



# ***TEST REPORT IN DIETRONIC***

## ***MOD SGQ 06.03***

R	DATE	DESCRIPTION
0	30/04/2018	First issue

CHECK	APPROVAL
RSGQ	DG

**Technical information of the partly completed machine**

<b>Name:</b>	LCP Antirust
<b>Product:</b>	Q.M. - Quasi-machine
<b>Model:</b>	ANTIRUST 04
<b>Serial number:</b>	20241099
<b>Review:</b>	00 - 11/09/2024 12.17.02
<b>Year of manufacture:</b>	2024
<b>Brand:</b>	Dietronic s.r.l.
<b>Intended use:</b>	Partly completed machine for metal sheet lubrication
<b>Description:</b>	The <b>Antirust</b> series is a partly completed machine

Created by:	Inspected by:	Validated by:	Date:	Observations:
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### **Risk Assessment overall status**

Directive 2006/42/EC of European Parliament and the Council of May 17-2006 on machinery and amendments of Directive 95/16/EC

#### **Manufacturer: Dietronic s.r.l.**

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<i>Address</i>	<i>postal code</i>	<i>Province</i>
Sant'Angelo Lodigiano	Italia	
<i>City</i>	<i>Country</i>	

#### **Machine: LCP Antirust**

Partly completed - machine for metal sheet lubrication			
<i>Intended use</i>			
Antirust 04	2024	2024	00 - 11/09/2024
<i>Model</i>	<i>Serial number</i>	<i>Year of manufacture</i>	<i>Rewiev</i>

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### 1. Materials and products

The materials or products used for the construction of the machine or originated during its use must not represent a risk for people's safety and health. In particular, in case of fluids usage, the machine must be designed and built to prevent risks due to filling, use, recovery and evacuation.

Standards: **ISO/TR 14121-2** and **EN ISO 12100**

Scheduled action: Visual inspection of the correct construction of the machine frame and the cutting-edge assembly of all parts including the mechanical and pneumatic components.

Sealing test of tanks and oil hydraulic circuit with max 3 bar pressure.

Outcome: OK

Date: 11/09/2024

Notes:

Possible intervention method:

Closing date: .....

### 2. Machine design for the purpose of handling

The machine, or each of its different components, must be handled and transported safely.

The machine is equipped with accessories that facilitate a safe handling with a lifting device or has a shape that allows the lifting means to adapt easily.

Standards: **ISO/TR 14121-2**, **EN ISO 12100**, **EN 1005-2** and **EN 1005-4**

Scheduled action: Visual inspection of the correct construction of the machine frame.

Lifting and handling tests of the machine and all its components.

Outcome: OK

Date: 11/09/2024

Notes:

Possible intervention method:

Closing date: .....

### 3. Safety and reliability of the stop systems

The control systems must be designed and built in such a way as to prevent the dangerous situations.

The following information requires a particular attention:

- the machine must not start unexpectedly,
- the parameters of the machine must not change in an uncontrolled manner, because such a change can lead to dangerous situations,
- the machine must not be prevented from turning off if the stopping command has already been given,
- no moving part of the machine or processed piece must fall or be thrown out,
- the manual or automatic stop of moving parts of any kind must not be prevented.

The machinery must be equipped with a control device that allows the general shutdown in safe conditions

The machine stop control must take priority over the start controls.

Once the machine or its dangerous operation has been stopped, the power supply of the corresponding actuators must be cut.

Standards: **ISO/TR 14121-2; EN ISO 12100, EN ISO 13849-1, IEC/EN 62061 and EN 60204-1**

Scheduled action: System shutdown by means of emergency button and inspection of the proper operation.

Outcome: OK

Date: 11/09/2024

Notes: Inspection of the correct online operation.

Possible intervention method: Check the correct operation after putting into service the partly completed machine.

Closing date: .....

### 4. Selection of the control or operating mode

The selected control or operating mode must have priority over all other control or operating modes, except for the emergency stop.

Each selector position, which must be clearly identifiable, must correspond to a single control or operating mode.

Placed on the switchboard, the selector allows the operation of the partly completed machine in automatic running condition if the system is online or in manual mode (maintenance), in case of a system outside the production line.

Standards: **ISO/TR 14121-2; EN ISO 12100, EN ISO 13849-1, IEC/EN 62061 and EN 60204-1**

Scheduled action: Inspection of the correct operation.

Outcome: OK

Date: 11/09/2024

Notes:

Possible intervention method: Check the correct operation after putting into service the partly completed machine.

Closing date: .....

### 5. Electrical specifications

The machine is powered with electricity, therefore it must be designed, built and equipped in such a way as to prevent or to allow the prevention of all hazards caused by electricity.

Standards: **ISO/TR 14121-2; EN ISO 12100** and **EN 60204-1**

Scheduled action: Inspection of the correct operation (mechanical and electrical inspections)

Outcome: OK

In compliance with standards and regulations. Power voltage according to specifications.

Wiring and devices selection according to specifications. Operating conditions followed.

Date: 11/09/2024

Notes:

Possible intervention method:

Closing date: .....

### 6. Noise

The machinery must be designed and built in such a way as to reduce to the minimum level the risks caused by the emission of airborne noise

Standard: **ISO/TR14121-2; EN ISO 12100 ISO 3743-1; ISO 3743-2; ISO 3744; ISO 3745; ISO 3746; ISO 3747; EN ISO 11200; EN ISO 11201; EN ISO 11202; EN ISO 11203; EN ISO 11204; EN ISO 11205; EN ISO 11688-1** and **EN ISO 4871**

Scheduled action: Inspection of the sound pressure lower than 80 dB (A) by using a sound levelmeter.

Outcome: OK

Date: 11/09/2024

Notes:

Possible intervention method:

Closing date: .....

### 7. Information and information devices

The information necessary for operating the machine must be provided in a clear and easily understandable way. The amount of information must not exceed the operator's ability of processing and understanding.

Standards: **ISO/TR 14121-2; EN ISO 12100; EN 894-1; EN 894-2; EN 61310-1; EN 61310-2; EN 61310-3; EN 842 and EN 981**

Scheduled action: Supply of manuals and all the required documentation in ..... (As specified) to accompany the machine.

Outcome: OK

Date: 11/09/2024

Notes:

Possible intervention method:

Closing date: .....

### 8. Machine labeling

Each machine must be marked, in a visible, legible and indelible manner, at least with the following information:

- company name, full address of the manufacturer and, where relevant, of his authorized representative,
- machine designation
- «CE» marking (see. AnnexIII),
- series or type designation,
- if necessary, serial number,
- year of manufacture, i.e. the year in which the manufacturing process was completed

Standards: **ISO/TR 14121-2; EN ISO 12100 and EN82079-1**

Scheduled action: Application on the switchboard of the CE plate showing the data according to current legislation.

Outcome: OK

Date: 11/09/2024

Notes:

Possible intervention method:

Closing date: .....



### **9. Signs**

The machine is equipped with all the necessary signs to signal the hazards, where present, and any indications for maintenance and control.

Standards: **ISO/TR 14121-2; EN ISO 12100; EN ISO 13849-1; IEC/EN 62061** and **EN 60204-1**

Scheduled action: Signs application according to current legislation. Visual inspection

Outcome: OK

Date: 11/09/2024

Notes:

Possible intervention method:

Closing date: .....

### 10. Electrical components inspection

Component	Schedule method	Outcome:	method
Tanks level switches	Inspection of the correct electrical and mechanical operation	ok	Raised the float inside the tank and recovery system and checked for correct panel signaling. Checked for the presence of minimum level alarm when the level is not reached
Tanks heating system	Inspection of the correct electrical operation	ok	Checked the activation of the heating element and adjustment according to the thermostat
Sensor flow	Inspection of the correct electrical operation	ok	Checked the presence of a consistent panel value and the intervention of flow sensors when a nozzle is blocked
04/08 Single command	Inspection of the correct electrical and mechanical operation	ok	Checked the correct positioning of the controls in the box containing the solenoid valves and checked the correct flow direction of the solenoid valves
Efficiency Single oil solenoid valves	Inspection of the correct electrical operation	ok	Checked the actual activation of individual solenoid valves (controls, air blade and full speed)
Efficiency stepper motor (pump)	Inspection of the correct electrical operation	ok	Checked the correct rotation of the stepper motor
Efficiency motor lifting system	Inspection of the correct electrical operation	ok	Checked that the command corresponds to the movement (up to raise the machine, down to lower it)
Efficiency motor suction system lubrication machine	Inspection of the correct electrical operation	ok	Checked activation in both automatic and manual modes and checked for alarms related to the vacuum system
Efficiency pulverization valve and proportional valve	Inspection of the correct electrical operation	ok	Checking for proper activation of the proportional pulverization valve and checking that the set value is consistent with the panel setting
Efficiency blower motor	Inspection of the correct electrical operation		Checked the proper operation of the blower
Efficiency main air pressure	Inspection of the correct electrical operation	ok	Sected and checked the correct operation of the pressure sensor. Reached 6 bar of line pressure and the regulator was blocked
External signal (start and encoder and analog signal)	Inspection of the correct electrical operation	ok	Checked the correct reception of start and speed signals (encoder and analog signal)

### 11. Pneumatic and oil-hydraulic components inspection

Component	Schedule method	Outcome:	method
Oil gear pump	Inspection of the correct hydraulic operation	ok	Checked leakage in gear pump and correct operation
Refill oil pump	Inspection of the correct Pneumatic and hydraulic operation	ok	Checked that when the maximum level fails, the pump and recharge valve will activate
Recovery tank pump	Inspection of the correct Pneumatic and hydraulic operation	ok	Checked that when the maximum level of the recovery tank is reached, the pump is activated
Solenoid valve 3-way (recovery tank)	Inspection of the correct Pneumatic and hydraulic operation	ok	Control that at a speed lower than the speed set at setup the valve discharges outside the recovery tank while at increasing speed it discharges inside the tank
Solenoid valve command air knife	Inspection of the correct Pneumatic operation	ok	Control of the activation of the air blade control valve when activated in manual and when commanded by the start signal
Air knife	Inspection of the correct Pneumatic operation	ok	Control of air flow from the air blade
Solenoid valve	Inspection of the correct Pneumatic and electrical operation	ok	Checking the correct connection of the hoses inside the back box and spray box
Efficiency Single Spray nozzles	Inspection of the correct Pneumatic and hydraulic operation	ok	Control of the dispensing flow rate of individual nozzles

### 12. Mechanical components inspection

Component	Schedule method	Outcome:	Possible intervention method
Efficiency suction system lubrication machine	Inspection of the correct mechanical operation	ok	Checked the effective suction by the vacuum cleaner
Efficiency lifting system	Inspection of the correct mechanical operation	ok	Checked for mechanical problems in the lifting system
Control extraction and plug connection spray box	Inspection of the correct mechanical operation	ok	Checked that the extraction of spray boxes is smooth

**Date:**  
**11/09/2024**

**Signature:**  
**Augusto Monaldi**