



**DieTronic**  
lubrication technology

# ***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>	
<b>Product:</b>	Q.M. - Quasi-machine
<b>Model:</b>	LCPXEJ 1400
<b>Serial number:</b>	20241071
<b>Review:</b>	00 - 15/03/2017 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 ..... series is a partly completed machine

Created by:	Inspected by:	Validated by:	Date:	Observations:
Boera Stefano	Cosentino Dario	Tommaso Bellinazzi	14/10/2024	

### **Risk Assessment overall status**

Directive 2006/42/EC of European Parliament and the Council of May 17<sup>t</sup> 2006 on machinery and amendments of Directive 95/16/EC

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

Via Madre Teresa di Calcutta 13	26866	Lodi
<i>Address</i>	<i>postal code</i>	<i>Province</i>
Sant'Angelo Lodigiano	Italia	
<i>City</i>	<i>Country</i>	

#### **Machine:**

Partly completed - machine for metal sheet lubrication			
<i>Intended use</i>			
	20241071	2024	00 - 15/03/2017
<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:

Date: 14/10/2024

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:

Date: 14/10/2024

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:

Date: 14/10/2024

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:

Date: 14/10/2024

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:

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

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

Date: 14/10/2024

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

Standards: **ISO/TR 14121-2; 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 level meter.

Outcome:

Date: 14/10/2024

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 English/German. (as specified) to accompany the machine.

Outcome:

Date: 14/10/2024

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. Annex III),
- 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 EN 82079-1**

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

Outcome:

Date: 14/10/2024

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:

Date: 14/10/2024

Notes:

Possible intervention method:

Closing date: .....

Component	Schedule method	Test Performed	Outcome:
Tanks level switches	Inspection of the correct Pneumatic and hydraulic operation	Tried the level of each tank manually by lifting the float. Subsequently tested with oil.	OK
Tanks heating system	Inspection of the correct Pneumatic and hydraulic operation	Tested proper thermostat startup (minimum level covered, panel activation and temperature set to 70 degrees). Heater activates and temperature remains constant.	OK
Efficiency Single oil solenoid valves	Inspection of the correct Pneumatic and hydraulic operation	Verify that each control actually controls the correct valve.	OK
Efficiency Heating manifold system	Inspection of the correct Pneumatic and hydraulic operation	Set temperature to 40 degrees and verified correct modulation and no alarms. 48vdc presence check on EVP board (or new MXP).	OK
Efficiency motor suction system lubrication machine	Inspection of the correct Pneumatic and hydraulic operation	Checked the suction by spraying the product to see the reduction of the oily cloud coming out of the spray box. Checked correct rotation of the suction fan.	OK
Flow Control Nozzle	Inspection of the correct Pneumatic and hydraulic operation	Conveyor motion control at different speeds	OK
Lifting motor upper spray head	Inspection of the correct Pneumatic and hydraulic operation	Checking correct activation of individual injectors and correct opening nozzle at different percentage PWMs	OK
Safety switch	Inspection of the correct Pneumatic and hydraulic operation	Adjustment of upper spray box lift sensors and proper movement and stop control	OK
Efficiency main air pressure regulator	Inspection of the correct Pneumatic and hydraulic operation	Emergency circuit security intervention control, gates and alarm intervention control	OK
Pneumatic and oil-hydraulic circuit	Inspection of the correct Pneumatic and hydraulic operation	Connection to main air and check for leaks by setting pressure in the oil and spray circuit without oil.	OK
Oil pump	Inspection of the correct Pneumatic and hydraulic operation	Adjusting oil pump and checking for proper operation in automatic mode.	OK
Feedback pressure oil	Inspection of the correct Pneumatic and hydraulic operation	Check that the pressure value in the "oil feedback" box is equal to the pressure value set for the oil	OK
2nd Oil pump	Inspection of the correct Pneumatic and hydraulic operation	Adjusting oil pump and checking for proper operation in automatic mode.	OK
Solenoid valve	Inspection of the correct Pneumatic and electrical operation	Checking correct switching of valves	OK
Efficiency Single Spray nozzles	Inspection of the correct Pneumatic and hydraulic operation	Checking correct oil delivery at different pressures and PWM (injector opening) rates	OK

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Efficiency Single Air valve

Inspection of the correct  
Pneumatic and electrical operation

Control matching value set on panel with value displayed on  
proportional valve.

OK

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**Date: 14/10/2024**

**Signature: Tommaso Bellinazzi**

