

Operating Instructions

Envelope Feeder



Kuvertanleger Superfeeder

EC Declaration of Conformity

within the meaning of the EC Directives

2006/42/EC	Machinery Directive Annex II A
2006/95/EC	Directive on electrical equipment for use within certain voltage limits
2004/108/EC	Directive on Electromagnetic compatibility
2008/34/EC	Directive revising Directive 2002/96/EC on waste electrical and electronic equipment with regard to the implementing powers transferred to the commission.

Construction of the machine:

Make:	Envelope feeder
Type:	SUPERFEEDER
No.:	
Year of manufacture:	2021

The machine was developed, designed and produced in accordance with the above-mentioned EC directives, under the sole responsibility of

Company:	Burch Maschinenbau AG Hofmattstrasse 16 CH - 92000 Gossau / SG
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The following harmonised and national standards and specifications are applied:

EN ISO 12100 : 2010	Safety of machinery – General principles for design – Risk assessment and risk reduction
EN 60204-1 : 2009	Safety of machinery – Electrical equipment of machinery, Part 1: General requirements
EN ISO 4414 : 2010	Fluid technology – General rules and safety requirements for pneumatic systems and their components
EN 14070 : 2010	Safety of machine tools - Transfer and single or special-purpose machines

Gossau / SG, March 2017

Marcel Burch
Managing director

Place, date

Signature

The person signed below, Bruno Burch, Burch Maschinenbau AG, CH – 9200 Gossau / SG is authorised to compile the document.

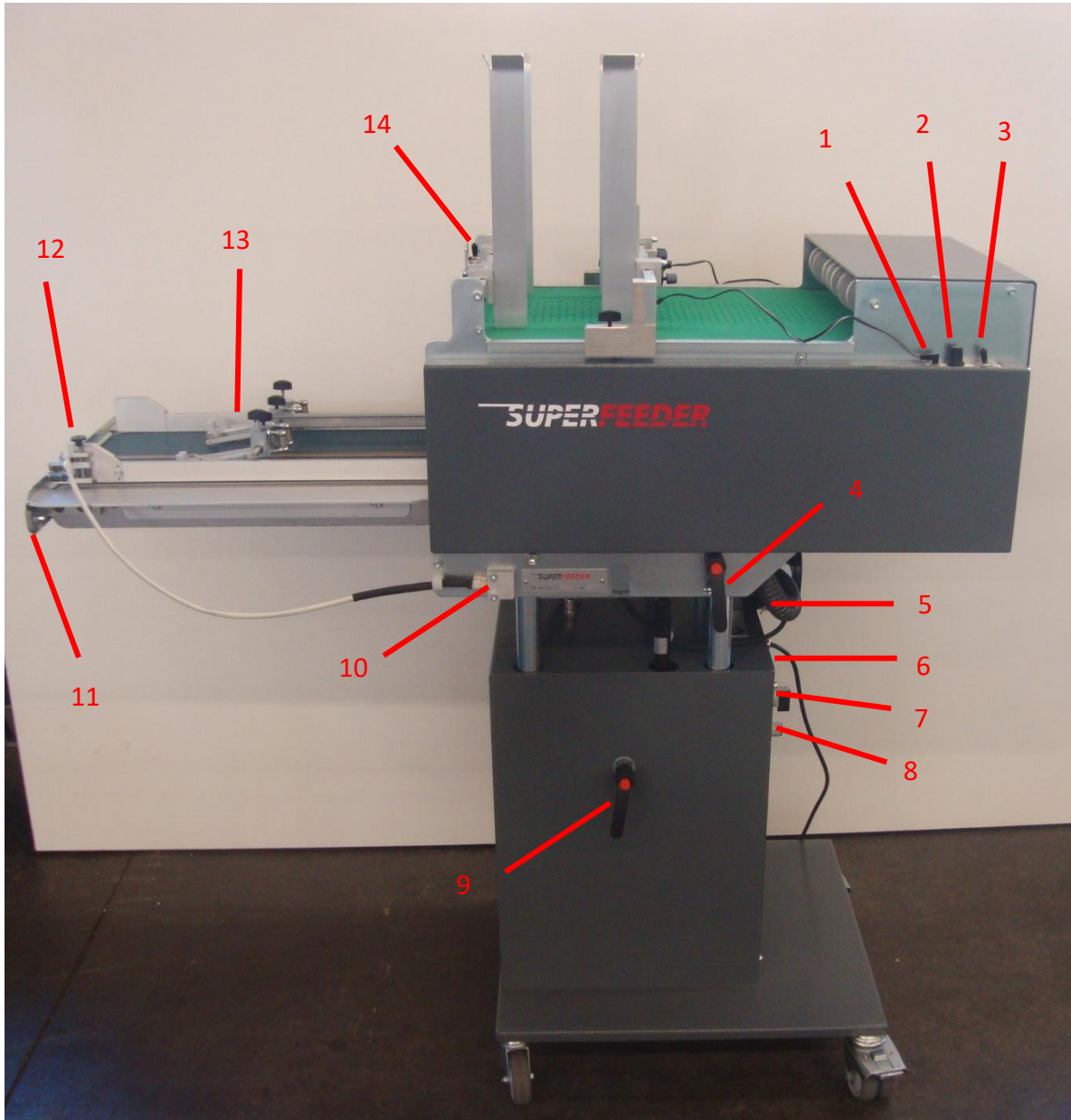
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1 Arrangement



Nr.	Description	Nr.	Description
1	Socket for cable brushes	8	Continuously variable vacuum control
2	Speed Tape	9	Height adjustment
3	Tape on/off	10	Pflug for stack measurement cell
4	Inclination adjustment (as table printer)	11	Front panel
5	Air filter	12	Shingle printing: photocell, high front panel
6	Fuse	13	Single sheet printer: metal switch, narrow front panel
7	Main switch	14	Stack control photocell

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2 Adjusting the feeder

The stops are to be set to the desired format with the aid of the fitted scale. Do not set the stops too tightly (2mm play).

Place an envelope in the stack and convey to the front.

2.1 Adjusting the knife

The knife is used to set the length of the shingle overlap.

Tip: Make the shingle overlap smaller than the envelope flap (prevents jamming)

2.2 Adjusting the vacuum:

Adjust the volume until an even shingle flow is obtained.

Tip: keep air to the minimum.

The adjustments should be carried out with the feeder in operation, until an even shingle flow is obtained.

Place crawlers and hold-down roller on the rear edge of the pre-stack and press down on the belt with the aid of the springs.

Tip: Give B4 format little air. Give the knife maximum height, a lot of pressure on caterpillars and holding rollers.

3 Application on different printing presses

3.1 Single sheet printing machine (GTO, QM-46 ...)

Switch off the printer stacking table

GTO: Tie the stacking rods in the raised position

QM-46: Screw on the blocking bar from Heidelberg or use Superfeeder block

Envelope feeder: The pre-stack is monitored at the rear. The metal switch is screwed on to the rear. Screw on the front panel for single-sheet printer.

The envelope feeder incline is adjustable. It is to be adjusted so that the feeder table slope matches the printer.

3.1.1 Adjust the feeder height

The feeder height is to be adjusted so that the printer suction nipples are well placed in relation to the pre-stack. Do not press too hard on the envelope stack. The exact height can be adjusted during operation by adjusting the measurement cell.

Tip: Blow into the stack using the printer blower, so that the envelopes are raised to the height of the stripper springs.

If you have a narrow printer (QM, TOK), unscrew the feeder side panels.

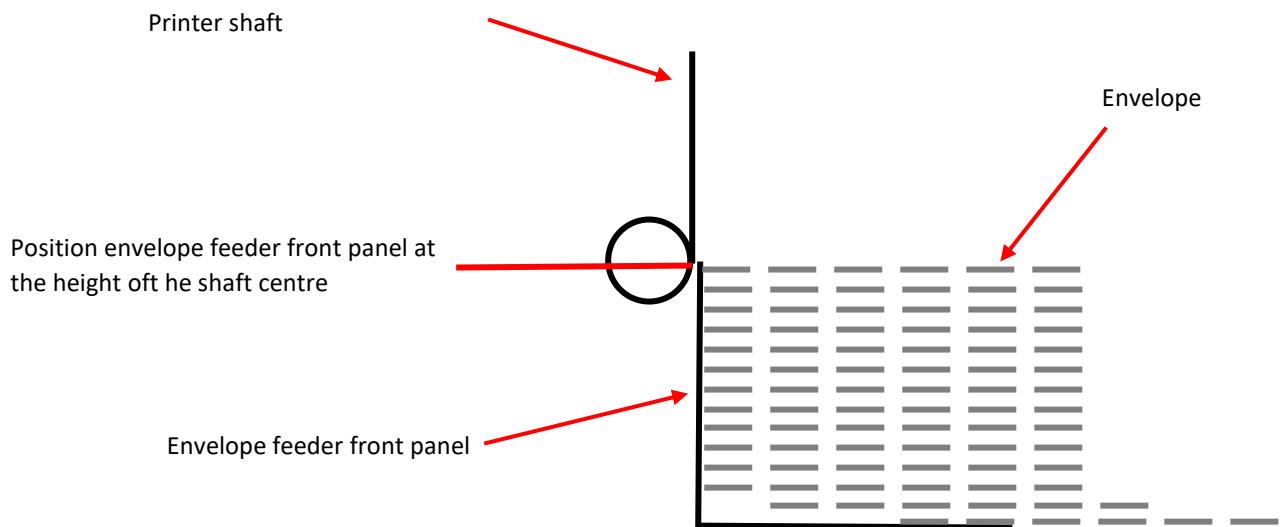
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3.2 Shingle printer (Heidelberg PM-52, SM-52, Ryobi 500....)

The pre-stack is monitored at the front. The photocell is screwed to the front. Fit front panel for shingle printers.

The envelope feeder incline is adjustable. It is be adjusted so that the feeder table slope matches the printer.

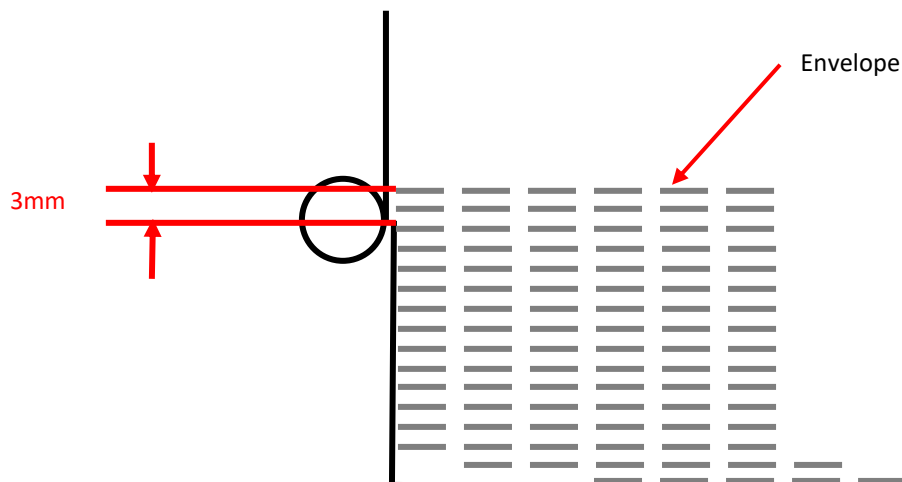
3.2.1 Adjusting the envelope feeder height



Note: the height may appear very low compared paper, but this is correct.

The envelope feeder measures 400mm at the front. Adjust printer side stops to 400mm (allow for travel). Envelope feeder stumble upon the printing press. Fix with side stops. Block rear wheels.

3.2.2 Adjusting the envelope stack height, with photocell.



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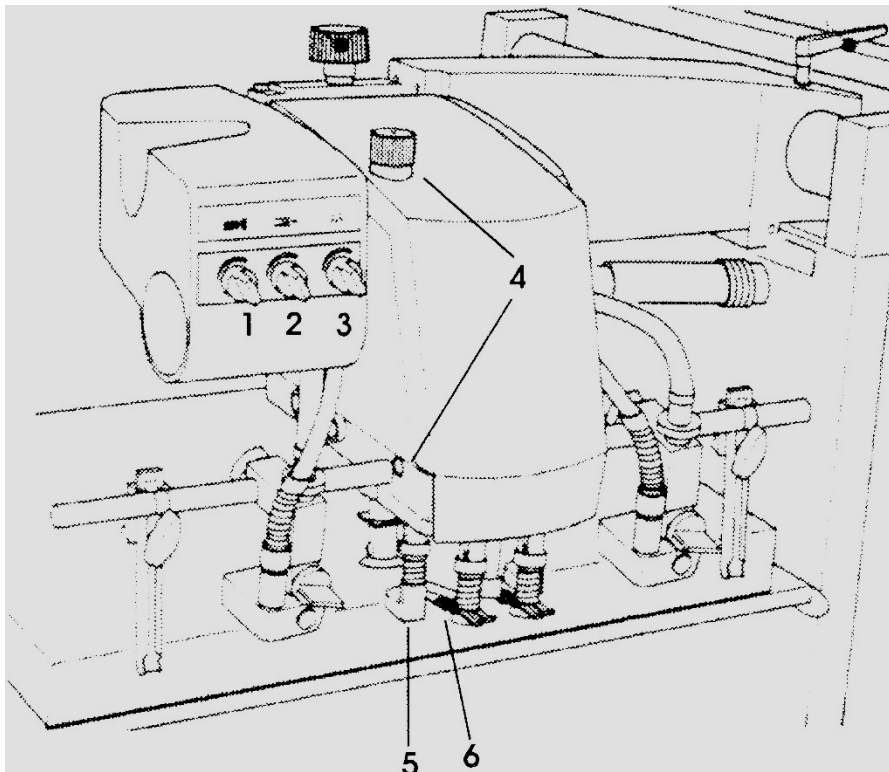
4 Adjusting the suction head Heidelberg SM-52

The sensor foot must be locked.

Insert wedge or lever to "Heidelberg" pattern.

Ryobi printer:

Unscrew the sensor foot and switch off table at the rotary knobs.



Raise suction head, then move the feeder into place.

- 1 Rotary knob position 0
- 2 Rotary knob position 0, open if necessary
- 3 Rotary knob position max
- 4 Suction nipples horizontal (control eye, off-centre, downward)
- 5 Unscrew the support air blower
- 6 Position stripper springs

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Turn the side blower away so that the air is blown into the machine walls.
Position envelope pre-stack with photocell 3 mm

4.1 Printer Ryobi

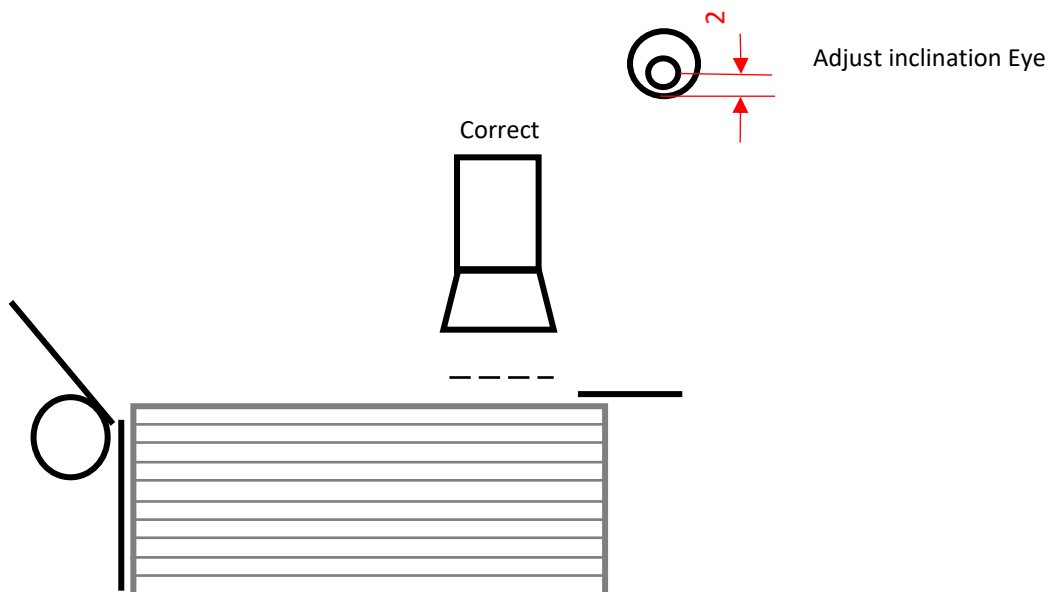
Unstable and switch off the table at the knobs.

Turn the side blowers (newer models) away so that the air is blown against the machine walls.
Position envelope pre-stack with photocell 3mm above the front panel.
Start the machine and lower the suction head until the suction nipples just touch the envelope stack slightly.
Stop the machine in the position with the suction nipples at the bottom in order to adjust the stripper springs to the envelopes.

Adjust the stripper springs, allow them to protrude 3-6 mm into the stack, place 0 mm above the envelopes.

Open the front compressed air chamber fully on the machine table.

4.2 Moving the suction head



Tip: Use telescopic suction nipples (Heidelberg) for heavy and curled envelopes

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5 Heidelberg Speedmaster SM-52

5.1 Printing of envelopes, sizes C5/6 DIN long

Lengthways:

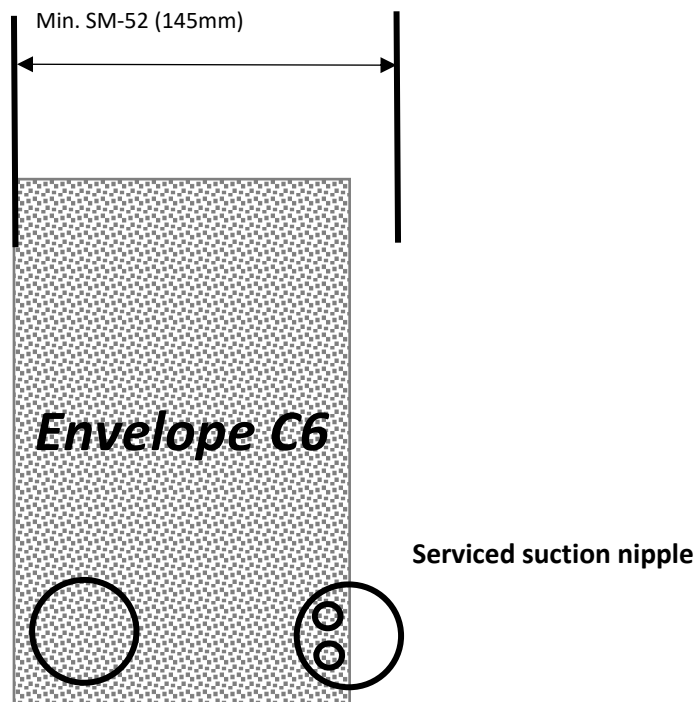
The Superfeeder enables C5/6 envelopes to be printed while being fed lengthways, although it falls below the normal format.

Printer

- Set printer to the smallest format.
- Position envelope on the pulling mark line (to the right on account of double sheet detector)
- Place cadence rollers on the perforated belt.
- Remove a suction nipple and replace with a serviced suction nipple. This creates extra space.

Envelope feeder

- Place envelope feeder in the correct lateral position
- Use only one crawler and one hold-down roller.



The print image is to be placed off-centre on the printing plate.

Example: 145 mm (SM52)



Minus - 114 mm (envelope)

Equal: = 32 mm

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6 Spare parts list

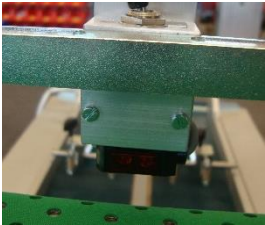


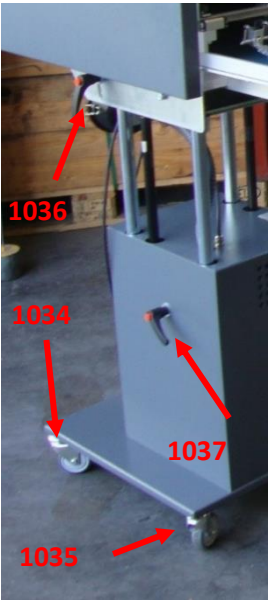
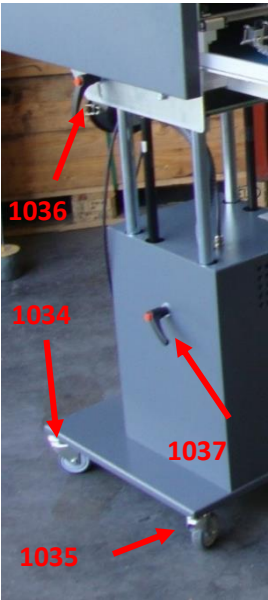
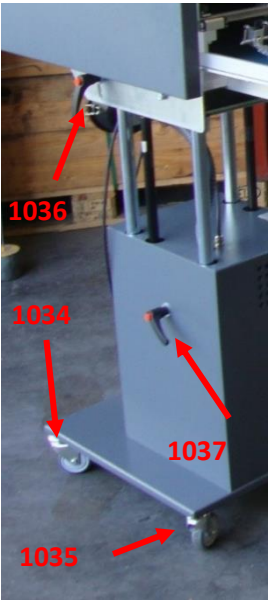
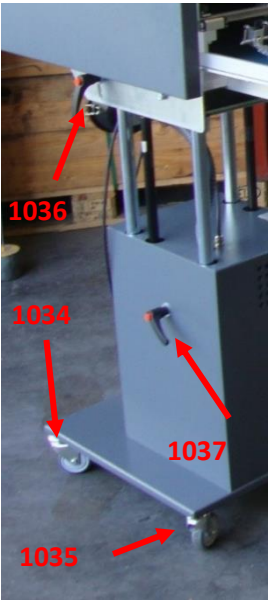
6.1 Envelope feeder

Photo	Nr.	Pcs.	Description
	1017	1	Main switch
	1018	1	Vacuum thumbwheel
	1019	1	Lamp
	1020	1	Fuse
	1021	1	Low-voltage supply (24 Volt DC)
	1022	1	Frequency transformer for vacuum pump

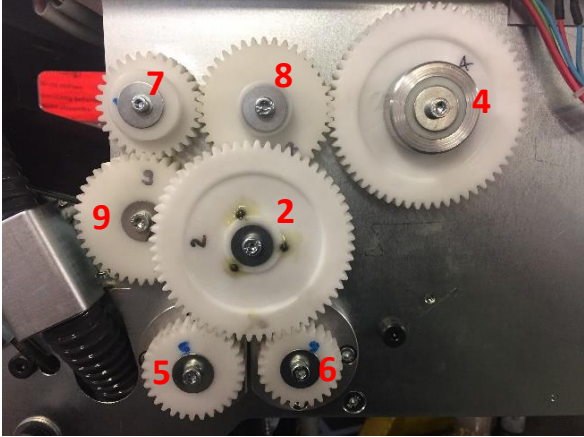
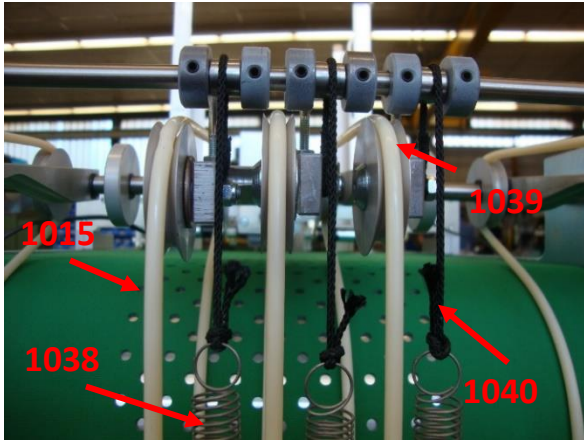
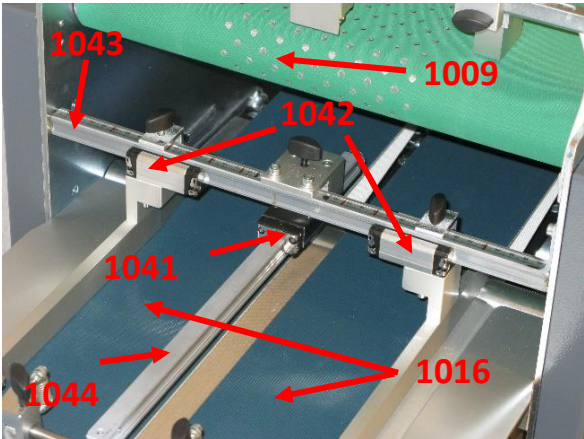
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Photo	Nr.	Pcs.	Description
	1023	1	Vacuum pump SB 0080 D OHO 0.4 kW
	1024	1	Engine with gearbox and integrated electronics
	1025	1	Distribution circuit board with transistor relay
	1026	2	Belt on/off switch
	1027	1	Switches only for single sheetfed machine (sensor with plug only)
	1028	1	Sensors complete only for single sheetfed machine (with holder)
	1029	1	Photocell only for shed machine (sensor with plug only)
	1030	1	Photocell only for shed machine complete (with holder)


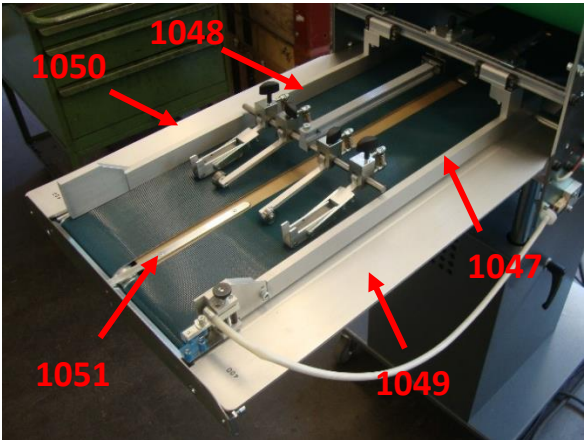
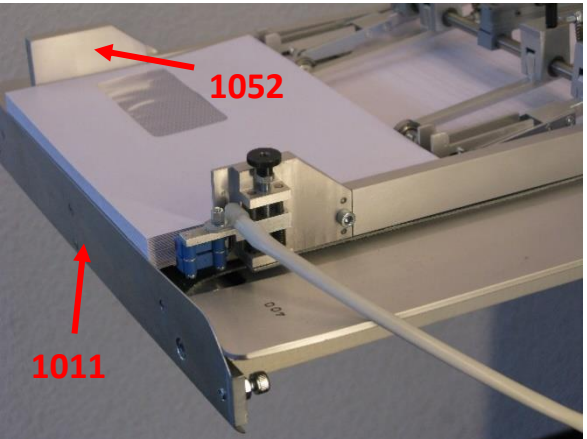
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Photo	Nr.	Pcs.	Description
	1031	1	Photocell stack monitoring
	1032	1	Plug for pre-stack measurement
	1033 1014	2 2	Brush motor left or right with cable Brushes to brush motor
	1034	2	Rear wheel (with brake)
	1035	2	Front wheel
	1036	2	Lever with setscrew
	1037	2	Lever with threaded hole

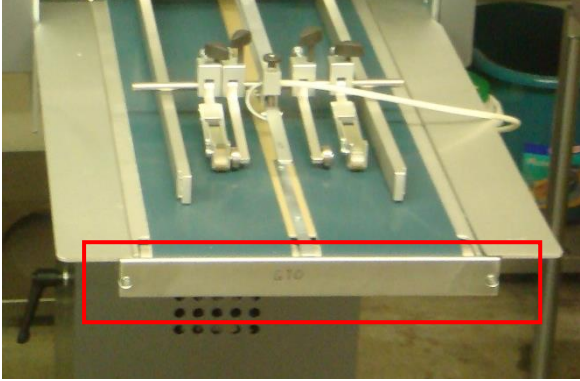
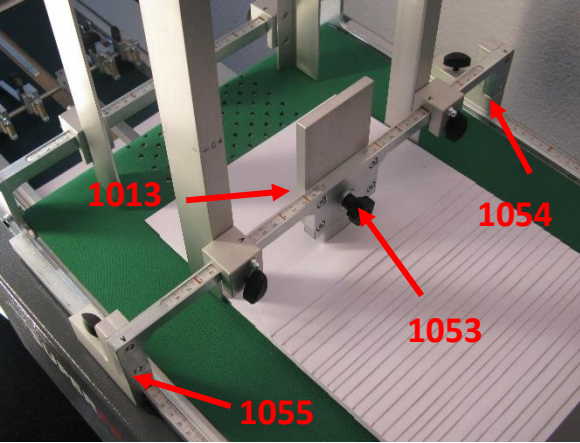
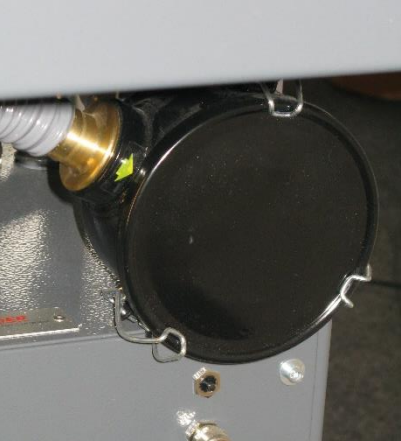
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Photo	Nr.	Pcs.	Description	
	1002	1	Gearwheel Nr. 2	
	1003	1	Gearwheel Nr. 4	
	1004	1	Gearwheel Nr. 5	
	1005	1	Gearwheel Nr. 6	
	1006	1	Gearwheel Nr. 7	
	1007	1	Gearwheel Nr. 8	
	1008	1	Gearwheel Nr. 9	
		1038	5	Spring
		1039	5	Round belt pulley
1040		5	Rope red	
1015		5	Round belt, white l=1145mm	
1015		5	Round belt, white l=1145mm	
	1009	1	Perforated belt l=1320	
	1016	1 Set	Front belt (1 set of 2 pieces)	
	1041	1	Transfer carriage long	
	1042	2	Transfer carriage short	
	1043	1	Transfer rail 390mm	
	1044	1	Transfer rail 370mm	
	1044	1	Transfer rail 370mm	

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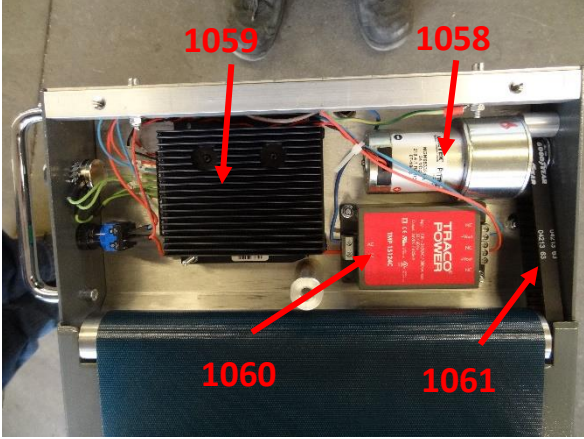
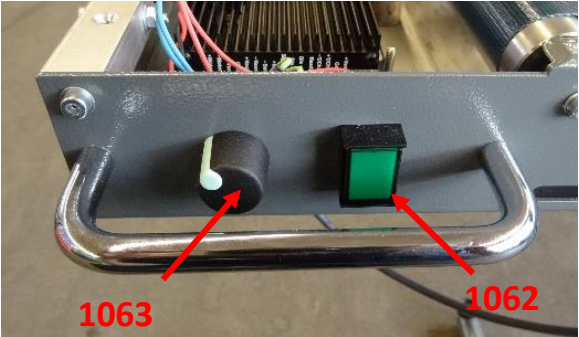
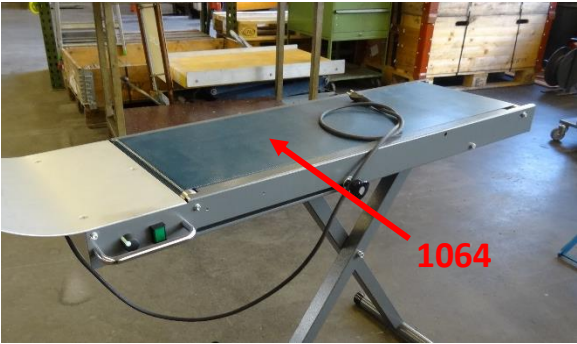
Photo	Nr.	Pcs.	Description
	1045	2	Transport crawler complete
	1010	2	Crawler T2.5 / 10
	1046	2	Hold-down roller complete
	1047	1	Bar, left
	1048	1	Bar, right
	1049	1	Side panel, left
	1050	1	Side panel, right
	1051	1	Bar for front panel
	1011	1	Front panel for shingle machine only
	1052	1	Photocell holder for shingle machine only

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Photo	Nr.	Pcs.	Description
	1012	1	Front panel for single sheet machine only
	1013	1	Knife (if bent immediately replace)
	1053	1	Knife screw
	1054	1	Adjustment, right
	1055	1	Adjustment, left
	1056	1	Air filter complete
	1057	1	Filter

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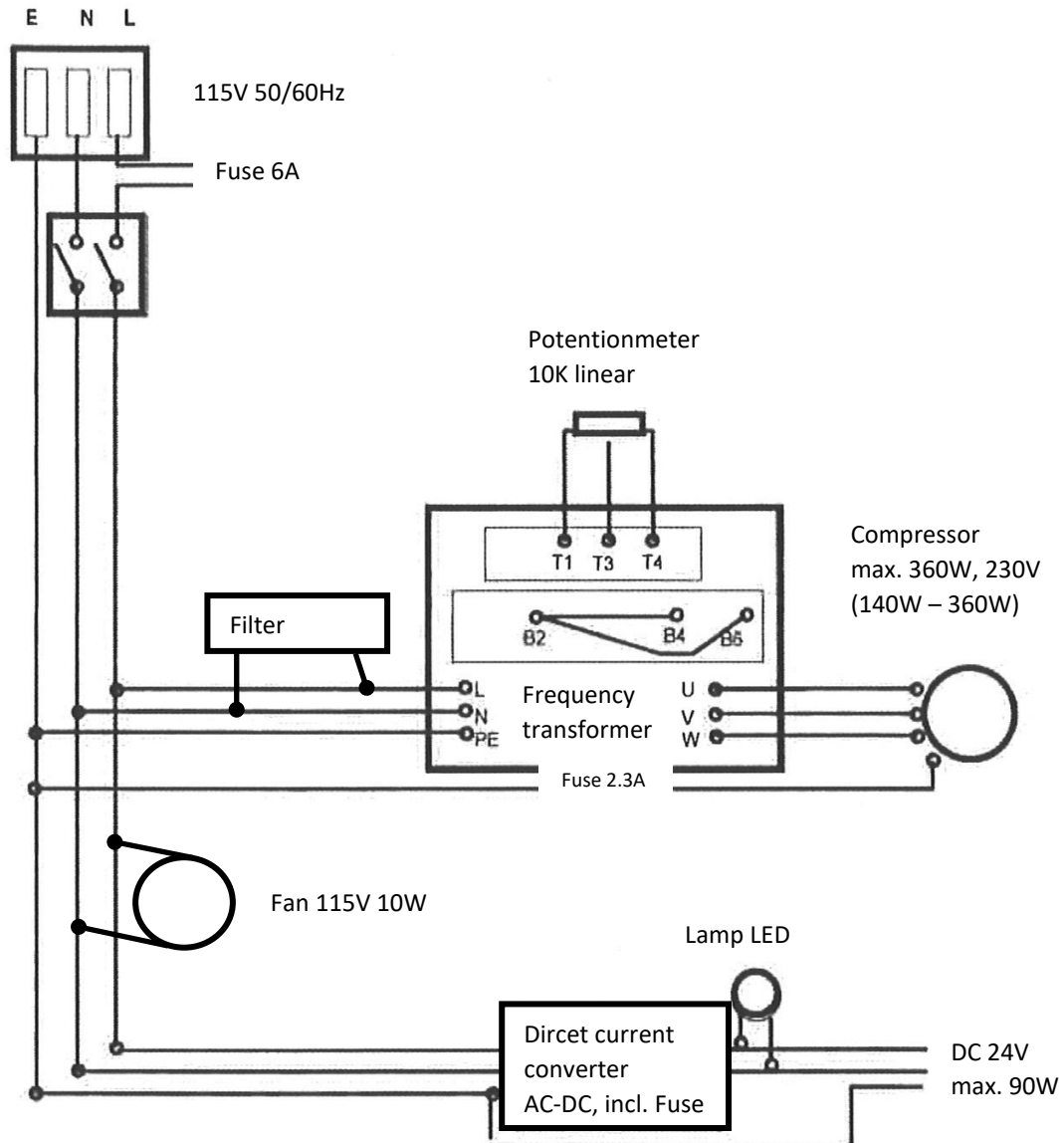
6.2 Auslageband

Photo	Nr.	Pcs.	Description
 <p>A top-down view of the internal components of the Superfeeder. A motor (1058) is connected to an electronics speed controller (1059) and a power supply unit (1060). A black belt (1061) is shown running across the bottom of the unit.</p>	1058	1	Motor
	1059	1	Electronics, Speed controller
	1060	1	Power supply unit, 230V – 24V DC
	1061	1	Belt 110 XL 037
 <p>A close-up view of the control panel on the front of the machine. It features a black rotary on/off switch (1062) and a green rectangular speed switch (1063).</p>	1062	1	On/off switch
	1063	1	Speed switch
 <p>A side view of the Superfeeder machine showing a long, thin belt (1064) stretched across the frame. The belt is used for the output tray.</p>	1064	1	Belt L=1645mm

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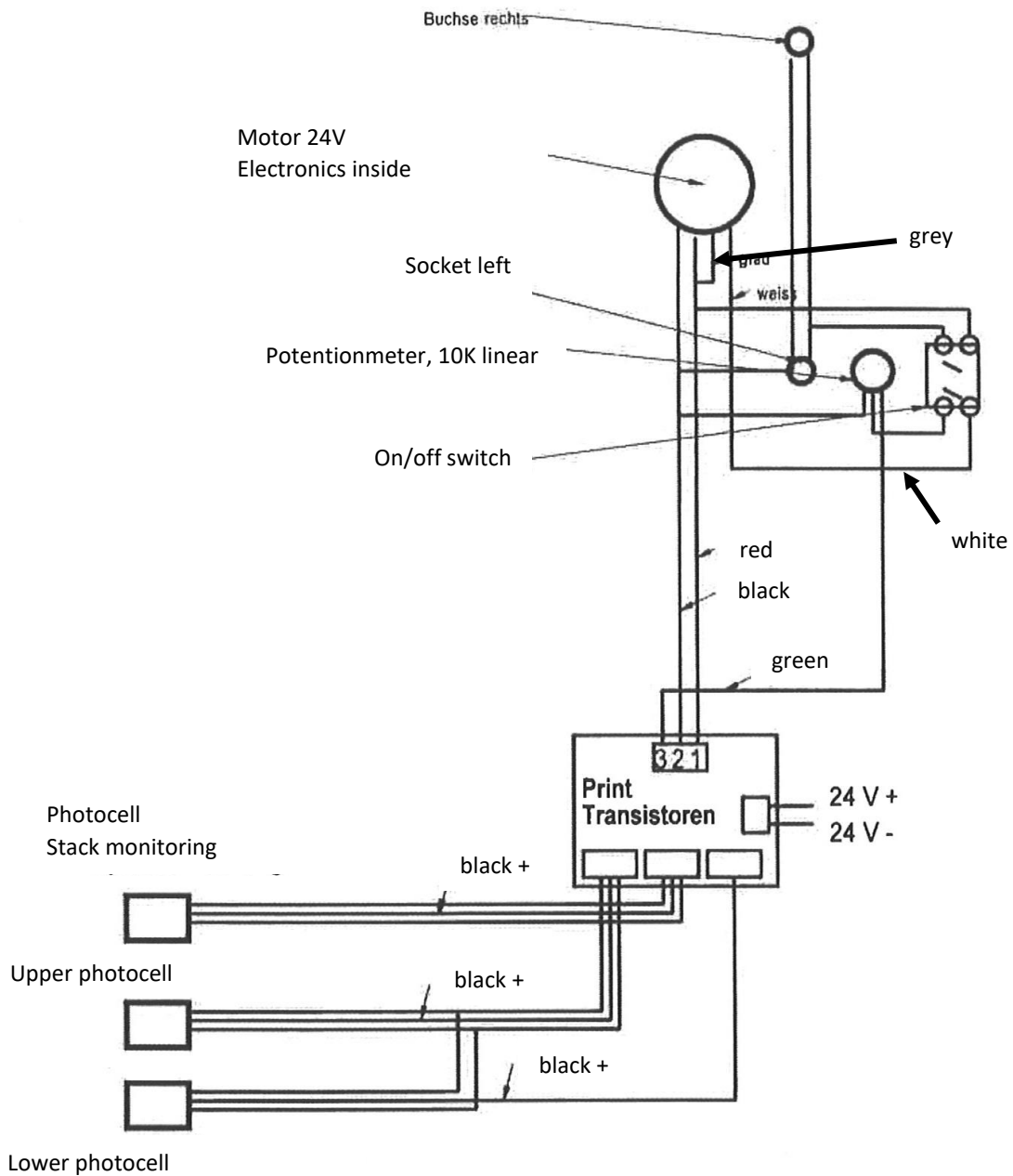
7 Electrical wiring diagram

7.1 Lower part



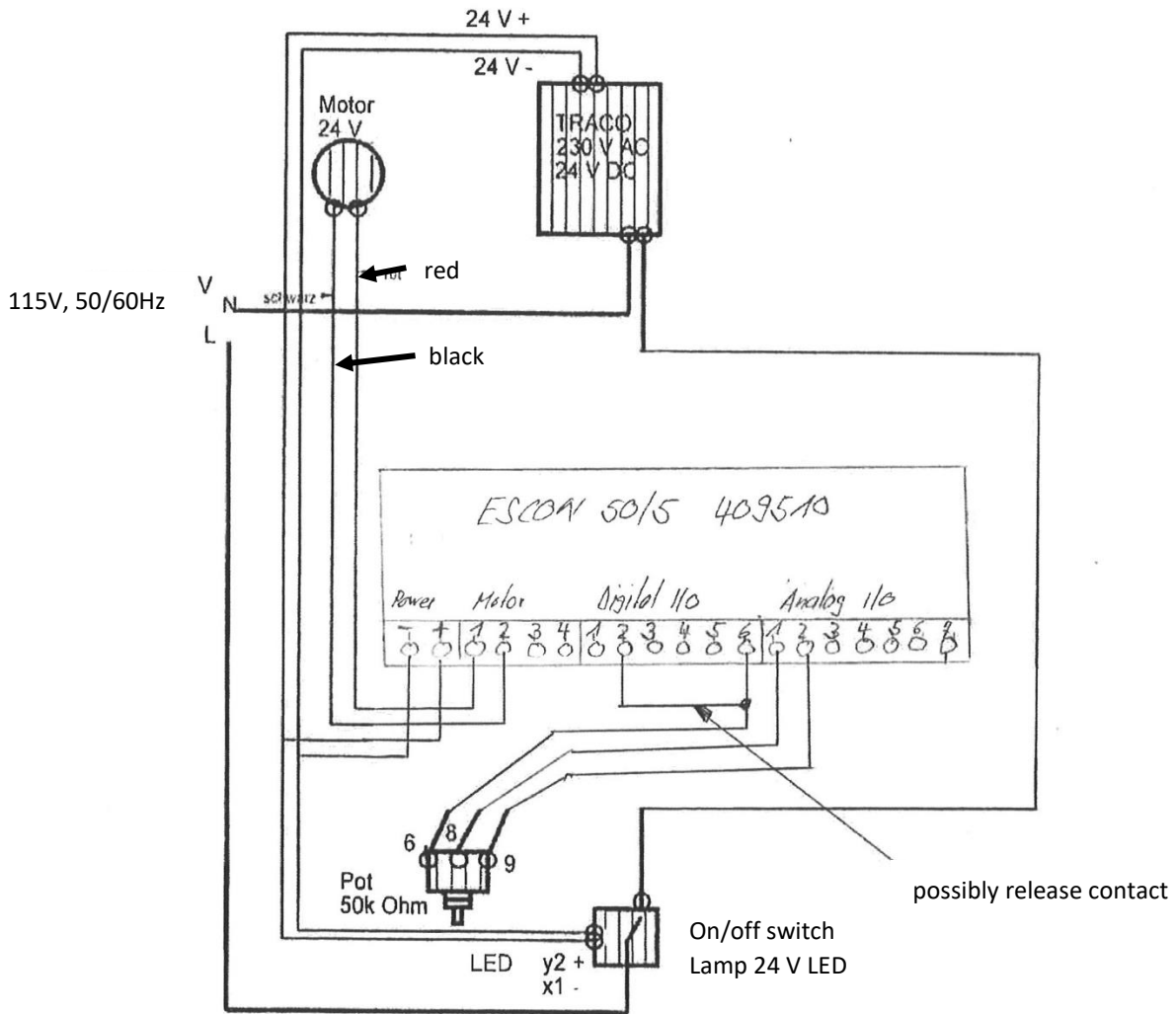
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7.2 Upper part



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7.3 Delivery belt



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8 Notes

8.1 Disassemble into 2 parts

The upper part can be separated from the lower part for transport.

Remove cover. Disconnect electrical cable and vacuum hose, unscrew left and right tilt levers, undo front screws.

8.2 Belt replacement

To be carried out, only by our service department or a trained mechanic.

The upper part is to be separated from the lower part and placed upon a table. Release all belt tensioners.

Place envelope feeder carefully on the operator side

Undo fitting bolts on the other side and withdraw the sidewall

The belts can now be drawn in.

No alignment is required when assembling because the fitting bolts guide the sidewalls into the exact position.

The round belt pulleys are inserted into the assembled machine and welded with the hotplate.

8.3 Motor

The motor is a brushless outer rotor with tarpaulin gearbox and integrated electronics. If the motor blocks, it turns back about 1 second (unblocking) and then switches off. After about 30 seconds, it starts again. This provides excellent protection for man and machine.

8.4 Quality standards

The feeder is manufactured according to CE standard. All electronic components are from well-known companies and carry various test certificates.

8.5 Safety

Only authorized personnel are permitted to carry out work on the high voltage components. The manufacturer disclaims any responsibility for damages caused by unskilled actions.

8.6 Maintenance

Every year, the cartridge must be removed from the air filter and cleaned with compressed air.