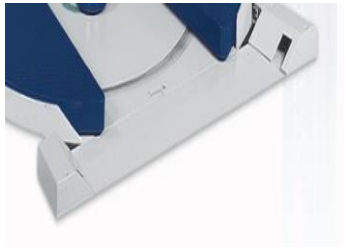
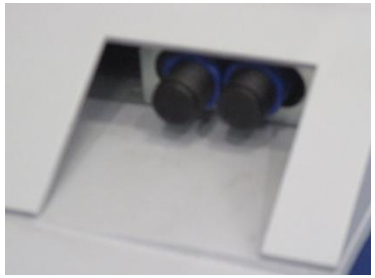
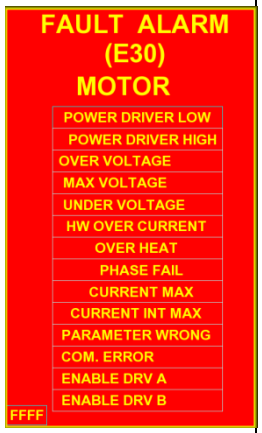
ALARM LIST AND TROUBLESHOOTING

Alarm code	Alarm description	Troubleshooting	Cause of the fault	Solution
	Emergency push button pressed			Turn and lift the mushroom head button and press RESET
		Check the SB1 emergency press button contact	Contact broken	Replace the SB1 emergency limit stop contact **Замените кнопку Стоп**
	**carriage emergency E02** Carriage descent Safety Alarm 	Carriage descent emergency	Obstacle between floor and carriage	**Препятствие под кареткой.** **Если препятствие не может быть устранено вручную, поверните кнопку ключа и поднимите каретку вручную.**
		Check the conditions of the limit stop connected to the emergency plate.	The safety limit stop connected to the metallic plate is broken	**Замените концевой замыкатель аварийный**

TRANSPALLET ALARM (E 03) transpallet alarm E03	Forklift photocell alarm  	Check emergency photocell alignment with the reflector.	Incorrect photocell alignment with reflector	Newly align the photocells
		Check correct emergency photocell operations	Photocells damages or wiring disconnected	Replace the emergency photocell or fix wiring
			The machine PLC main board is defective	Replace the PLC main board.
	Roller lock forklift photocell alarm	Check photocell alignment with the reflector	Improper alignment photocell with reflector	Newly align the photocell.
		Check correct emergency photocell operations	Photocells damages or wiring disconnected	Replace the emergency photocell or fix wiring.
			The machine PLC main board is defective	Replace the PLC main board.

	Active protection barriers.	Remove any obstacle that blocks the barriers photocells.	Probable misalignment of the barriers photocells	



Motor Index:
1 = Table rotation
2 = Carriage
3 = Stretch
4 = Pre-Stretch
5 = Top Platten (Pressure)

fault alarm E30 motor max voltage

Fault motore

POWER DRIVER LOW/HIGH
Incorrect voltage Motor Enable

ENABLE DRV A/B
Absence Motor Enable

OVER / MAX / UNDER VOLTAGE
Incorrect voltage Motor supply

OVER HEAT
High temperature

PHASE FAIL
Motor incorrectly connected

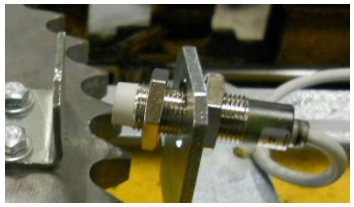
CURRENT (INT) MAX
Overcurrent (short / full) of the motor (as a function of motor parameters)

HW OVER CURRENT
Instantaneous overcurrent (non programmable)

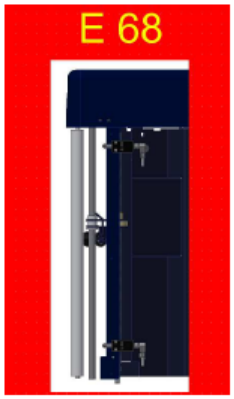
COMM.ERROR
Comunication error (see error 83)

Disconnect the motor indicated in the error message from the inverter card and start a cycle.	If the error message no longer appears, it could be a motor fault	Replace the motor. **замена мотора код 2212300019 или кабеля**
	If the message persists, it could be an inverter card fault	Replace the inverter card. **Замена или ремонт платы инвертера 1430300271 1430300278**
Possible gear motor fault.	Possible gear motor fault.	Replace the gear motor

FILM BREAK ALARM (E60)	**E60 alarm robopac** Film break alarm for carriages with load cell			Replace the film reel on the carriage or re-attach the edge of the film to the product and press START.
		Проверьте работу тензодатчика код 0204300004 Check correct load cell operations (extensometer)	The load cell value is not correct	Make the load cell calibration
			The load cell does not send the signal to the signal amplifier board.	Replace the load cell (extensometer).
			The load cell correctly operates	Replace the cell signal amplifier/pre-stretch motor inverter board.
		If present the film consumption sensor (r-connect) and the parameter P3 = 2 or P3 = 3	The film consumption sensor is not working properly	Check the mechanical position of the sensor
				Check the electrical connections of the sensor
				Replace the film consumption sensor

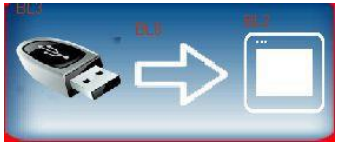
TURNTABLE PHASE ALARM (E61)	Table rotation alarm  	Check revolution counter sensor position (the alarm appears with there is no PLC input signal for at least 2 table revolutions)	Incorrect sensor position.	Correctly reposition the sensor
		Check correct sensor operations	Possible sensor and relevant wiring fault	Replace the sensor
		Check IN08 input on the PLC board	Possible PLC board fault	Replace the PLC board.
SPEED CARRIAGE ALARM (E 64)	Carriage speed alarm 	The carriage is not lifted at the set speed. Check correct carriage encoder positioning.	Incorrect sensor position.	Correctly reposition the sensor
		Check correct carriage encoder operations and wiring	Possible encoder sensor fault or wiring fault.	Replace the sensor or restore wiring
		Check the carriage speed encoder sensor input on the U1 board (lower level). The H3 led blinks quickly.	Possible U1 board fault (lower level).	Replace the U1 board (lower level).

TOP PLATEN ALARM (E 65)	Top platen (Pressure) blocked alarm  	The pressure platen did not reach the product (or limit stop) within the set time. Check motor drive	Possible motor fault.	Replace the motor
		Check pressure sensors on plate and limit stop	Possible sensor or limit stop and relevant wiring fault	Replace the sensor or limit stop or restore wiring

	MECHANIC roping Alarm	Roping hardware alarm: example overload, voltage, brake.	Problem with the roping fuse	Check the fuse correct position and / or change it
			Problem with the cables of the roping device group	Check and fix the correct wiring connection
	MECHANIC roping position Alarm	The roping failed to reach the set altitude within 10 seconds.	Mechanic problem	Check for any mechanical obstructions
			Encoder sensor problem	Check correct position and operation of the encoder sensor
			Wrong value of the P39 parameter (roping stop)	Change the parameter P39

E71	Presser Position Alarm	Attempt to start the DW cycle with the presser in the high position	Lower the presser and start the cycle	
		The presser is in the low position but the pressure height limit switch remains active	Check the status of the limit switch and its correct connection to the U11 board (input In2 - PIN 16)	Change the limit switch or check the connections
				Replace the U11 board
E72	Roller Conveyor Photocell	Attempt to start a packing cycle with the roller conveyor unlocked	Lower the roller blocking lever and start the cycle	
		The locking lever is lowered but the roller photocell does not detect it	Check the status of the photocell and its correct connection to the U10 board (input 15 - led H36)	Replace the photocell or check the connections
				Replace the U10 board
	Product presence alarm	Attempt to start the cycle WITHOUT the pallet present on the platform (parameter P [40] active) or pallet lower than 50 centimeters	Place a correct pallet on the platform	Restart a cycle
		The pallet is present but the photocell does not detect it	Check the state of the photocell and its correct connection to the U11 board (input 7) in the case of PDS-PDS or on the U10 board (overridden I2) in the FR-FRD case	Replace the photocell or restore the wiring
				Replacing the U10 / U11 board

 **INVERTER1** (Table Rotation + Carriage) **INVERTER2** (Stretch + pre-Stretch) **INVERTER3** (Top Platten) **PRES03ROB** (Control Card for load cell) **HMI** (Touch screen Panel)	**Modbus communication alarm E83** **inverter U1** **inverter U2** **inverter U3** **pres03rob** The screen shows the electronic cards that show the communication alarm simultaneously.	Check connections with the various devices **Note. To exit the alarm screen, press the button hidden in the upper right vertex**	Possible communication wire fault	Replace connection wire
		Try connecting one device at a time. **Note. To exit the alarm screen, press the button hidden in the upper right vertex**	Possible electronic board fault	Replace the electronic board.

	Wrong configuration of parameters The list of parameters is not 'consistent with the value of Csum stored.	When the machine turn on it was found a discrepancy between the configuration parameters stored in the memory and the set.	Possible is a "damaging the machine configuration parameters	Restore the correct parameters by copying from the USB stick with the machine  Or, to manually set the parameters, press the button 
E90	Emergency Feedback alarm	During machine start up, checking the status of contactor has failed.	Check the contactor release and / or its connections.	Replace the contactor, or restore correct wiring.

Rotoplat 508 – 708	The machine does not pre-stretch/stretch film	Visually inspect roller conditions	Rollers are dirty	Clean with pressurised air (do not use thinners)
			Rollers are worn	Replace rollers
		Make sure the film path between the carriage rollers is correct and that the amount of film is suited to a high performance machine.	Possible improper machine use.	Correctly load film on the machine and make sure it is threaded through the path indicated in the machine manual.
		Make sure the brake/friction installed on the carriage is not excessively worn, dirty or mechanically or electrically damaged.	The brake/friction is worn, dirty or damaged.	Replace the brake/friction.
		Check PLC board output and brake/friction power voltage.	The brake/friction does not receive correct electricity (24 V for PDS carriage and 7 V for FE carriage during the automatic cycle with maximum drive value)	Replace the PRES03ROB board (U11).
			The brake/friction receives correct electricity	Replace the brake/friction.
Rotoplat 108 – 308 508 – 708	The carriage remains still (does not lift or lower)	Check the mechanical high and low limit stops	One or both mechanical limit stops are defective.	Replace defective mechanical limit stops.
		Make sure the high and low position limit stops correctly send the signal to the power board.	Possible high and low mechanical limit stop electrical fault or wires disconnected	Replace the mechanical limit stop or restore wiring
		Check PLC board operating conditions	Possible PLC board fault	Replace the PLC board.

Rotoplat 108 – 308 508 – 708	Film breaks during product wrapping or not appropriately applied to the load (too tight or too loose)	Make sure film is correctly applied on the carriage and, especially, that it "embraces" the last roller where the film sensitivity sensor is installed.	Incorrect film threading on the reel carriage	Correctly load film on the machine and make sure it is threaded through the path indicated in the machine manual.
		Visually inspect roller conditions	Rollers are dirty and mark film	Clean with pressurised air (do not use thinners)
		Make sure the film sensitivity sensor (extensometer) is not mechanically damaged or incorrectly installed (the dancer roller must be free to move a few millimetres in the upper and lower housings)	The film sensitivity sensor is too tight or mechanically damaged.	Loosen the screws that secure the film sensitivity sensor to the carriage frame and make sure it is correctly installed. If the tool is mechanically damaged, replace it.
		Make sure the film sensitivity sensor (extensometer) is not electrically damaged	Film sensitivity sensor electrical fault	Calibrate the tool (extensometer)
		Make sure the load cell/pre-stretch motor inverter (extensometer) signal amplifier board is not electrically defective	Film sensitivity sensor electrical fault	Calibrate the tool (extensometer)

APPENDIX 1 : Security module SG BWS T4 for TP photocells

Below is an extract from the technical manual of the SG BWS T4 safety module for TP photocells

for a more in-depth analysis of the component, please read the technical manual of the component (ask Robopac service)