bracket of the photodetector to the rear edge of the right air bracket (3).
- Screw the reflector (4) of the photodetector to the front edge of the right air bracket.
- Insert the plug into the socket at the rear of the continuous loading device (5).



Triggering the Machine by Outside Signals

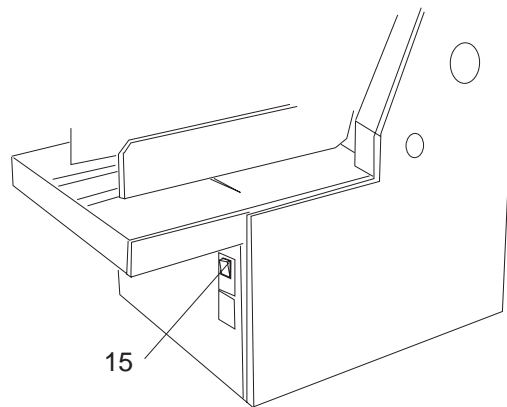
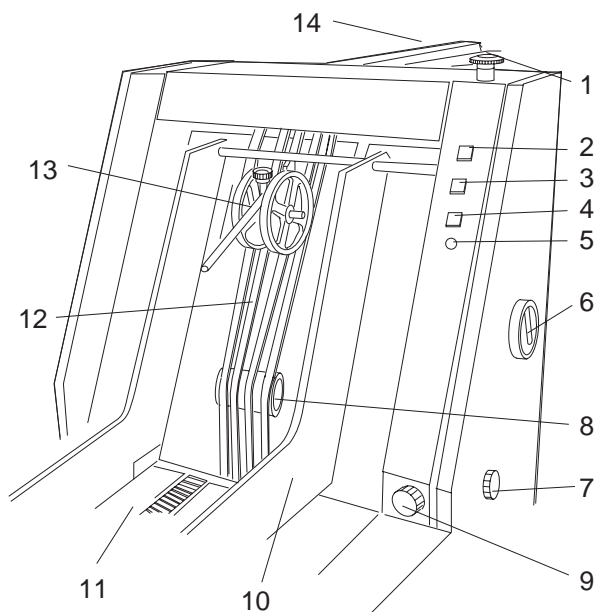
The device can also be controlled by any other piece of equipment connected to it. To do this, a normally open contact is connected parallel to the photodetector as shown in the diagram.




9. OPERATING INSTRUCTIONS

Description

- 1 Emergency stop button
- 2 "Automatic feed" button
- 3 Stop button
- 4 "Manual feed" button
- 5 Potentiometer for speed control
- 6 Handwheel for setting the paper width
- 7 Knob for positioning the sliding roller
- 8 Sliding roller
- 9 Knurled screw for photodetector
- 10 Feed guide
- 11 Feed table
- 12 Transport belts
- 13 Pressure roller
- 14 Transfer arm
- 15 Main switch



Setting the Stacker Table to the Paper Size

- Place some sample sheets vertically on the stacker table (11).
- Move the feed guides (10) towards the stack by turning the handwheel (6).
 The paper stack must not be pinched (1-2 mm side play).
- Set the pressure roller (13) to the paper size by loosening the knurled screw.

Setting the Paper Transport

The transport belts (1) carry the sheets from the stacker plate to the feeder.

To ensure accurate sheet separation, the paper stack must exert a certain pressure on the transport belts.

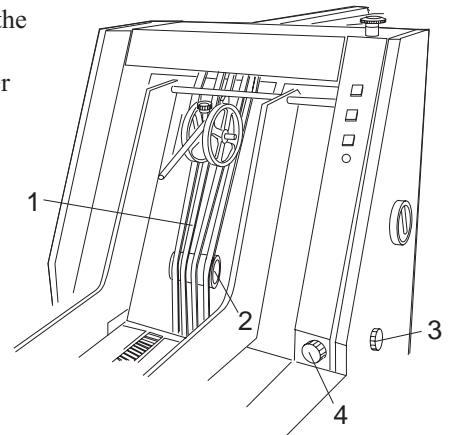
This pressure can be adjusted by a vertical adjustment of the sliding roller (2).

- Turn the knob (3) counter-clockwise or clockwise. The sliding roller moves either up or down.



The correct position of the sliding roller is in the lower third of the sheet length.

- The photodetector controls the transport cycles of the stacker plate. Its correct position can be changed by means of the setting screw (4). Paper transport can be influenced by adjusting the photodetector.



Setting the Transport Rollers of the Transfer Arm to Paper Size

The sheets are transported into the feeder by means of the transport belts of the transfer arm and stacked in the feeder. The transport belts run around adjustable rollers. These rollers also serve as rear paper stops and must therefore be set to sheet length. The setting depends on the type of feeder.

The following feeders can be used with the continuous loading device:

- Modified MB suction feeders (with cutout in the feed table)
- Top-loading feeders by other manufacturers

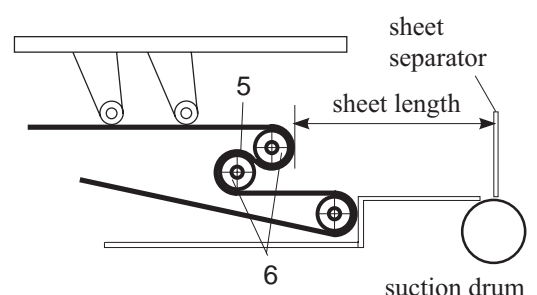
When it comes to setting the sheet length, please note the following differences:

Modified suction feeder (with cutout in the feed table)

These feeders have a cutout which accommodates the transfer arm of the continuous loading device.

Setting the correct paper length is achieved by moving the upper rollers which are mounted on one single guide plate. Proceed as follows:

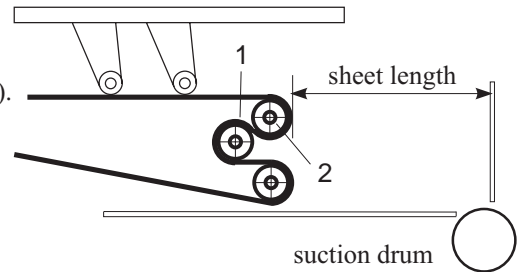
- Loosen the 6-mm-Allen screws (5).
- Move the rollers (6) according to the paper size.
- Tighten the 6-mm-Allen screws.



Suction feeders by other manufacturers

As a rule, the transport rollers of the transfer arm are set in such a way that the two front rollers are exactly on top of each other. Proceed as follows:

- Loosen the 6-mm-Allen screw (1).
- Place the upper exactly on top of the lower one (2).
- Tighten the 6-mm-Allen screw.



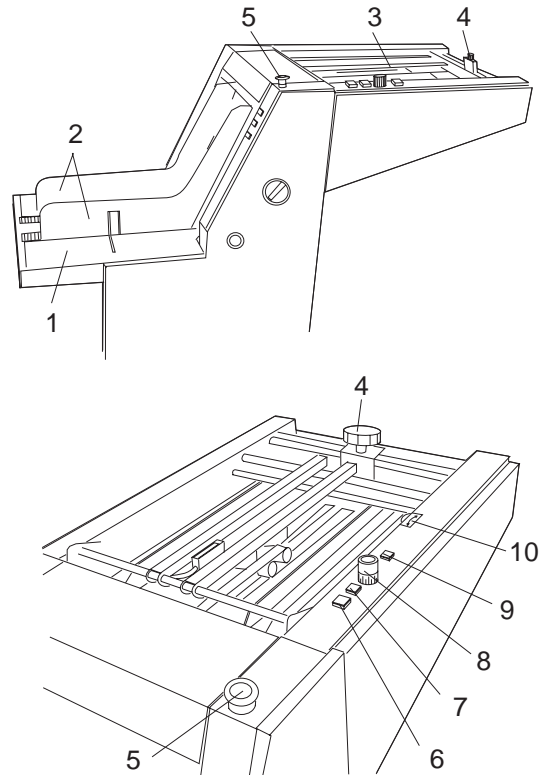
Depending on the sheet length, move the continuous loading device in such a way that the sheets are securely transported to the front paper stop.

Settings at the multifeed 3208/F

The multifeed 3208/F has an integrated friction feeder.

Description

- 1 Feed table
- 2 Feed guide
- 3 Transfer arm
- 4 Knob for sheet separator
- 5 Emergency stop button
- 6 "Feeder on" button
- 7 "Motor off" button
- 8 Potentiometer for speed control
- 9 Signal lamp and reset button for double sheets
- 10 Setting wheel for setting the double sheet control



Stacker Plate

See page 14

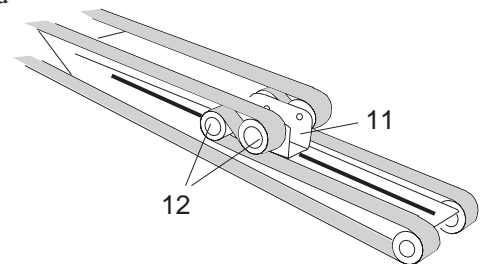
Paper Transport

See page 15

Paper Length

Setting the correct paper length is achieved by moving the upper rollers which are mounted on one single guide plate. Proceed as follows:

- Loosen the 6-mm-Allen screw (11).
- Move the rollers (12) to accommodate the paper size.
- Tighten the 6-mm-Allen screw.

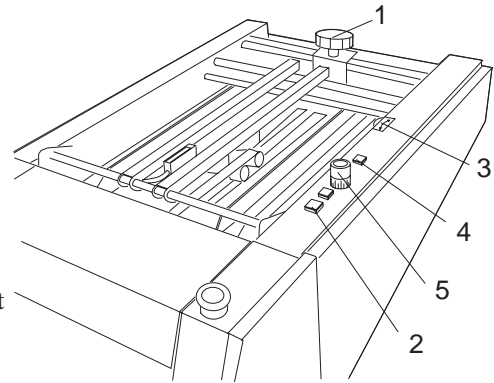


Paper Width

- Set the left and right feed guide to sheet width after loosening the Allen screws (use the scale).

Paper Thickness

- Turn the knob of the sheet separator roller clockwise several turns (1). The roller is raised.
- Lift the hold-down rollers and place a sheet under the sheet separator roller.
- Turn the knob of the roller counter-clockwise until the sheet is held tightly.
- Turn the knob clockwise until only a slight resistance is felt when pulling out the sheet.





Double Sheet Control

The double sheet control should be reset whenever a new job is started.



Exercise caution in the vicinity of rotating shafts, rollers and moving belts! Hair, loose garments or jewellery may get caught - SERIOUS INJURY MAY RESULT!

- Switch on main switch.
- Push the "feeder on" button (2).
- Turn the setting wheel (3) about 3 turns in direction .
- Manually place two sheets (double sheet) under the sheet separator roller and feed them.
- Turn the setting wheel (3) about 1/4 turn in direction . Repeat this procedure until the reset lamp (4) comes on. Now the double sheet control is set to the paper thickness.
- Push the reset button (4). The lamp goes off.

Speed

The speed of the friction feeder can be changed by means of a potentiometer (5).

10. OPERATION AND TEST RUN

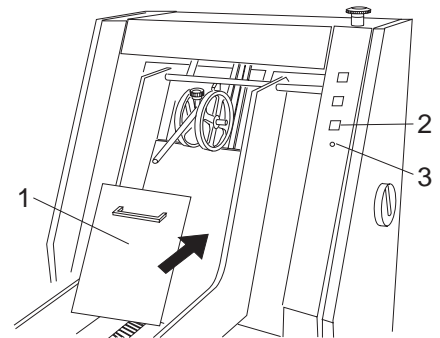


Exercise caution in the vicinity of rotating shafts, rollers and moving belts! Hair, loose garments or jewellery may get caught - SERIOUS INJURY MAY RESULT!

Test Run

Once the settings are completed, make a test run to check the proper function of the continuous loading device. Proceed as follows:

- Place a stack of paper on the stacker plate.
 - Place the support plate (1) against the rear of the stack.
 - Switch on the main switch.
 - Keep the push-button (2) pressed for a few seconds. As soon as the push-button is pressed, sheets are continuously fed from the stacker plate to the feeder.
 - Paper feed is interrupted by releasing the button (2).
 - Change the speed, if necessary. Adjust the potentiometer (3) by means of a screwdriver.
- The paper feed speed of the continuous loading device is adjustable from 0.55 m/s to 5.5 m/s, making it possible to adapt the speed of the multifeed 3208 to the type of material and to the speed of the connected feeding device.



Continuous Operation

- Start the machine that is connected to the continuous loading device.
- Push the "feeder on" button (4) (for multi-feed 3208/F only). This starts the integrated friction feeder.
- Push button (5). This activates automatic loading. Sheets are transported into the feeder until the photodetector in the feeder signals that a maximum number of sheets is reached. Loading is interrupted. When the stack drops below a minimum level, the process is repeated and the feeder is reloaded.
- Loading can be automatically interrupted by pressing the stop button (6).

