

Rollers lubrication

Rollers covered with wool felt



Model 8SRP60

Lubrication system with rollers covered with wool felt.
Diameter 60 mm.

roll width	50	75	100	150	200	300	400	500	600	800	1000	1200	1300
sheet thickness	2,5						2			1,5			



Model CR60

Lubrication system with rollers covered with wool felt.
Diameter 110 mm.

roll width	200	300	400	500	600	800	1000	1200	1300
sheet thickness	6			4		3		2	



Model CR110

Sectoral lubrication system with rollers covered with wool felt for a variable width.
Diameter 110mm.

roll width	200	300	400	500	600	800	1000	1200	1300	1400
sheet thickness	0,4 - 14		0,5 - 10		0,5 - 8		0,6 - 5			



CONTROL UNITE

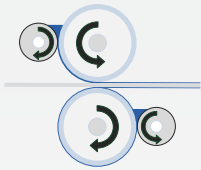
Through a membrane keypad the following parameters can be set:

- **Injection cycles of the lubricant**
- **Duration of cycles**
- **Mode of operation (cam signal, start signal)**

The control unit has an integrated oil tank of 30 liters of lubricant, with full visual level control, electrical minimum level signal and filter incorporated.

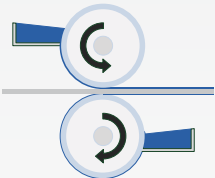
The diaphragm pump is installed in the same control unit which supplies lubricant to the rollers.

Polyurethane rollers



4 ROLLERS MACHINES

This machines, used for low and medium viscosity, is composed of two rollers covered with polyurethane foam (spreading rollers), and two steel rollers (dosing rollers). This machines, used for low and medium viscosity, is composed of two rollers covered with polyurethane foam (spreading rollers), and two steel rollers (dosing rollers).



2 ROLLERS MACHINES

This machines, used for low and medium viscosity, is composed of two rollers covered with polyurethane foam (spreading rollers), and two spreading system (dosing rollers). This machines, used for low and medium viscosity, is composed of two rollers covered with polyurethane foam (spreading rollers), and two steel rollers (dosing rollers).

Model MR-G

The machines are equipped with a manual or automatic system for adjusting the distance between the spreading rollers, which corresponds to the thickness of the sheet. The manual (optionally, automatic) pressure regulation of the dispenser rollers/squeegee rollers on the spreading rollers, separately for each side of the machine. Allows a variable application of the quantity of lubricant on the sheet.

The machines are equipped with a recycling tank for the lubricant, including a mixing system with a motorized auger.



Spray Lubrication EPC Series

ELECTRO-PNEUMATIC SYSTEM FOR CONTINUOUS LUBRICATION

Model ECP

The EPC standard lubrication spray machines are housed in a position to deposit adjustable films of lubricant. Our machines are made to use automatic valves spaced at 100 mm spraying KA2.

The extraction of the carrier nozzles allow manual adjustment of each spray valve through a screw placed at the top of the KA2 valve.

The selection of the active spray valves is done through a pneumatic island mounted at the bottom of the tub assembly.

The standard control unit is composed of a 30 liter oil tank, which includes a minimum visual and electric level indicator and a filtration system for any impurities.



The connections of the structure containing oil-pneumatic valves and the spray tub assembly is made using connectors for quick connection.

The product is fed through an air pump housed in the spray the tub assembly group and the amount of product applied to the plate by spraying valves is adjusted by an air flow regulator.

The management of air atomization spray valves is through precision pressure regulators, including a pressure gauge, that allow complete control from 0.2 to 0.8 bar depending on the viscosity of the product.



CONTROL UNITE

The following parameters can be set via a membrane keypad:

- **Sheet width (active nozzles)**
- **Mode of operation**
- **Cam signal**
- **Start signal**
- **Adjustment of pulverization pressure**
- **Adjusting the amount of lubricant at the top and bottom**

A 30 litre lubricant tank is integrated within the control unit, including full visual oil level control, electrical minimum level signal and filter incorporated.

The diaphragm pump which supplies the lubricant to the spray valve is housed in the same unit

Spot Lubrication

SPRAY VALVE



MKDDS/F

The spray valves are electro-pneumatically controlled spray valves.

Available nozzle dimensions:
0,2; 0,3; 0,5; 0,8; 1,0; 1,5 mm \varnothing .



MKDDISR/F

The spray valves are electro-pneumatically controlled spray valves.
Available nozzle dimensions (roundspray):
0,3; 0,5; 0,8; 1,0; 1,2; 1,5; 2,0 mm \varnothing



KA-2 R/F

Needle controlled spray valve in small design.
Available nozzle dimensions:
0,2; 0,3; 0,5; 0,8; 1,0; 1,2; 1,5 mm \varnothing
Flatspray or roundspray pattern depending on aircap.



MFS

Pneumatically controlled spray valve.
Available nozzle dimensions:
0,2; 0,3; 0,5; 0,8; 1,0; 1,2; 1,5; 2,0; 2,5 mm \varnothing
Flatspray or roundspray pattern depending on aircap.



MINI spray valve MSV

Suitable for thin liquids as f.i. release agents and oils.
Available nozzle dimensions:
0,2; 0,3; 0,5; 0,8; 1,0; 1,5 mm \varnothing
Flatspray or roundspray pattern depending on aircap.



MMFS

Pneumatically controlled roundspray valve.
Very fine and small sprayjet.
Available nozzle dimensions:
0,3; 0,5; 0,8; 1,0; 1,2; 2,0 mm \varnothing



Extensions for spraygun

Spraying at an angle 90°, 45°, 90° twin head, 45° twin head
Spraying circular jet (360°)
Standard lengths:
200, 300, 400, 500, 600 mm.

ELECTRO-PNEUMATIC SYSTEM FOR THE SPOT LUBRICATION

The **EPC DROP** series are metal spray lubrication machines which can deposit adjustable films of lubricant at desired points. This is done through the use of **automatic valves for spraying** of various models equipped with quick connectors for connection to the control unit.

The standard control unit consists of **8 outputs for connecting up to 8 spray valves in addition** to the 30-litre lubricant tank, complete with a comprehensive visual and electrical indicator of minimum levels, as well as a system to filter out any impurities.

The electrical control unit comes complete with an electric cabinet in which the operator interface keyboard is found.



Electronic Spray Lubrication LCP Series

PARTIAL ELECTRONIC MACHINES FOR SPRAY LUBRICATION



Model LCP

The LCP series are machines for spray lubricating on the sheet metal, capable of depositing films of lubricant adjustable from 0.3 up to 10 g/m².

This is done by using a series of **collectors 200mm in length**, which house the LVLP **spray nozzles at every 50mm**. The manifolds are designed to channel the pulverization airflow at a very low pressure (0.2 to 0.8 bar), the housing of control valves for each nozzle and the **oil heating temperature maintenance system** incorporated in the manifold.

The series of collectors are placed in a box in an **isolated removable piece of carpentry**, which is in turn housed within a load-bearing structure where there is a pneumatic lifting system of the upper box to facilitate insertion of the plate. All the structures of our machines are designed for connection to an **oil mist exhauster**. The feeding and management of the quantity of oil is through the variable frequency drive of the solenoid valves of the oil, designed and produced by Dietronic.

The separate management allows using different amounts of lubricant between the top and bottom. The connection system for all the electrical/pneumatic/hydraulic connections is designed connect the spraying box and the tank, which includes a control panel, allowing for very rapid installation.



The extraction of the spray heads on the LCP EJ model allows the replacement of the latter in case of use of different lubricants. Following this comes the need for a modular bath, more precisely, the ability to feed the various spraying oil heads using modular tanks.

CONTROL UNITE

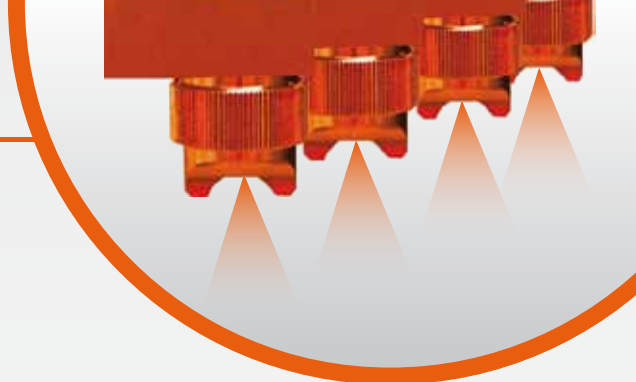
The operator interface consists of an 5 inch touch panel, on which all the parameters of lubrication are set, such as:

- **The activation of the nozzles depending on the width of the sheet. You can select ranges from 100 mm.**
- **The amount of lubricant applied to the top and bottom separately.**
- **The management of the TRS lubricant temperature maintenance system, allowing the uniform application of products including medium and high viscosity.**
- **The functions of different types of lubricant.**
- **Storage of programs with an alpha-numeric code.**

The interface with the line, through a signal of progress of the sheet (in case of coils), or a piece of reading photocell input to lubricate, (in the case of squares of sheet metal), allows the application of the lubricant only during the forward movement or passage of the sheet.

Modular tanks are available in case of using multiple lubricants.





Oil Mist Exhauster



- Constructive solidity of its mechanical parts
- 5 filter stages, which can be diversified according to the type of pollutant and kind of machining process
- Pre-arranged to be equipped with:
 - Absolute Filtration - Tested in compliance with Euro Norms EN 1822
 - HEPA FILTER up to H13 – Efficient for particles < 0,01 μ
 - FILTRATION EFFICIENCY 99,97%
 - Burn behaviour classified in accordance with norms DIN 53438
- Pre-filtration system
- Activated carbon cell to eliminate fumes and odours.

Manifold (Collector)



The manifold includes a manifold machined aluminum for the housing of the spray nozzles, control valves with adjustable frequency and a control system of the oil temperature inside the collector. The standard width of a single manifold is 200 mm and 4 units of nozzles are housed with the respective control valve, so the nozzle spacing is 50 mm. They are made in a modular fashion for different sheet widths to be lubricated.

Transport System



The inside of the lubricating system houses the sheet transport with chains coated with anti-oil rubber with crushless contrast wheels, and this is to ensure progress of the sheet metal without slippage. The speed of transport, under an inverter, allows you to perfectly synchronize the speed of transport with that of the feed and discharge conveyors.

Lifting System



In case of inclusion of a line fed by coils, the machine is equipped with a system for lifting the nozzle holder head higher, to facilitate the exchange of coils.



Sector Lubrication

SECTOR ELECTRONIC MACHINES FOR SPRAY LUBRICATION



Model SAGOMA

The Sagoma spray lubrication system spray is a product made for application to medium and large surfaces where a dose of lubricant is required only in certain areas of the plate.

The desired lubricated shape can be designed on the sheet metal via the touch screen, by the selection of 50x50mm squares, with the ability to set for each square up to 8 different amounts of oil, which are identified by different colours.

- Amount of oil applied in every single 50x50 mm cell
- Shape of lubrication
- Parameterization of the lubricant temperature
- Speed of the belt within the lubricating mechanism
- 8 amounts of oil, applicable to each cell in mg/ m².
- Storage of programs with an alphanumeric code
- Display alarms and system diagnostics
- Remote assistance



With the SAGOMA series machines, the lubricant can be applied to different areas and adjustable quantities are used only in pre-cut sheet metal machining for square sheets ranging from 400 to 4000 mm.

As the series are equipped with LCP manifold with the same features included in the pull-out spray heads, the amount applied is determined by the volumetric pump for each individual nozzle, by means of motorized pumps with brushless motors.

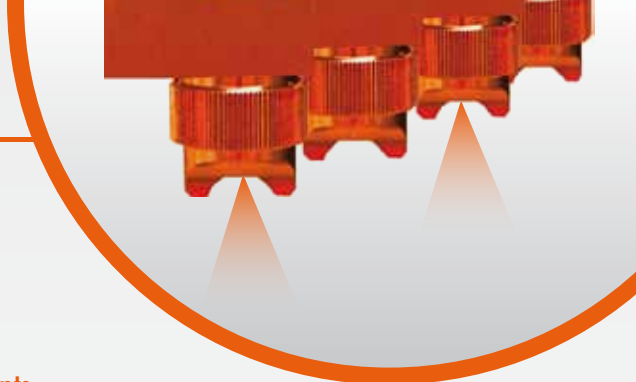


CONTROL UNITE

Innovative lubrication system of sheet metal sectors through the setting of all parameters, with an industrial PC as an operator interface.

The parameters which can be selected are:

- Amount of oil applied in every single 50x50 mm cell
- Shape of lubrication
- Parameterization of the lubricant temperature
- Speed of the belt within the lubricating mechanism
- 8 amounts of oil, applicable to each cell in mg/ m².
- Storage of programs with an alphanumeric code
- Display alarms and system diagnostics
- Remote assistance



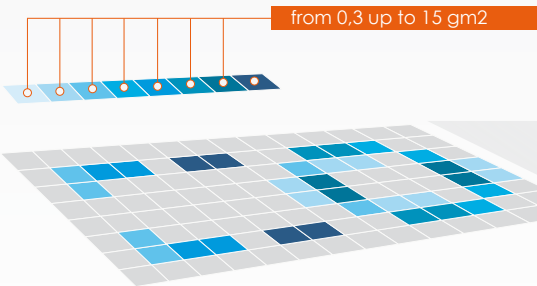
Oil Supply for different types of lubricants

In case of different oil media the machine is able to substitute spray chamber.



OIL 1 (eg. Emulsion)

OIL 2 (eg. High Density Oil)

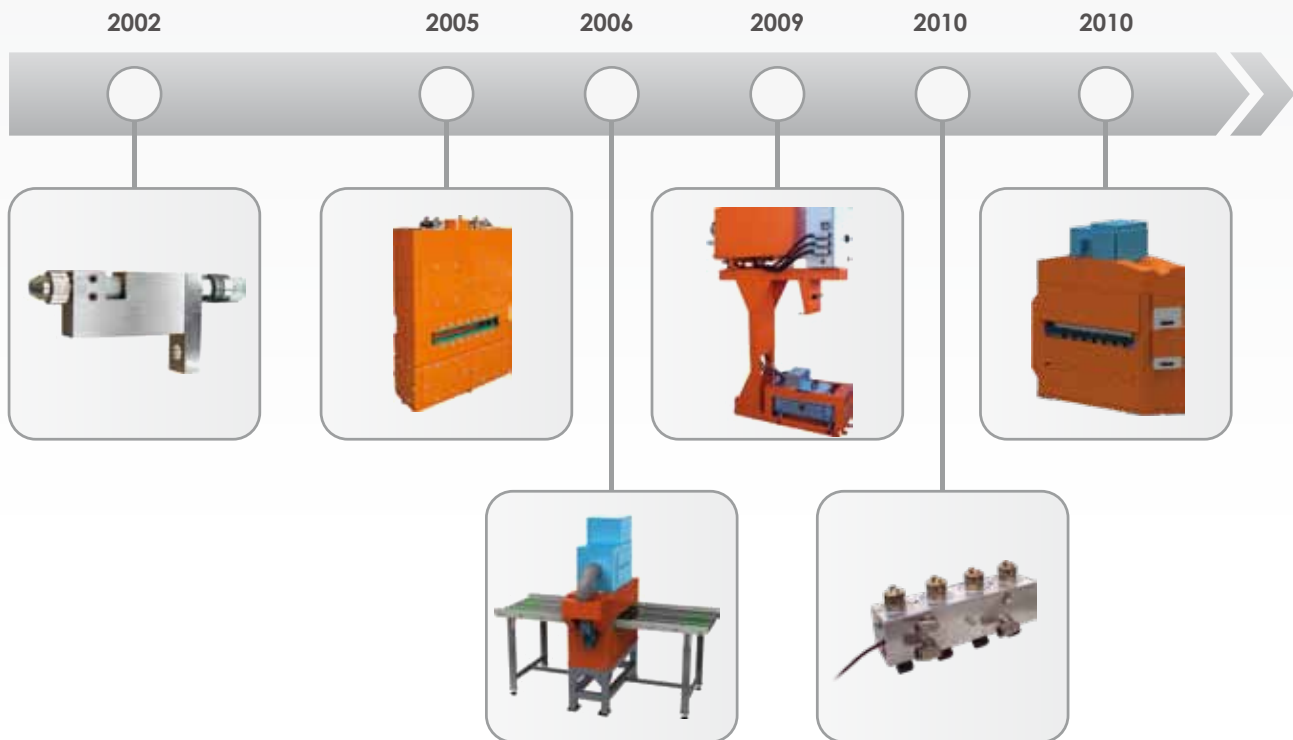


Your Ideal Partner

Our story

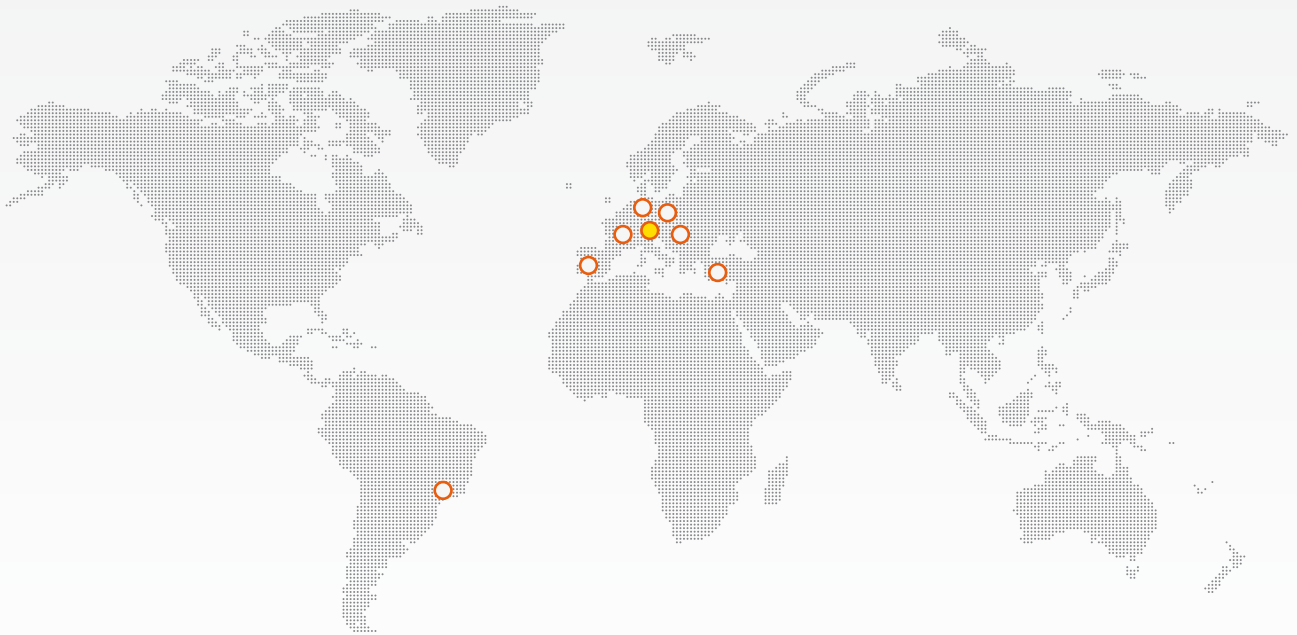
For over 10 years the company Dietronic Srl has worked with the controlled lubrication of metal sheets. The evolving technology of lubricants used in the deformation of sheet metal, has led our company to develop customized solutions for every need.

The research and development of these solutions began 10 years ago with the desire to create an Italian company able to offer appropriate systems for the automatic lubrication with varied sheet metal forming applications. The first product was the system of application with spray valves with manual adjustment of the amount applied.





Dietronic is represented in several countries in the world by our technical and commercial partners in order to meet your requests.



Maximum Flexibility



DieTronic S.r.l - lubrication systems

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