

# AUTOMATIC BREADING-BATTERING MACHINE

Mod. COMPACT



**GASER**

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## 4. INTRODUCTION

Before using or handling the machine, you must read this manual carefully.

The instructions in this document are, whenever possible, accompanied by illustrations to help with understanding of how to start, use and clean the machine.

This manual is subject to amendment.

### 4.1 Safety

It is forbidden to make any change or modification to the machine without the prior written permission of our technical department. Use of the machine in these conditions could cause accidents, in which case INDUSTRIAS GASER S.L. accepts no liability for improper use of the machine.

The machine has been designed for use with food products and must be used in the way described in this manual. Any use other than the specified one will involve risk for the user and for the machine. INDUSTRIAS GASER S.L. accepts no liability either for damage to the machine or personal injury or injury to third parties that this use might cause.

### 4.2 Hygiene

All of the materials used in the manufacture of the machine and which come into contact with food comply with Regulation 1935/2004. Consequently, the machine has the CE mark.

It is not recommended to use detergents containing chlorine, any of its derivatives or any other product that could damage the construction materials of the machine.

## 5. TECHNICAL SPECIFICATIONS

1. Automatic battering and breading
2. Tabletop machine
3. Can be fully dismantled for ease of cleaning
4. Easy maintenance
5. Made from stainless steel and plastics suitable for use with food
6. Belt speed 10 metres/minute
7. Produces 2000 to 3000 pieces/hour
8. Usable width 150 mm
9. Motor power (single-phase) 200W
10. Dimensions of assembled machine: 1000 x 485 x 400 mm
11. Machine weight: 55 kg

## 6. RECEIPT AND START-UP

### 6.1 Receipt

When you receive the machine, you must first check that it is in perfect conditions, without any damage, dents or knocks.

If there is any problem, we advise you notify the distributor or INDUSTRIAS GASER S.L. directly.

### 6.2 Start-up



1. These machines essentially consist of 3 parts: chassis, batter tank and breader.

Image 1. Main parts

2. It is important that when the machine starts working, it is completely clean to ensure it works properly.
3. The COMPACT model breading machine works on single phase 220V 50Hz electrical current.
4. To start breading, first turn the machine on using the ON/OFF position selector knob (Pos. 8. control panel overview). Once the machine is in the ON position, press the green "START" button (Pos. 7. control panel overview).
5. Next pour 4 to 5 litres of batter into the batter tank. The batter level must not be higher than half way up the batter roller (Pos. 33. overview).

- Next fill the breader with 5-6 kilograms of breadcrumbs, always with the machine turned on. For correct breading, the bread level must be between 1 and 2 centimetres from the top of the curtain vanes (Pos. 3. Complete COMPACT breader overview). Excess bread will affect the operation of the machine.

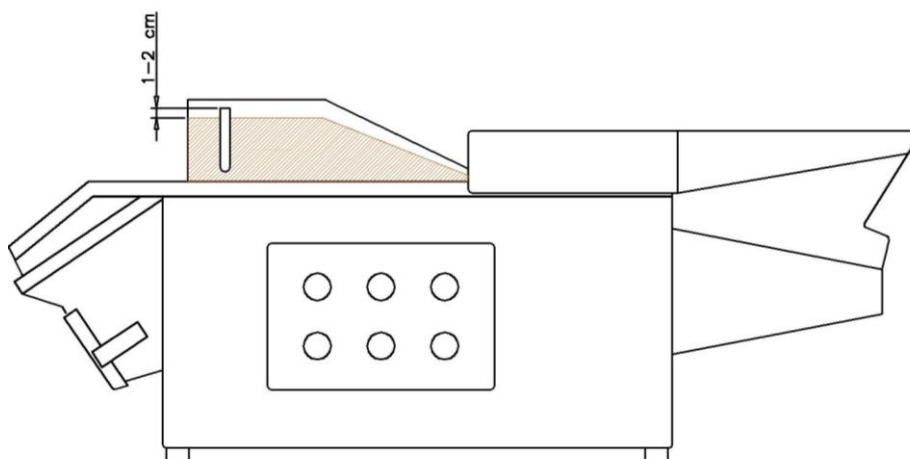


Image 2. Bread level

- The machine is ready for breading.

### 6.3 Notes

- The wire mesh battering and breading belts must operate under tension. You should also remember that they loosen in use. There is a shaft for tensioning them (Pos. 8 and 9. Overview). To use this, slide both ends in the appropriate direction by the same amount. Working with the wire mesh belts loose or too tense can cause damage.



Image 3. Batter belt tensioner



Image 4. Breading belt tensioner

- The controls (Pos. 13, overview) can be mounted on either side of the machine. To do this, simply swap the panel for the blank cover (Pos. 16. Overview) from the other side by disconnecting the plug and reconnecting it on the opposite side.

## 7. CLEANING

When you have finished using the machine, it must be cleaned. To do so, follow these steps:



1. Remove the batter roller (Pos. 33. overview).

Remove the batter roller (Pos. 33. overview).Image 5. Batter roller

2. Remove the batter belt chassis (Pos. 28. overview) by removing the two knobs (Pos. 27. overview). Remove the batter tank and empty it.



Image 6. Removing knobs



Image 7. Batter belt removal



Image 8, Removing batter tank.

3. Remove the breader (Pos. 12. overview).



Image 9. Breader removal



4. Empty the bread through the discharge door (Pos. 20. overview).



Image 10. Emptying bread

5. Remove the breading belt (Pos. 23. Overview) by removing the two knobs (Pos. 27. overview).



Image 11. Removing knobs



Image 12. Breading belt removal

6. Clean the disassembled components with pressurised water and dry well, if possible with air. Clean the machine's chassis with a damp cloth. Never clean it with pressurised water.



Image 13. Chassis ready for cleaning

7. To reassemble the machine, repeat the process described above in reverse order.

## 8. MAINTENANCE

1. Periodically check the condition of all moving parts: belt, rollers, gears and bearings.
2. Periodically check the condition of the gear motor.
3. Periodically check the general condition of the machine.
4. If any of the rods on the wire mesh belts break, replace the broken rod with a new one using a connecting tube. The connecting tube must always be situated where there are no rollers.

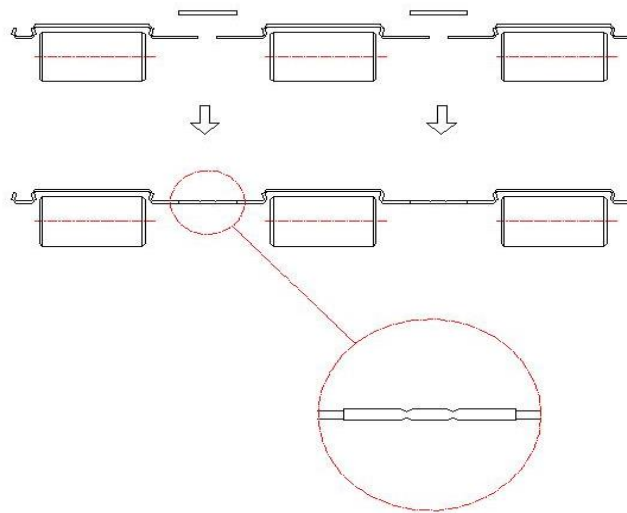


Image 14. Belt rod repair

5. When reassembling the belt on its chassis, remember that the smooth side is the upper face and that the ends of the wires must always face in the opposite direction to the motion.



Image 15. Belt fitting

## 9. TROUBLESHOOTING

Problem	Cause	Solution
The machine does not start	Machine unplugged	See manual "6.2. Start-up", point 4
	The batter tank is not correctly positioned	Locate it using its own centering pieces.
The belt makes a noise	Incorrect belt tension	See manual "6.3. Notes", point 1
	The mesh is twisted	Straighten, repair or replace affected area. See manual "8. Maintenance", points 4 and 5
The pieces are deformed as they pass through the breader.	The tooth rollers are worn.	See manual "8. Maintenance", point 1
	There is insufficient bread.	See manual "6.2. Start-up", point 6
	The batter is not correct.	The batter should be smoother or colder.
The bread forms lumps	There is too much batter and it is coming into contact with the bread.	See manual "6.2. Start-up", point 5

## 10. GENERAL DIAGRAM

### 10.1 Overview

Number	Description	Reference	Units
1	COMPACT BREADER CHASSIS	C3010100	1
2	BREADING BELT DRIVE SHAFT UNIT	44670000	1
3	BATTER BELT DRIVE SHAFT UNIT	44680000	1
4	BREADING BELT LEFT BEARING HOUSING UNIT	44620000	1
5	BREADING BELT RIGHT BEARING HOUSING UNIT	44630000	1
6	BATTER BELT BEARING HOUSING UNIT	44640000	2
7	BREADING BELT PASSIVE ROLLER AXLE UNIT	44760000	3
8	BREADING BELT TENSIONING SHAFT UNIT	44560000	1
9	BATTER BELT TENSIONING SHAFT UNIT	CC770000	1
10	BATTER BELT LOWER SHAFT UNIT	44790000	2
11	BATTER BELT LOWERING ASSEMBLY SHAFT UNIT	44780000	1
12	COMPLETE COMPACT BREADER UNIT	C3820000	1
13	CONTROL PANEL UNIT	C3250000	1
14	ELECTRICAL CABINET UNIT	C3260000	1
15	GEAR MOTOR UNIT	C3270000	1
16	BLANK CONTROL PANEL COVER	40160800	1
17	MOTOR AXIS	40091100	1
18	DRIVE GEARS	40091000	1
19	GEAR END WASHER	40000500	3
20	BREAD TANK DISCHARGE DOOR	C3160600	1
21	DISCHARGE DOOR LATCH	40160700	2
22	BATTER TANK SUPPORT	C3161000	1
23	BREADING BELT CHASSIS	C3030100	1
24	MESH SLIDING PLATFORM	C3030200	1
25	BREADER WIRE MESH CONVEYOR BELT	CC710000	1
26	BELT POSITION GUIDE PIVOT	40010500	2
27	M8 FIXING KNOB	00040200	4
28	BATTER BELT CHASSIS	C3040100	1
29	BATTER TANK	C3020100	1
30	BATTERING WIRE MESH CONVEYOR BELT	CC720000	1
31	SAFETY MICROSWITCH	40041500	1
32	DRIVE GEAR SIDE SPACER	40040300	1
33	MINI BATTER ROLLER	40190100	1

34	BATTER ROLLER SUPPORT	C3041600	2
35	GEAR TRAIN COVER	40160500	1
36	MOELLER LS-11 LIMIT SWITCH	EL0220LS11	1
37	STAINLESS STEEL/RUBBER FOOT D-40	SI0226PID40M10	4
38	EU D-85 ROUND STICKER	PA0230D85	2
39	FRONT TRIANGULAR COMPACT STICKER	PA0230FTC3	1
40	REAR TRIANGULAR COMPACT STICKER	PA0230PTC3	1
41	REAR COVER COMPACT STICKER	PA0230TP40	1
42	CE MARKING		1
43	SINGLE PHASE PLUG 1409-19	EL0220MCGMC6	1

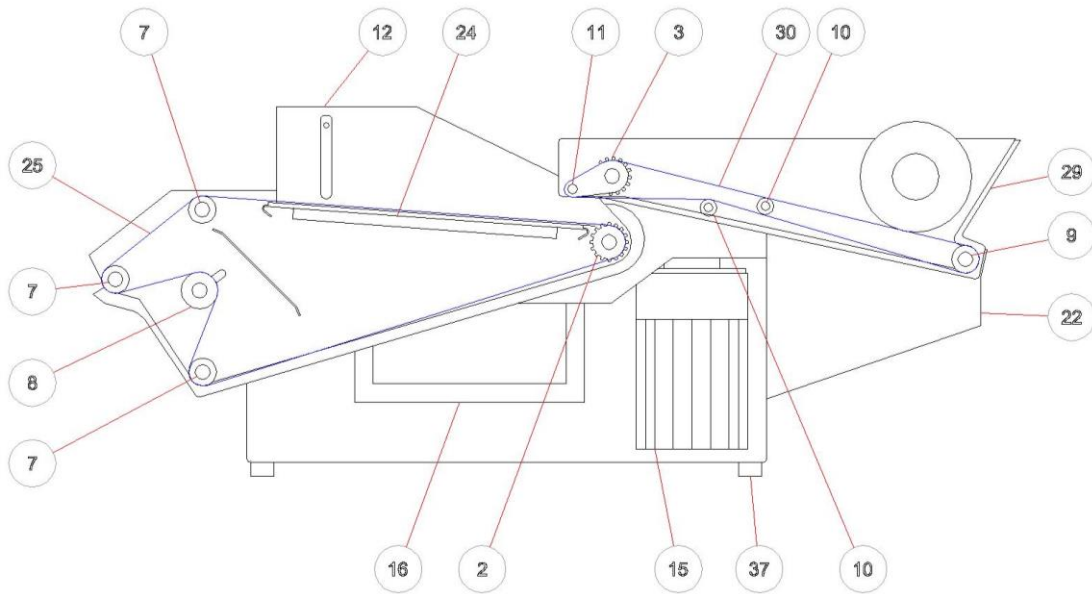


Figure 1. Standard overview 1

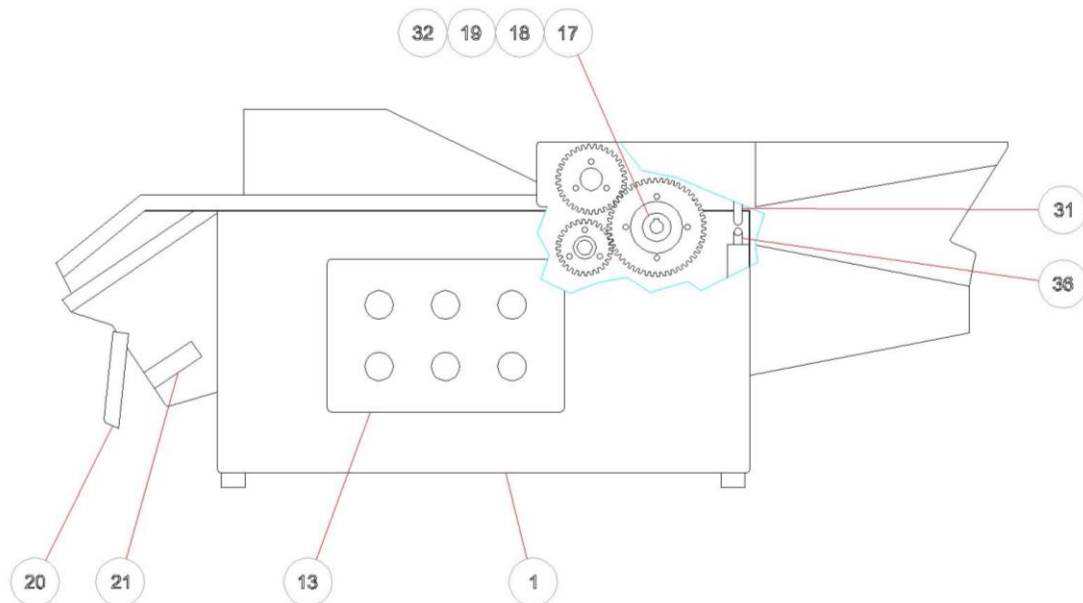


Figure 2. Standard overview 2

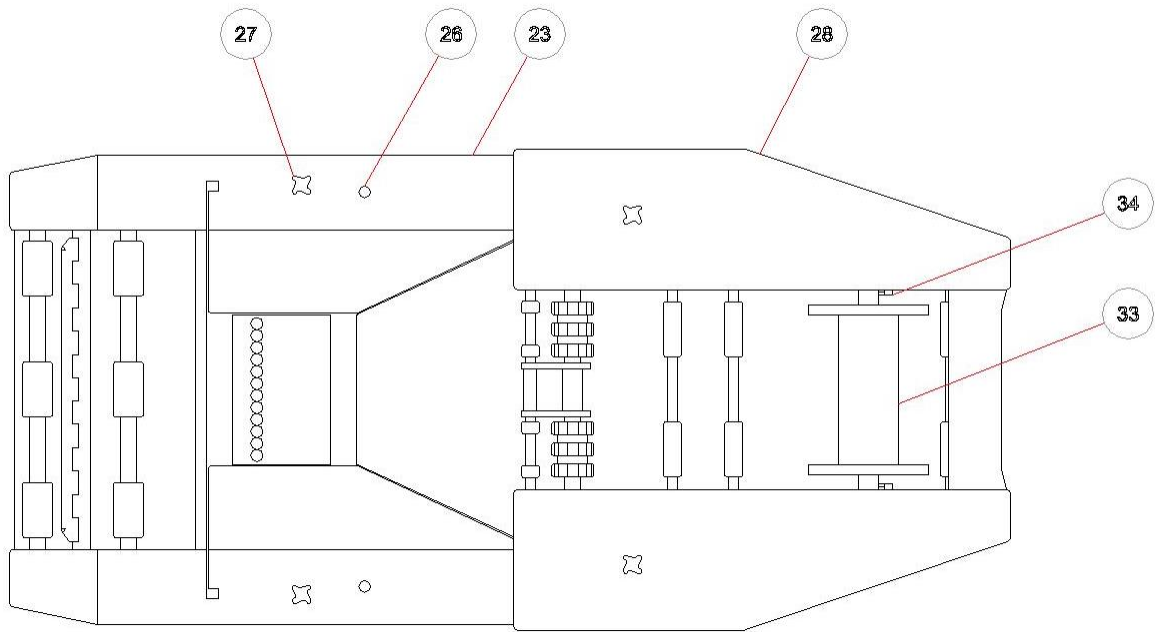


Figure 3. Standard overview 3

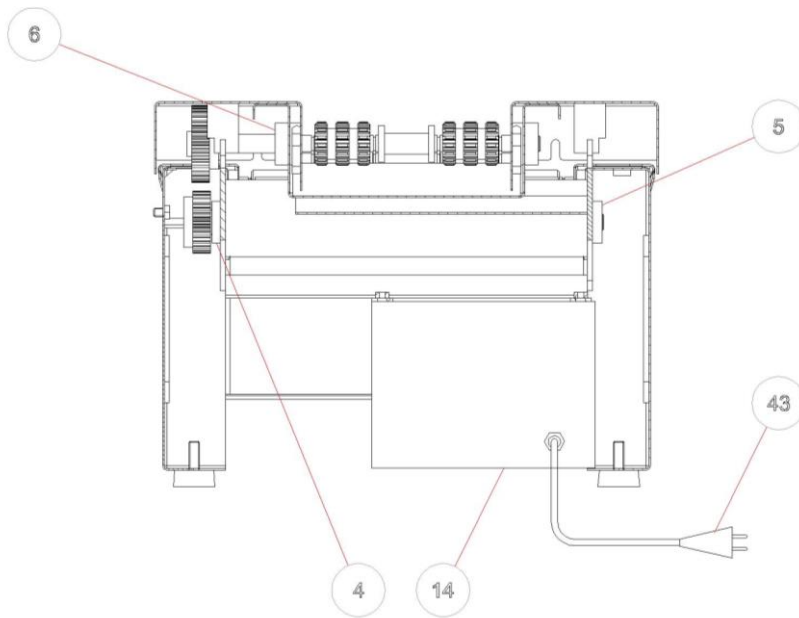


Figure 4, Standard overview 4



Figure 5. Standard overview 5

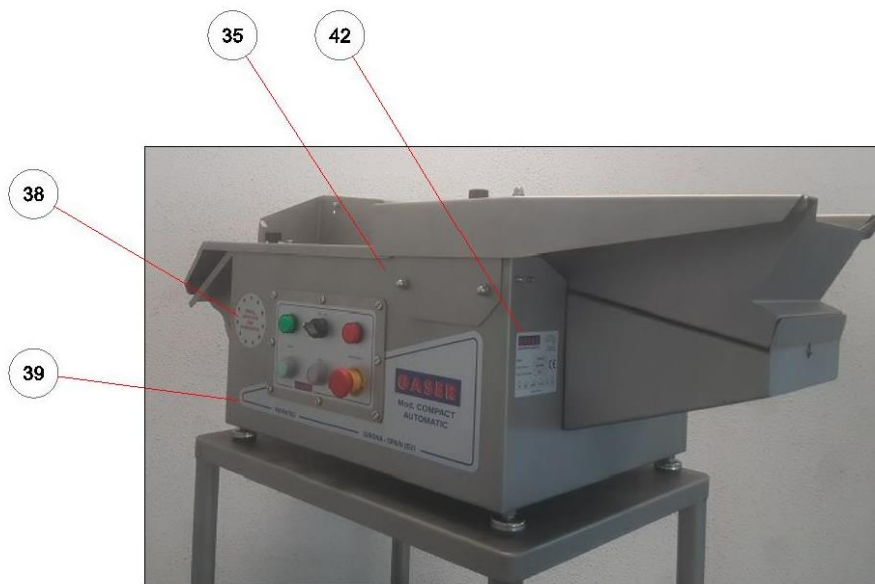


Figure 6. Standard overview 6

## 10.2 Overview complete breading belt drive shaft

Ref. 44670000

Number	Description	Reference	Units
1	BREADING BELT DRIVE GEAR UNIT	44580000	1
2	BREADING BELT DRIVE SHAFT	40030400	1
3	BREADING BELT TOOTH ROLLER	40000100-R	3
4	DRIVE SHAFT SPACING ROLLER	40031400	2
5	GEAR END WASHER	40000500	1
6	E-15 DIN 471 STAINLESS CIRCLIP	SI0109E150471	2
7	O-RING VITON FPM 70 SHA Ø13 x 2mm	SI06090132.5	4

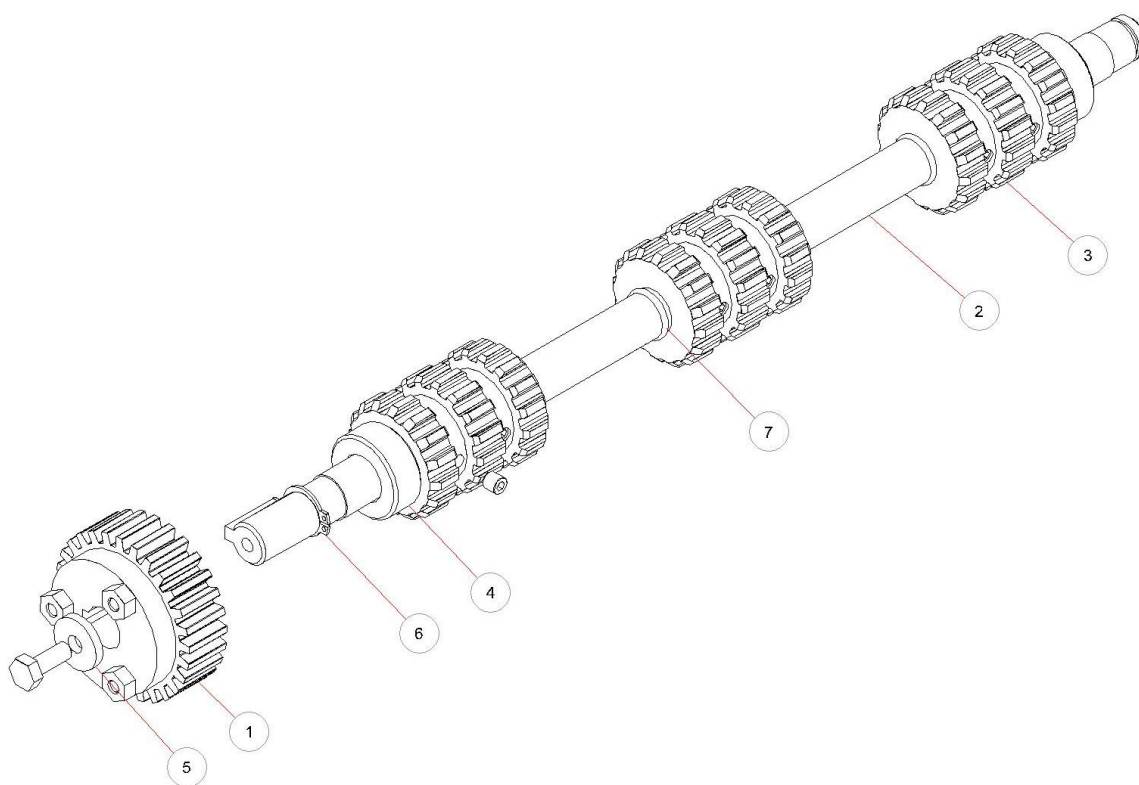


Figure 7. Overview complete breading belt drive shaft



### 10.2.1 Overview complete breading belt drive gears

Ref. 44580000

Number	Description	Reference	Units
1	BREADING BELT DRIVE GEARS	40031000	1
2	DRIVE GEAR SPACER	40001100	1
3	STAINLESS SCREW C/PL M6x30 DIN963	FE0108M060300963	3
4	HEX NUT M6 DIN934	FE0108M060000934	3

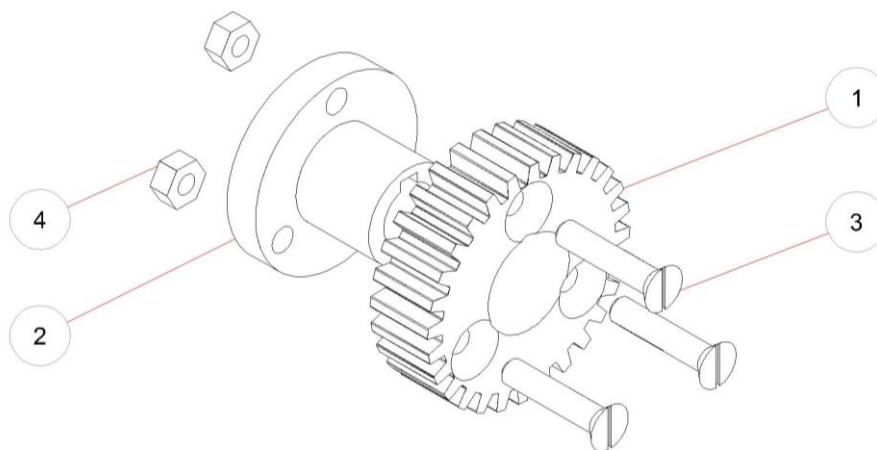


Figure 8. Overview complete breading belt drive gears

### 10.3 Overview complete batter belt drive shaft

Ref. 44680000

Number	Description	Reference	Units
1	BATTER BELT DRIVE GEAR UNIT	44590000	1
2	BATTER BELT DRIVE SHAFT	40040400	1
3	BREADING BELT TOOTH ROLLER	40000100-R	2
4	CRANK REAR SPACER	40041300	1
5	BATTER BELT CRANK	40041400	2
6	GEAR END WASHER	40000500	1
7	E-15 DIN 471 STAINLESS CIRCLIP	SI0109E150471	2
8	O-RING VITON FPM 70 SHA Ø13x2mm	SI06090132.5	4

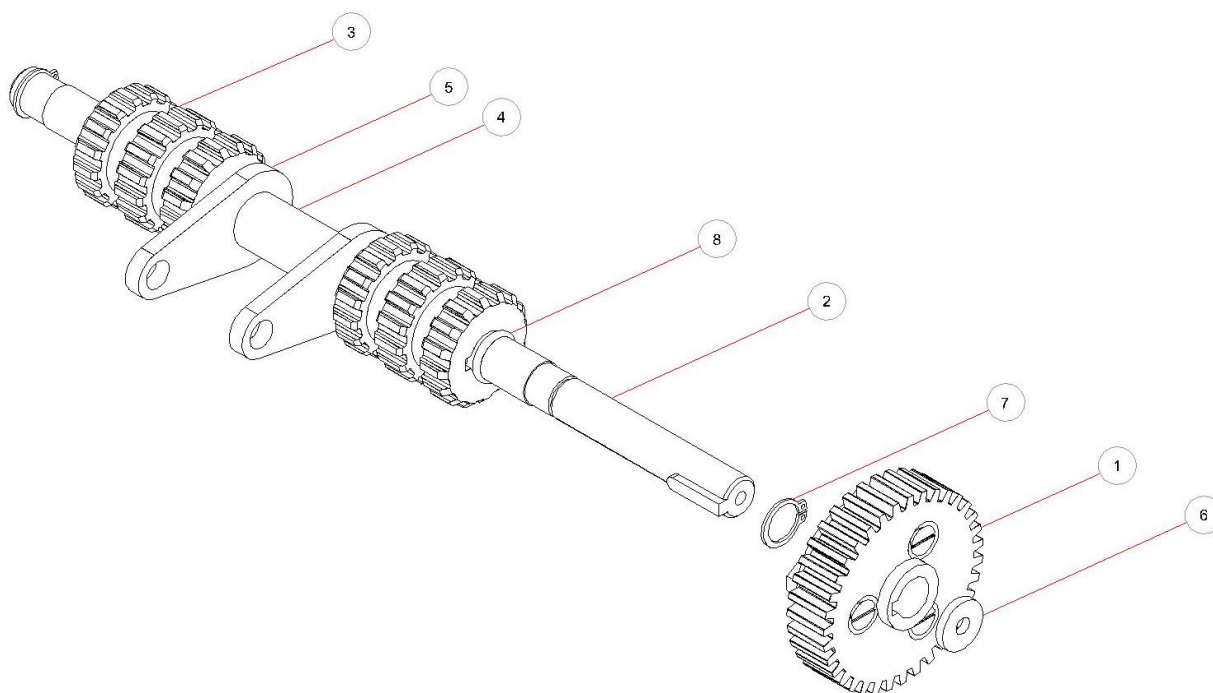


Figure 9. Overview batter belt drive shaft

### 10.3.1 Overview batter belt drive gears

Ref. 44590000

Number	Description	Reference	Units
1	BATTER BELT DRIVE GEARS	40041000	1
2	DRIVE GEAR SPACER	40001100	1
3	STAINLESS STEEL SCREW M6x30 DIN963	FE0108M060300963	3
4	HEX NUT M6 DIN934	FE0108M060000934	3

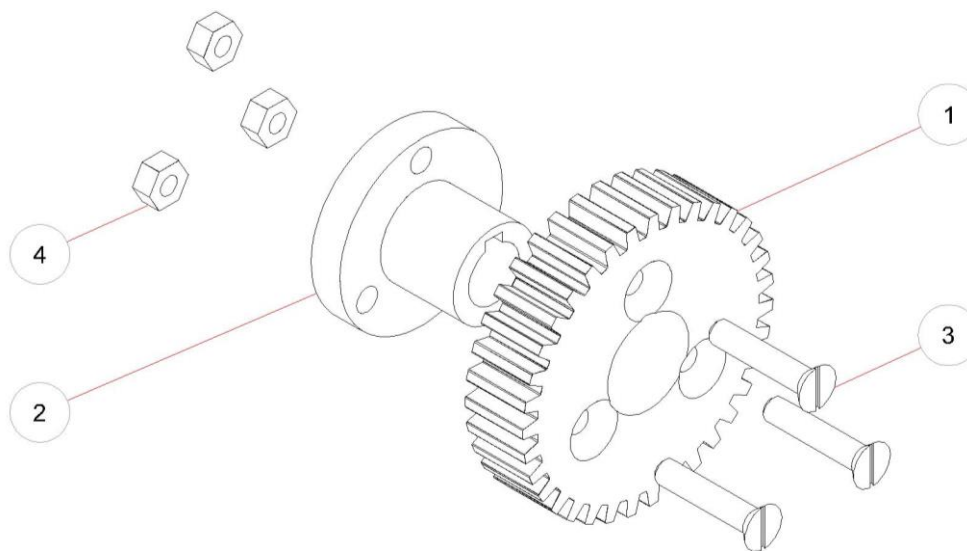


Figure 10. Overview batter belt drive gears

#### 10.4 Overview complete breading belt left/right bearing housing

Overview complete left bearing housing, Ref. 44620000

Overview complete right bearing housing, Ref. 44630000

Position	Description	Reference	Units
1	BREADING BELT RIGHT BEARING HOUSING BREADING BELT LEFT BEARING HOUSING	40030700 40030800	1 1
2	BEARING	SI010962022RS	1
3	RETAINING SEAL	SI0209R351607	1
4	STAINLESS CIRCLIP	SI0109I350472	1

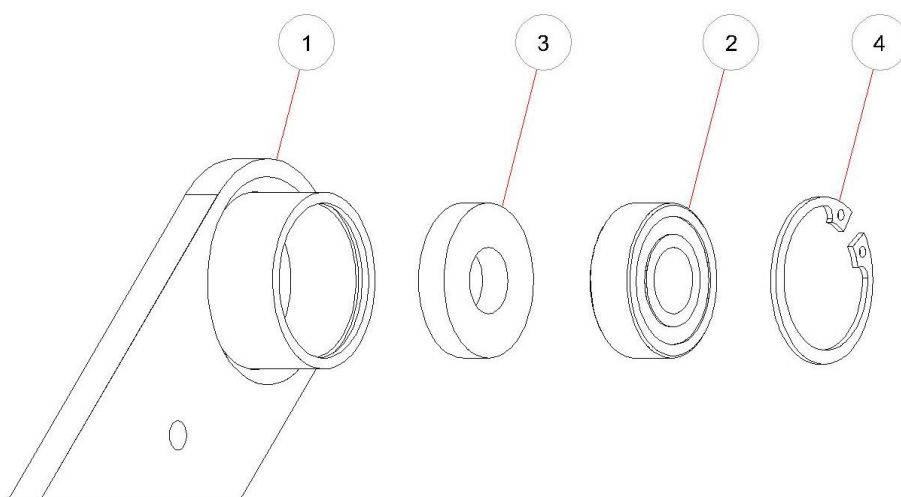


Figure 11. Overview complete breading belt left/right bearing housing

## 10.5 Overview complete batter belt bearing housing

Ref. 44640000

Number	Description	Reference	Units
1	BATTER BELT BEARING HOUSING	40040700	1
2	BEARING	SI010962022RS	1
3	RETAINING SEAL	SI0209R351607	1
4	STAINLESS CIRCLIP	SI0109I350472	1

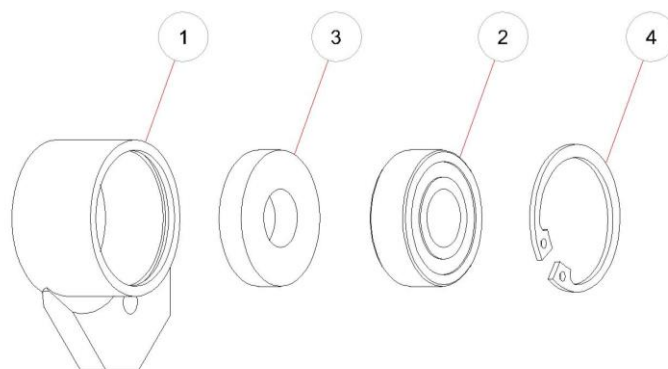


Figure 12. Complete batter belt bearing housing

## 10.6 Overview complete breading belt passive rollers

Ref. 44760000

Number	Description	Reference	Units
1	BREADING BELT PASSIVE ROLLER AXLE	40030500	1
2	BREADING BELT SMOOTH ROLLER	40000300	3
3	O-RING VITON FPM 70 SHA Ø13x2mm	SI06090132.5	6

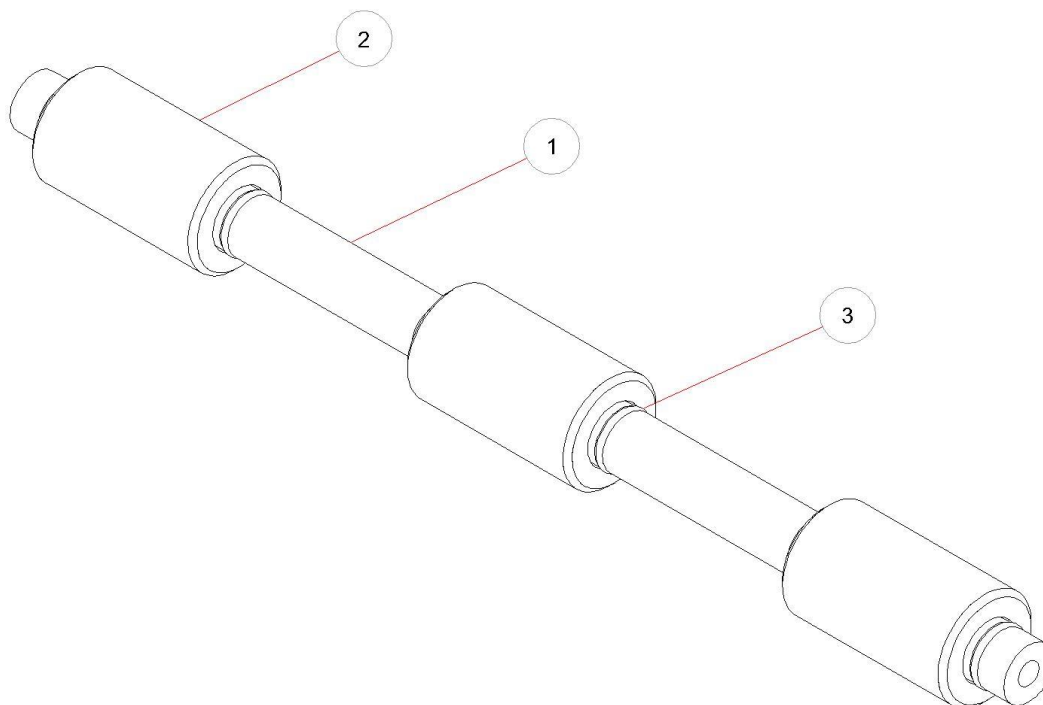


Figure 13. Overview complete breading belt passive roller axle

## 10.7 Overview complete breading belt tensioning shaft

Ref. 44560000

Number	Description	Reference	Units
1	BREADING BELT PASSIVE ROLLER AXLE	40030500	1
2	BREADING BELT TENSIONING ROLLER	40031500	3
3	O-RING VITON FPM 70 SHA Ø13x2mm	SI06090132.5	6

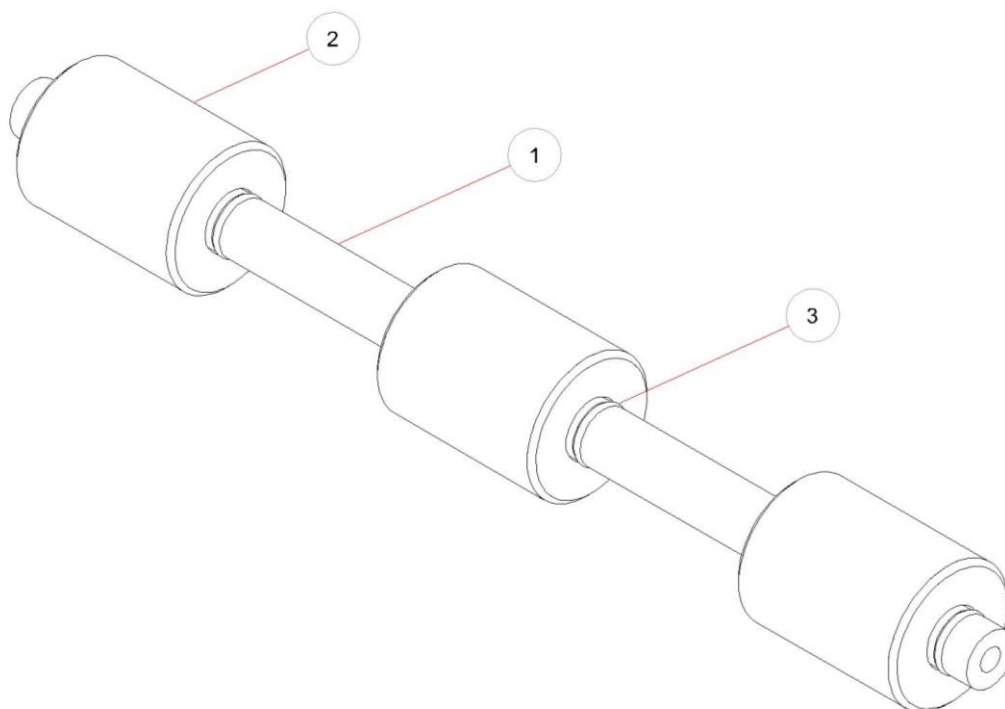


Figure 14. Overview complete breading belt tensioning shaft

## 10.8 Overview complete batter belt tensioning shaft

Ref. 44770000

Number	Description	Reference	Units
1	BATTER BELT PASSIVE ROLLER AXLE	40040500	1
2	BATTER BELT TENSIONING ROLLER	C3000300	2
3	O-RING VITON FPM 70 SHA Ø13x2mm	SI06090132.5	4

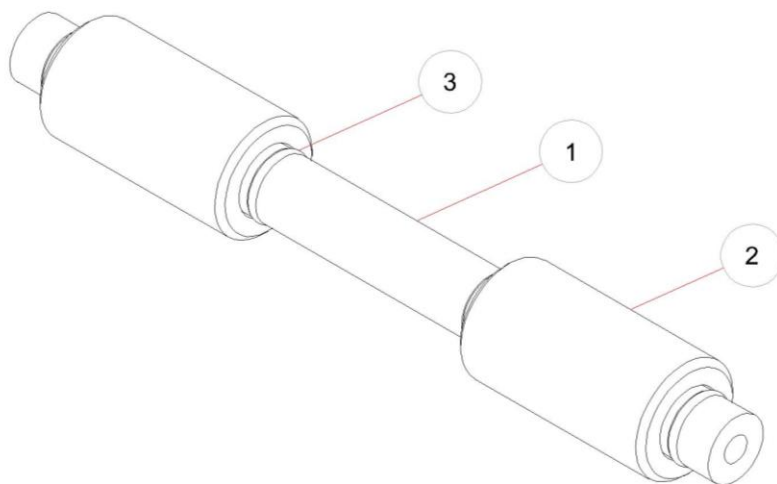


Figure 15. Overview complete batter belt tensioning shaft



## 10.9 Overview complete batter belt lower shaft

Ref. 44790000

Number	Description	Reference	Units
1	BATTER BELT LOWER SHAFT	40040800	1
2	BATTER BELT LOWER ROLLER	40040900	2
3	O-RING VITON FPM 70 SHA Ø6x2.5mm	SI06090062.5	4

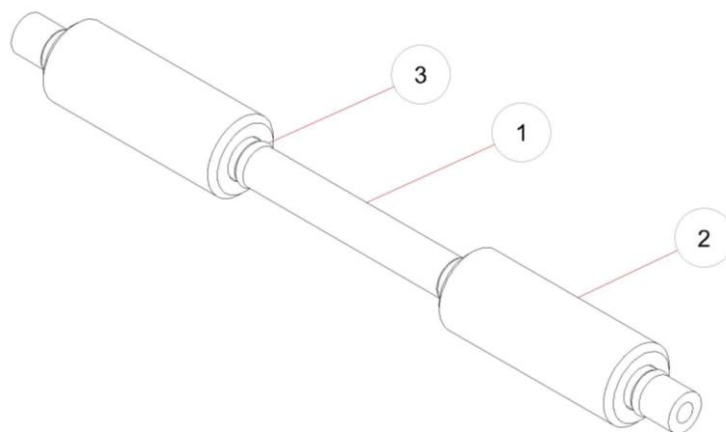


Figure 16. Overview complete batter belt lower shaft

### 10.10 Overview complete batter belt lowering assembly

Ref. 44780000

Number	Description	Reference	Units
1	BATTER BELT LOWERING SECTION ROLLER AXLE	40041700	1
2	CRANK FRONT SPACER	40041200	1
3	BATTER BELT LOWERING SECTION ROLLER	40041800	4
4	O-RING VITON FPM 70 SHA Ø6x2.5mm	SI06090062.5	8

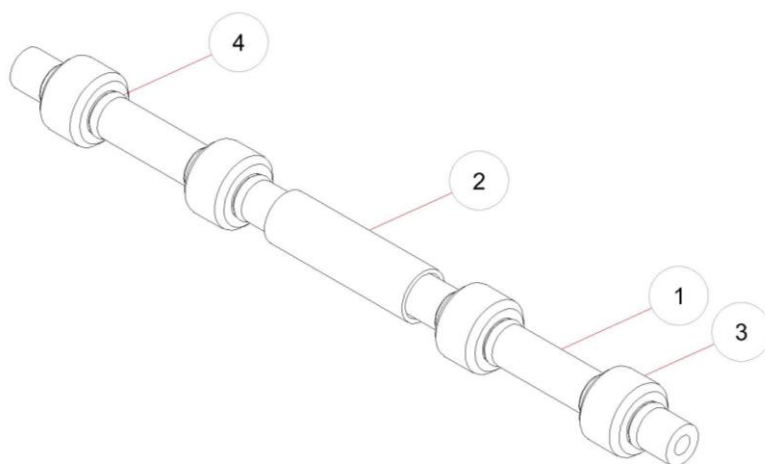


Figure 17. Overview complete batter belt lowering assembly shaft

### 10.11. Complete COMPACT breader overview

Ref. C3820000

Position	Description	Reference	Units
1	COMPACT BREADER	C3180100	1
2	OUTLET CURTAIN SUPPORT ROD	40180200	1
3	OUTLET CURTAIN VANE	40180300	12

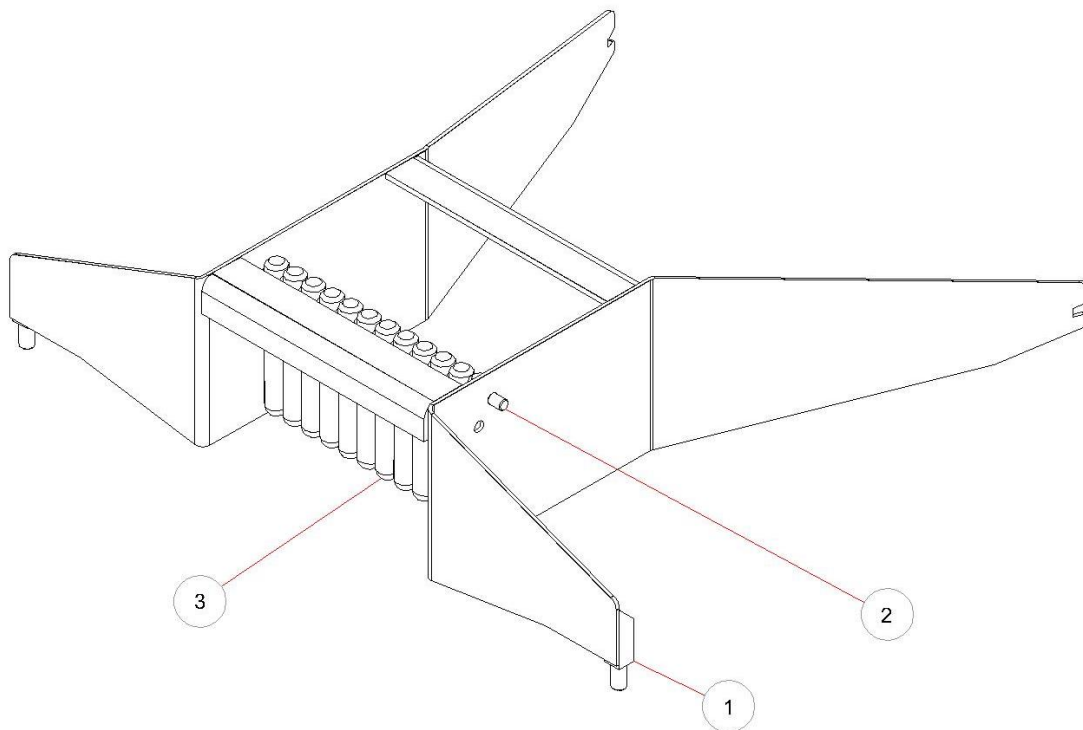


Figure 18. Complete COMPACT breader overview

## 10.12 Gear motor overview

Ref. C3270000

Position	Description	Reference	Units
1	BREADER MOTOR 0.18KW	EL1420BG018B14	1
2	COMPACT GEARBOX	C3090500	1

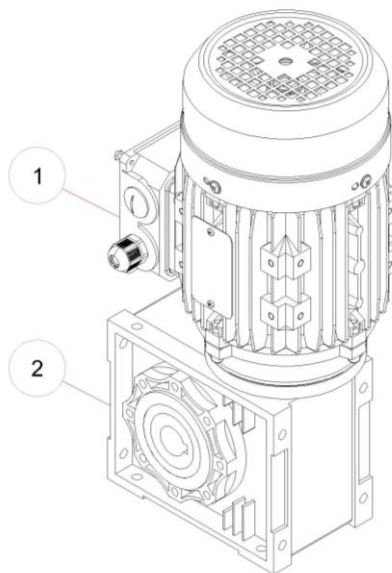


Figure 19. Gear motor overview

### 10.13 Control panel overview

Ref. C3250000

Position	Description	Reference	Units
1	CONTROL PANEL	PA0230COMC3	1
2	RED LED D-22 24V	EL2120PRD2224V	1
3	GREEN LED D-22 24V	EL2120PVD2224V	1
4	EMERGENCY STOP	CC930000	1
5	RED PUSH BUTTON Ø22	44920000	1
6	GREEN PUSH BUTTON Ø22	44910000	1
7	ON-OFF KNOB	44960000	1

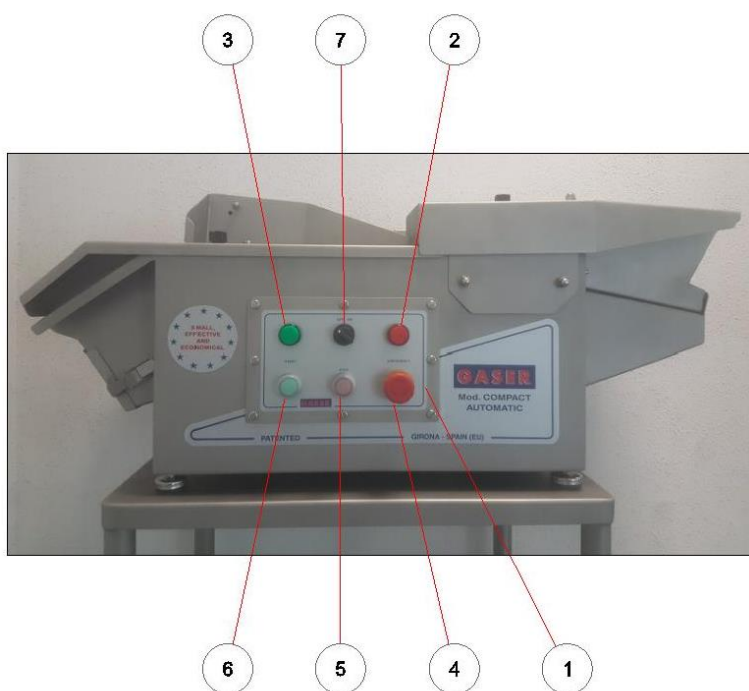


Figure 20. Control panel overview

## 10.14 Electrical cabinet overview

Ref. C3260000

Position	Description	Reference	Units
1	ELECTRICAL CABINET	EL0220CI2722A	1
2	PM-20 PUSH-FIT GLAND	EL0208RPM20	3
3	PM-20 GLAND NUT	EL0208TPM20	3
4	4mm <sup>2</sup> EARTH TERMINAL	EL0220BWPE04	2
5	MINI-CONTACTOR	EL0220MCGMC6	1
6	CIRCUIT BREAKER 6A "C" I+N	EL0402MG6ACIN	1
7	CIRCUIT BREAKER 2A "C" 1P	EL0402MGI02A	1
8	FREQUENCY TRANSVERTER	C3660000	1
9	40W TRANSFORMER	EL1420TP401S	1

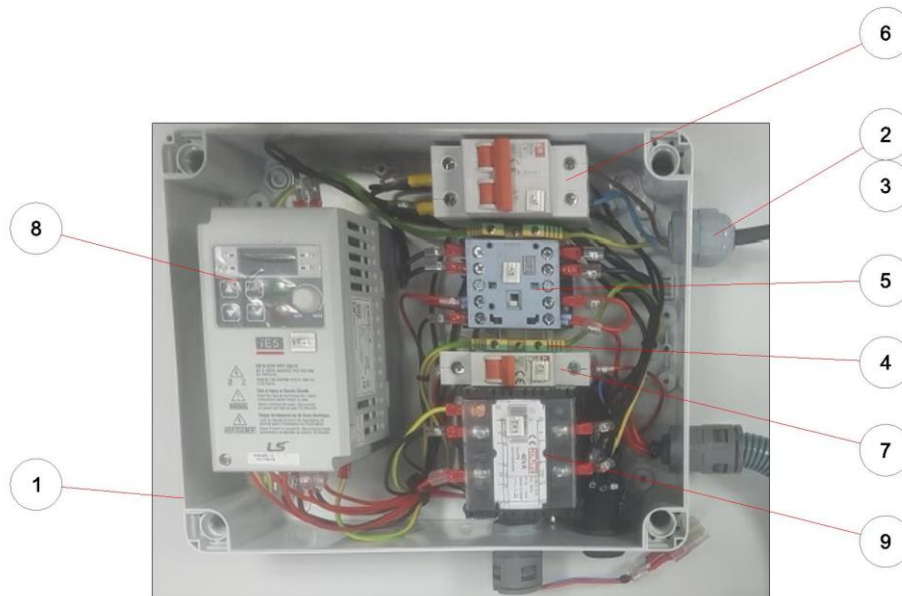
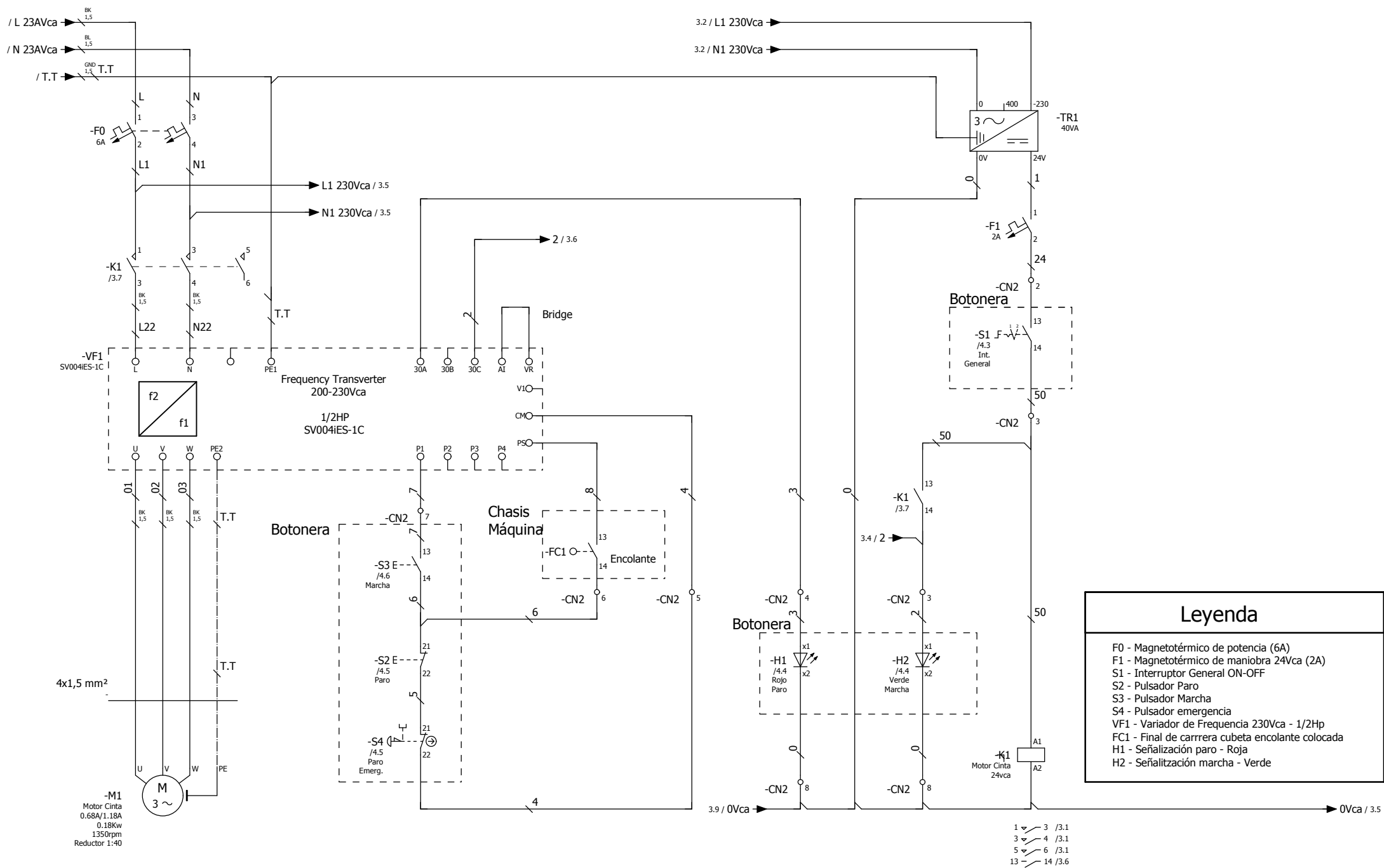


Figure 21. Electrical cabinet overview

## 12. WIRING DIAGRAMS



Fecha	31/01/2018
Resp.	DEP. ELECTRICICO
Probado	
Original	

**COMPACT**

Proyecto nº :

POTENCIA - MANIOBRA	= 0DCI
	+ AR1
	Hoja



