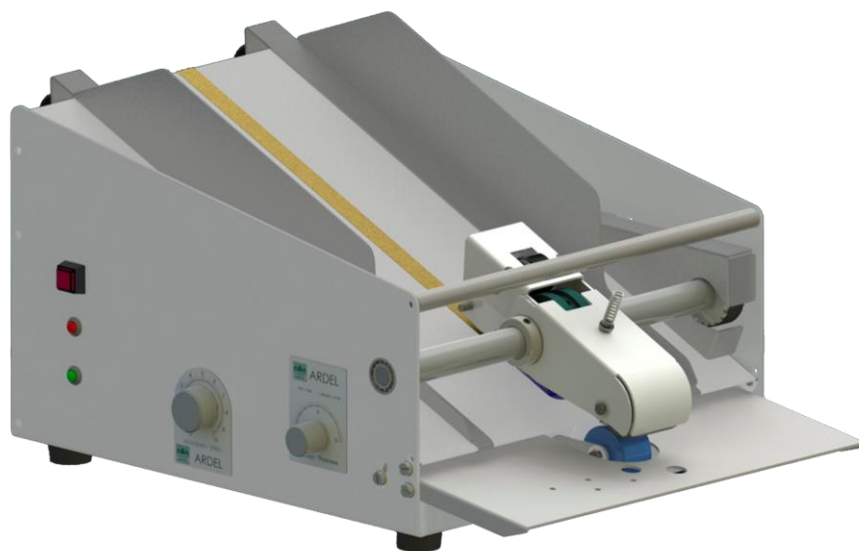


AUTOMATIC FEEDER



INSTRUCTION MANUAL

AP - AG - AG45



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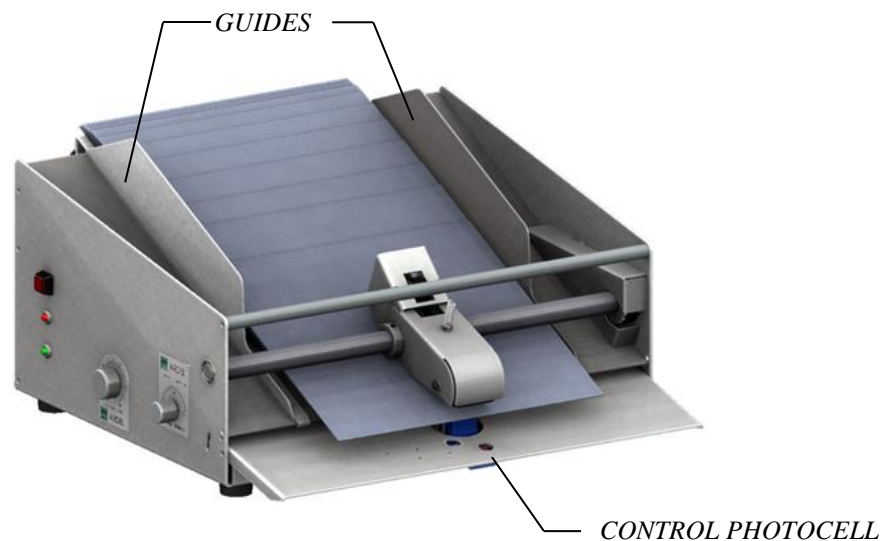
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1.- OPERATING PRINCIPLE

The automatic feeder is a machine designed for the supply of different products continuously, for example, fed onto conveyor belts for marking or labeling the product.

The products must be flat and untied in order to be manipulated: sheets, cardboards, labels, envelopes, flat boxes, plastic or aluminium bags, etc.

The load of products to be processed is placed between the feeder guides. These products are dragged one at a time and detected by a photocell which controls the supply.



The supply of products is done using the start button or receiving an external signal. The signal can come from the machine or line in which the feeder is installed.

Is possible to preselect a number and carry out the supply of products in groups with the desired amount. This requires installing in the feeder a LCD screen and a keypad for its control.

2.- SAFETY PRECAUTIONS

Read this manual prior to handling or power up the machines.

Inspect the equipment when unpacking to ensure that no damage has occurred during transport. In case you notice any damage, notify to ARDEL S.L.

Do not place the feeder on inclined or unstable surfaces to avoid tipping or falling.

Before operating the feeder, check that the voltage of the machines (220V.) is identical to the voltage of your local power supply.

While the feeder is in use, keep your hands away from the rotating systems and the area of marking.

Do not wear loose clothing, likely to get caught and be dragged by the rotating parts of machines. Protect long hair and avoid ties, necklaces, scarves, bracelets, etc.

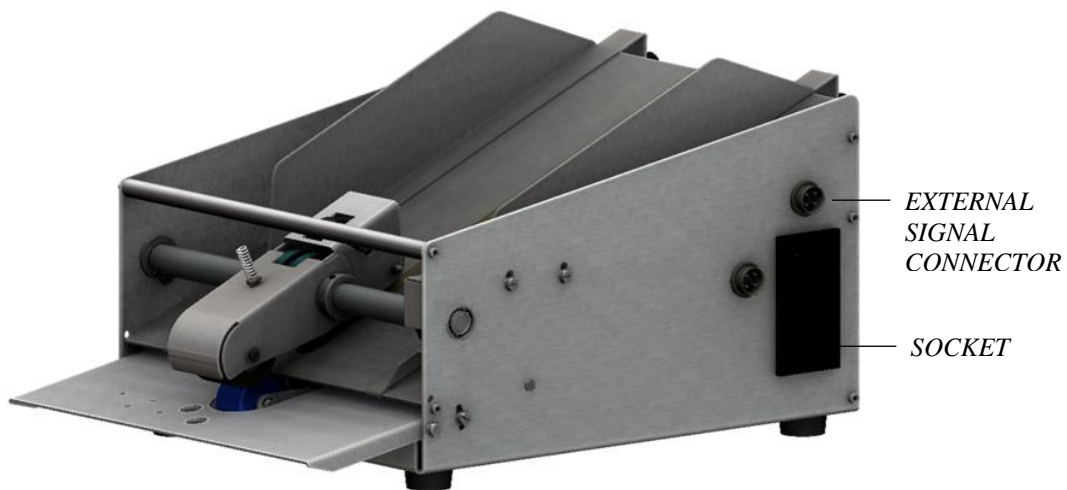
Check that the machines are disconnected from the mains before performing maintenance.

Do not expose to moisture or extreme temperature and keep it away from liquids.

3.- CONNECTIONS AND START-UP

3.1.- CONEXION WIRING

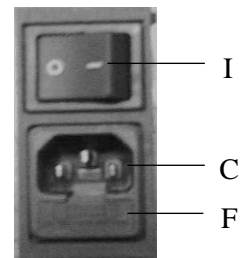
The feeder has a **socket** on one side of the machine for connection to the mains.



Connect the network cables into sockets **C**.

I: On-off switches.

F: boxes where are located the main fuse and a spare.



The supply of products is done using the start button or receiving an external signal. The signal can come from the machine or line in which the feeder is installed. The **external signal connector** serves to connect the photocell or the signal cable, both provided by ARDEL S.L.

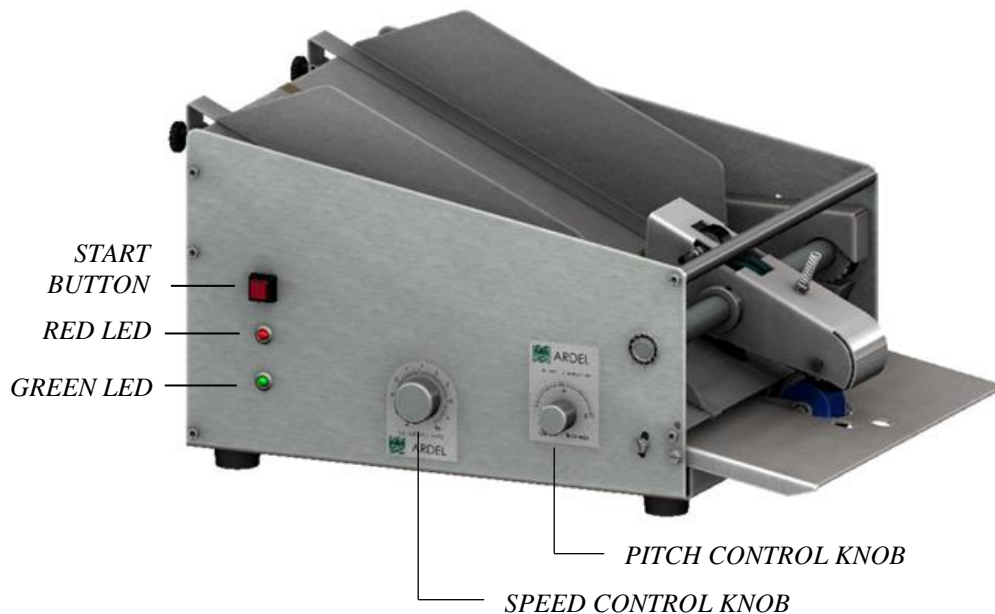
3.2.- START-UP

Press the power switches I, the green LED on the will light. The feeder is ready to work.

Place the load (page 6) and select the desired speed using the speed control knob.

Press the start button, if everything is correct only will dispense products one by one. If not, adjust the pitch control knob, to obtain a good feed.

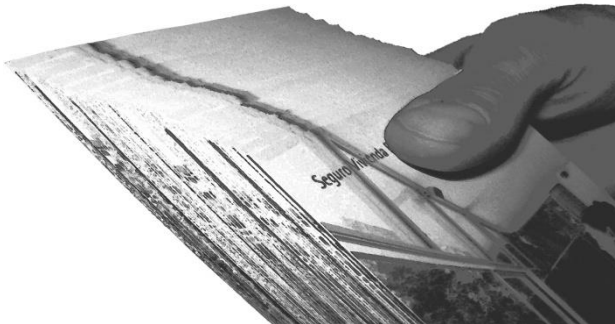
The red LED will light each time the control photocell detects a product.



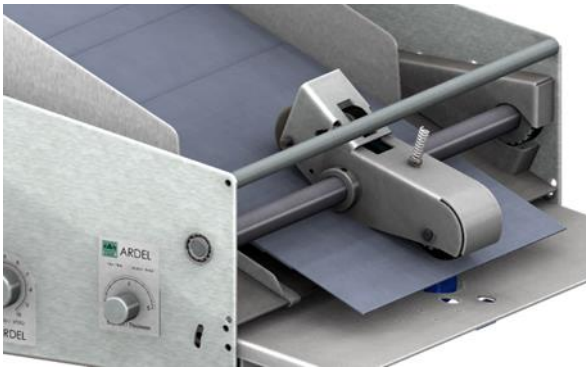
If supply order is given but there is no product load, the drive system is activated and after a few seconds, the feeder will automatically stop, green LED flashes. Reload and push the start button, the green LED turns on again continuously and the feeder is ready to receive the signal again.

4.- POSITIONING PRODUCT LOAD

In addition to being centered between the guides of the feeder, the load should be placed at a slant, considering that the unit of product remaining on the top will be the first to be fed.



Preparation: with a simple gesture the load is ready to be fed.



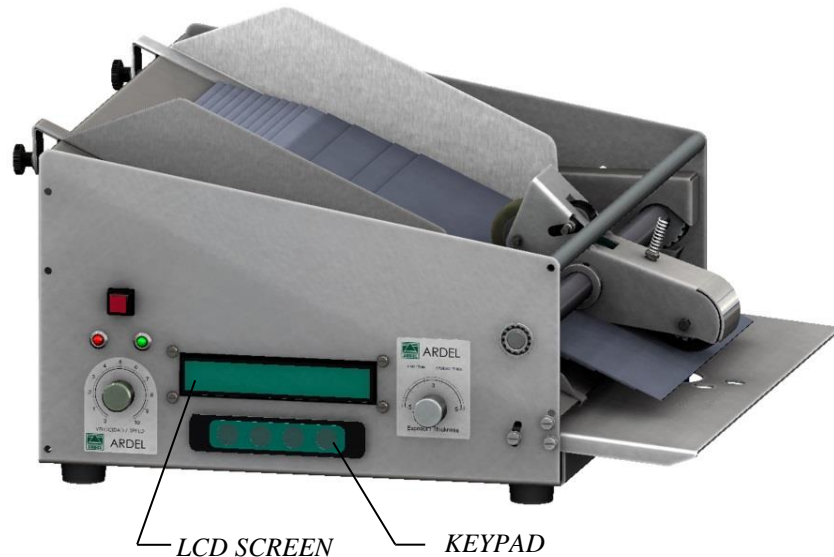
Place the load so that the drive wheel is in contact with the first product to feed.

Products can be supplied continuously. Reload the feeder before the end of feeding the previous load.

Slightly tilt the last of the products and introduce a new load.

5.- KEYPAD OPERATION

The model with LCD display and keypad, allows grouping the products in the desired quantities.



Select a quantity

P9999 C: 9999999

A B C D

1. Push **A** on the keypad, thousand units will be in intermittent, if we press A again, will flash the hundreds, so forth.
2. Once in the desired position, pressing B increases the number that is flashing, press C to decrease. Once you reach the number, press A. If no digit is flashing the machine is ready to count.
3. If the preselected amount is not completed the green LED turns on intermittently, the machine will stop after a few seconds to avoid the wear on the wheels. Placed a new load, press the start button and the preselected amount will be completed.

6.- TECHNICAL SPECIFICATIONS

AP MODEL

VOLTAGE	220V AC - 50/60 Hz
POWER max.	≈100 watt.
WEIGHT	8 kg. aprox.
SPEED max.	40/200 units/min

Minimum Material Size: 55 x 70 mm.

Maximum Width: 218 mm.

AG MODEL

VOLTAGE	220V AC - 50/60 Hz
POWER max.	≈100 watt.
WEIGHT	10 kg. aprox.
SPEED max.	40/200 units/min

Minimum Material Size: 55 x 70 mm.

Maximum Width: 328 mm.

A45 MODEL

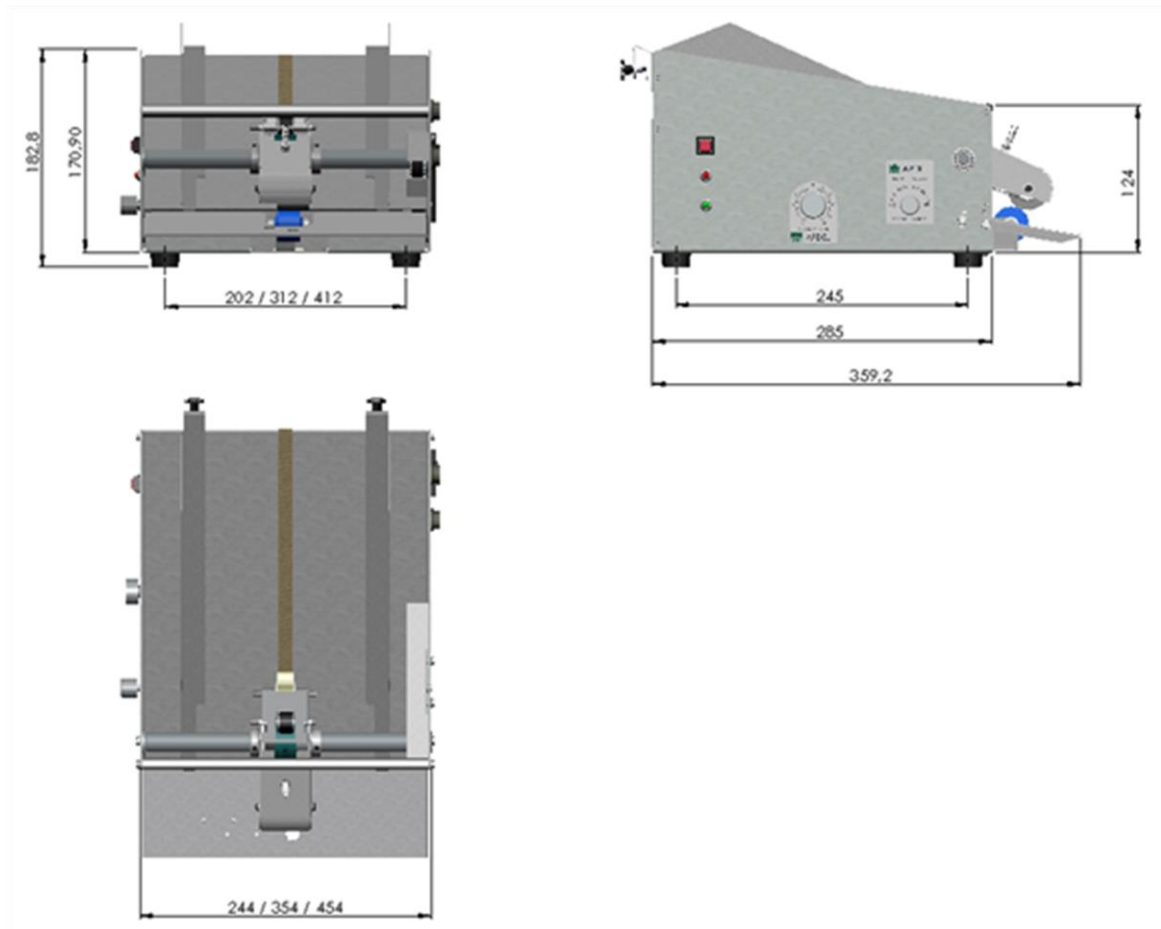
VOLTAGE	220V AC - 50/60 Hz
POWER max.	≈100 watt.
WEIGHT	12 kg. aprox.
SPEED max.	40/200 unites/min

Minimum Material Size: 55 x 70 mm.

Maximum Width: 428 mm.

* Maximum speed depends on the size of material and the motor selected for the final work to be performed by the feeder.

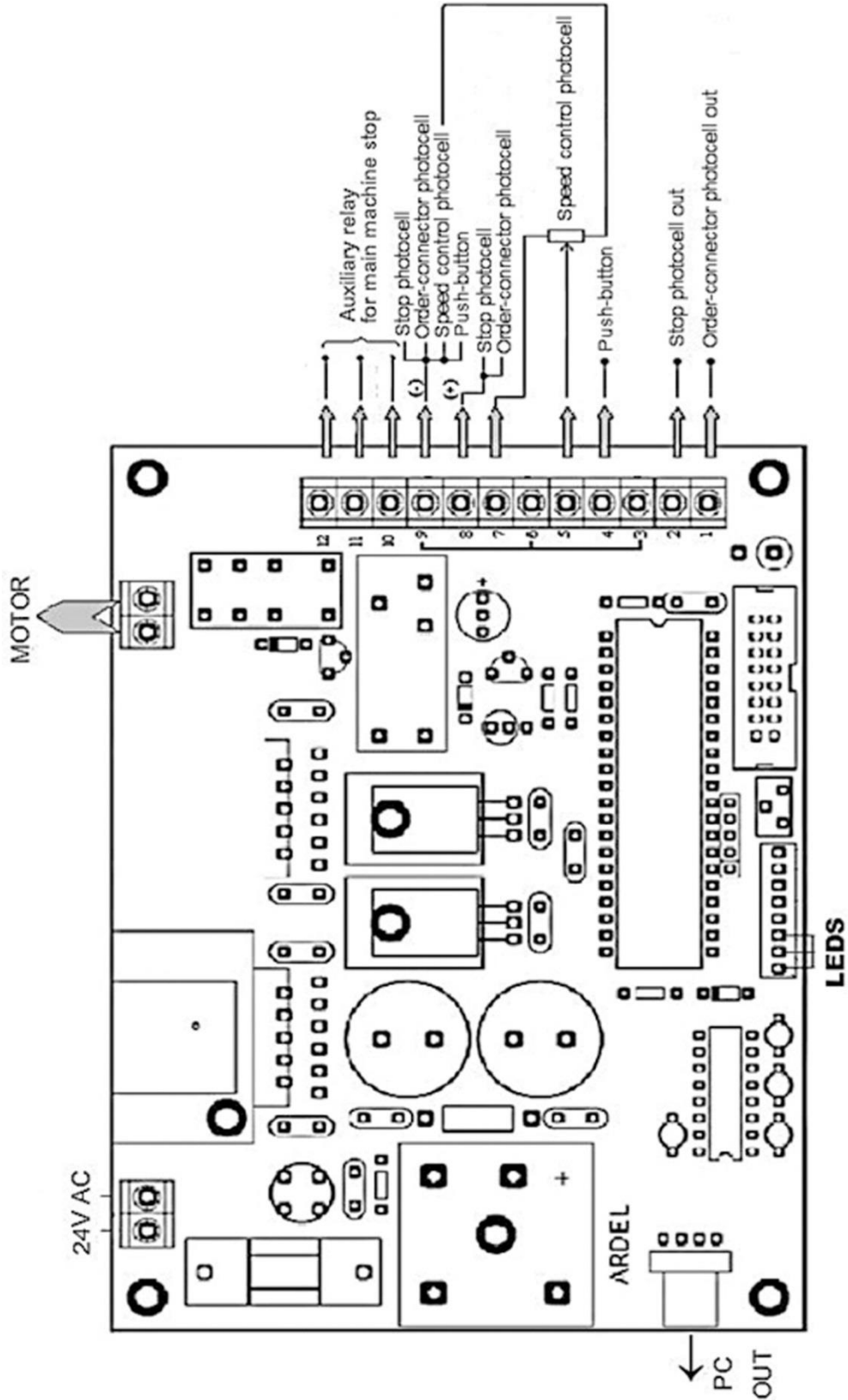
DIMENSIONS AP / AG / AG45 (mm).



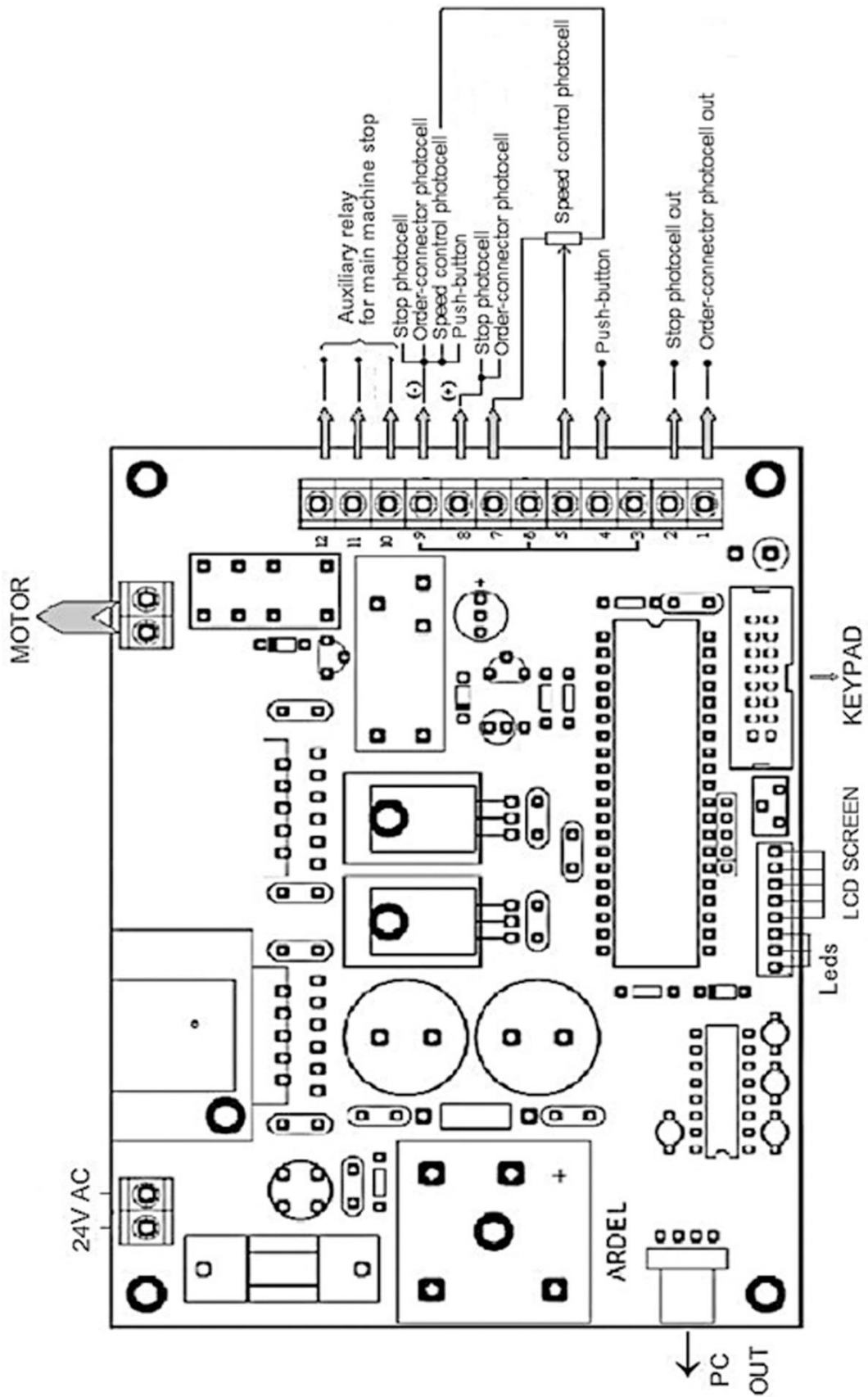
* Depending on the size of the products may be necessary longer guides.

WIRING DIAGRAM

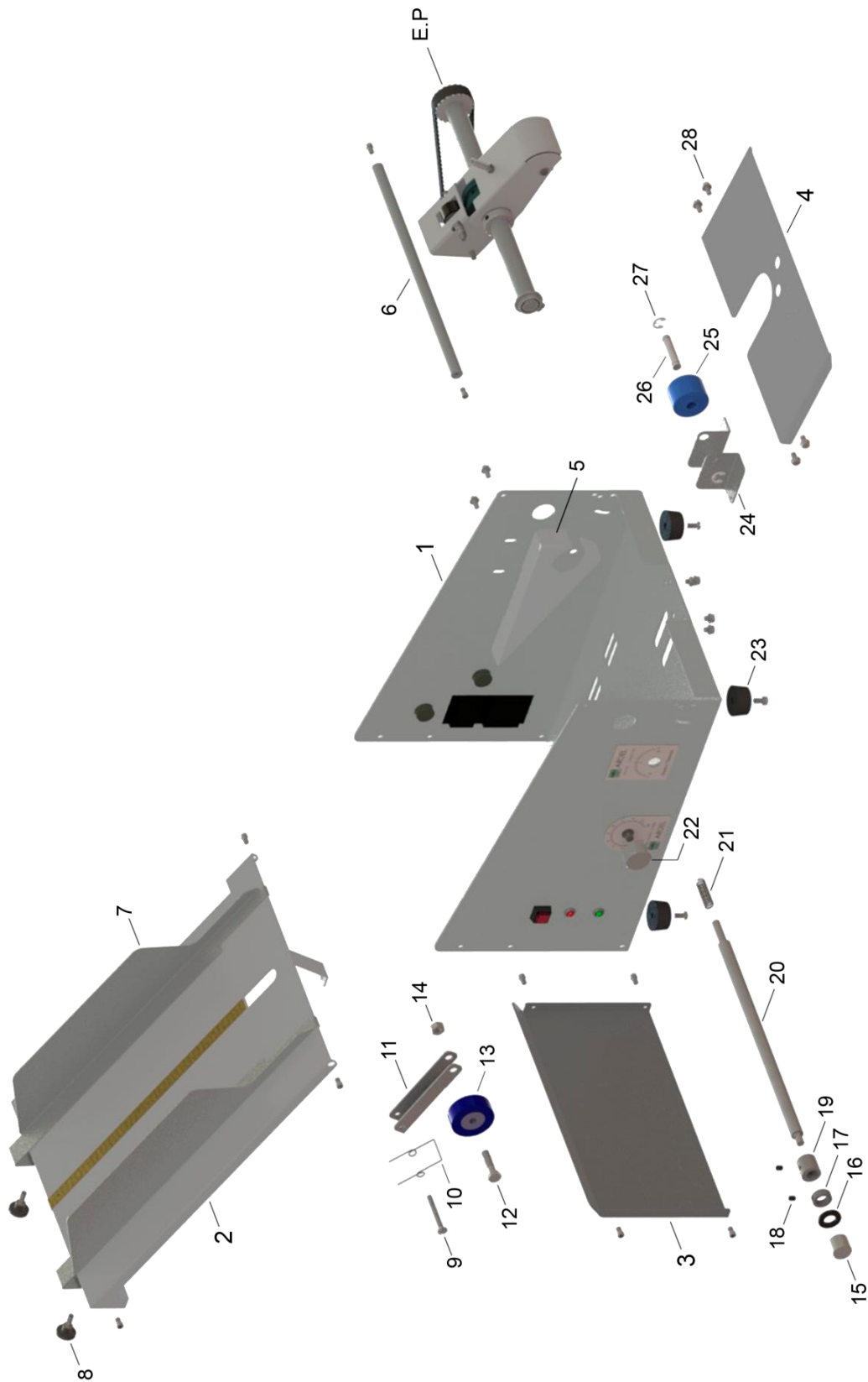
CONTROL BOARD. STANDAR



CONTROL BOARD – LCD DISPLAY MODEL



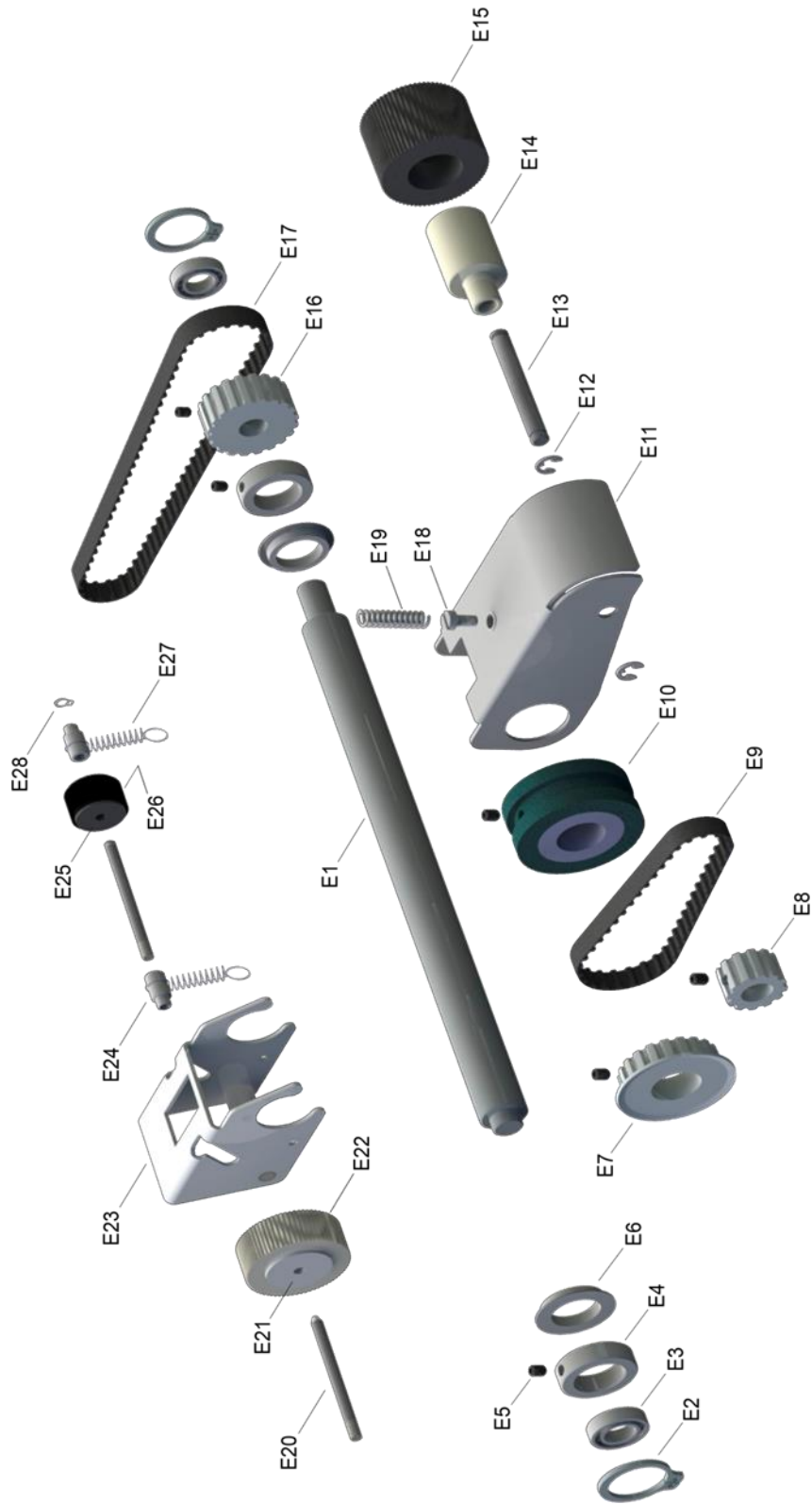
7.- EXPLODED VIEW AND DENOMINATIONS



FEEDER

<i>Nº</i>	<i>DENOMINATION</i>	<i>MATERIAL / NORM</i>	<i>TOTAL</i>
1	FRAME	STAINLESS STEEL	1
2	FEEDER TRAY	STAINLESS STEEL	1
3	BACK COVER	STAINLESS STEEL	1
4	EXIT TRAY	STAINLESS STEEL	1
5	BELT PROTECTOR	STAINLESS STEEL	1
6	SEPARATION AXLE	STAINLESS STEEL	1
7	GUIDES	STAINLESS STEEL	2
8	KNURL SCREWS	M5/M6 DIN 464	2
9	PRESSURE SPRING SCREW	M4 DIN 964	1
10	PRESSURE SPRING	STAINLESS STEEL	1
11	FIXED WHEEL SUPPORT	STAINLESS STEEL	1
12	FIXED WHEEL SCREW	M6 DIN 931	1
13	FIXED WHEEL	ADIPRENE / ALUMINIUM	1
14	FIXED WHEEL NUT	M6 DIN 934	1
15	THICKNESS CONTROL KNOB	ALUMINIUM	1
16	GUM WASHER	RUBBER	1
17	CAM AXLE COLLAR	STAINLESS STEEL	1
18	M4 SETSCREW	M4 DIN 916	2
19	CAM	ERTACETAL	1
20	CAM AXLE	STAINLESS STEEL	1
21	CAM AXLE SPRING	STAINLESS STEEL	1
22	SPEED CONTROL KNOB	ALUMINIUM	1
23	FOOT	RUBBER	4
24	OUPUT WHEEL SUPPORTS	STAINLESS STEEL	2
25	OUPUT LOWER WHEEL	ERTACETAL / COMERCIAL	1
26	OUPUT WHEEL AXLE	STAINLESS STEEL	1
27	SAFETY WASHERS	DIN 6799	2
28	M4 SCREWS	DIN 85 / DIN 912	20
EP	MAIN AXLE SET		1

MAIN AXLE SET



MAIN AXLE SET

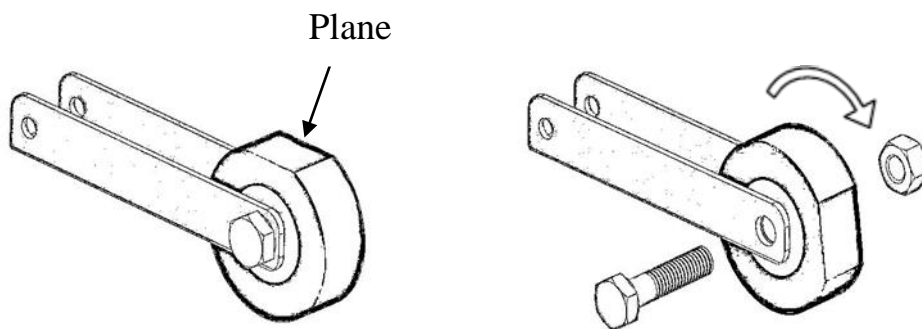
<i>Nº</i>	<i>DENOMINACION</i>	<i>MATERIAL / NORMA</i>	<i>TOTAL</i>
E1	MAIN AXLE	STAINLESS STEEL	1
E2	MAIN AXLE SAFETY WASHERS	DIN 471	2
E3	RADIAL BALL BEARINGS	SF 61800-2Z	2
E4	MAIN AXLE COLLARS	STAINLESS STEEL	2
E5	M4 SETSCREW	M4 DIN 916	6
E6	TEFLON COLLARS	ERTALYTE TX	2
E7	HEADSTOCK PULLEY	ALUMINIUM 20 XL	1
E8	OUTPUT PULLEY	ALUMINIUM 12 XL	1
E9	HEADSTOCK BELT	RUBBER 70/80 XL	1
E10	MAIN WHEEL	POLYURETHANE	1
E11	OUTPUT HEADSTOCK	STAINLESS STEEL	1
E12	OUTPUT SAFETY WASHERS	DIN 6799	2
E13	OUTPUT WHEEL AXLE	STAINLESS STEEL	1
E14	OUTPUT WHEEL SUPPORT	BRONZE / BRASS	1
E15	OUTPUT WHEEL	SILICONE	1
E16	MAIN AXLE PULLEY	ALUMINIUM 20 XL	1
E17	MOTOR BELT	CAUCHO 140/150 XL	1
E18	SPRING SCREW	DIN 85	1
E19	HEADSTOCK SPRING	STAINLESS STEEL	1
E20	KNURL SMUGGLER	STAINLESS STEEL	2
E21	STRIATED WHEEL SUPPORT	ERTACETAL	1
E22	STRIATED WHEEL	SILICONE	1
E23	PULL HEADSTOCK	STAINLESS STEEL	1
E24	INTERMEDIATE WHEEL COLLARS	STAINLESS STEEL	2
E25	INTERMEDIATE WHEEL SUPPORT	STAINLESS STEEL	1
E26	WHEEL SHEATH	RUBBER	1
E27	SPRINGS	STAINLESS STEEL	2
E28	SAFETY WASHER	4 x 0,4 DIN 55	1

8.- MAINTENANCE

Depending on environmental conditions and the kind of material to be processed can produce wear on the wheels of the feed drive system. This affects the traction capacity of the dispenser.

For proper operation is necessary to regularly review the status of these wheels. Exploded view: nº 13, E10, E15, E22 y E26.

The wear of the **Fixed Wheel** (nº 13) is not uniform. This wheel does not rotate, so generates a plane in the top of the wheel. If this plane is too big the separation of products is incorrect. Rotate to another position in which the plane does not stay on top of the wheel.



CLEANING

Sometimes particles of the product being processed remain stuck in the wheels, this causes a bad friction. To prevent this problem wipe the wheels regularly with a cloth dampened or 60% alcohol.

Perform these cleaning operations with the machines switching off.

* Do not grease the axles of the feeder. If the oil impregnates the wheel, friction decreases.

9.- TROUBLESHOOTING

TROUBLE	CAUSES	SOLUTIONS
The feeder is not put into operation. (Green Led doesn't light)	Bad network connection. Switch is in OFF position. Fuse into disrepair.	Check network connections. Switch to On position. Change fuse.
The feeder is not put into operation. (Green Led doesn't light)	The speed control knobs are at zero.	Check speed control knob.
The feeder is not activated when receiving external machine order. (Green Led lights)	The connection between the feeder and external machine is not correct.	Verify that the cable between both machines is well connected.
The products supply is not correct.	Dirty wheels. Worn wheels. Load placed incorrectly. Incorrect pitch regulation. Insufficient or excessive speed.	Clean wheels. Replacement of wheels. Check that the guides do not squeeze the products and is well coined. Open / close pitch. Regulates the speed.

* If the problem persists, contact with ARDEL S.L or one of its dealers.

10.- WARRANTY

The warranty is provided by ARDEL S.L. or one of its dealers. It covers two years of operation or two million units fed.

Includes free replacement and installation of all those items unusable for material defects, construction or assembly. In this case the machines under warranty must be sent together with the warranty certificate. His return will be made free of charge.

This warranty includes the need for the machine to be revised once a year. **Omission of this review will result in lost of warranty.**

In other matters governing the conditions set forth below.

Excluded from the warranty:

- Worm components by common usage that must be replaced.
- Dirty components that must be cleaned.
- Damages by inadequate handling.
- Damages resulting during transport.
- Damages caused by use of the machine in a different job for which it was designed or changes in the feed products without first consulting to ARDEL S.L.

This warranty is written as indicated in Law 23/2003 of Guarantees *In the Sale of Consumer Goods*.

11.- ENVIRONMENT



This symbol indicates that the device out of use should be discarded independently and never with household residues.

EU Directive 2002/96/EC

This product contains electrical and electronic components necessary for the proper operation. This can be dangerous to health and the environment if their removal is done incorrectly.

Deposit these products to designated collection points. This will help prevent negative environmental consequences.