Immagine che contiene testo, strumento, dispositivo

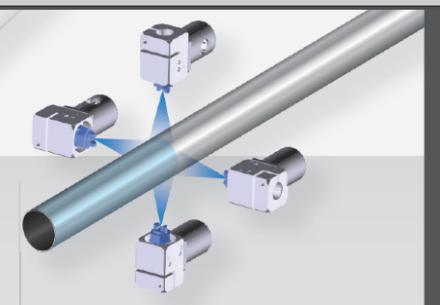
Descrizione generata automaticamente

# **WHY INTEGRATE DIETRONIC LCP ANTIRUST ON YOUR TUBEMILL**

Do you know how much rust prevention lubricant are you using on your tube mill? Do you need to manually adapt your system according to the material profile and line speed?

The Dietronic LCP Antirust will protect your products from corrosion during storage and transportation.

The system is an innovative solution that enables the in-line application of protective oil onto the surfaces of tubes, pipes and profiles.

Three simple operations will obtain the optimum result:

* Setup or choose the relevant recipe from the control panel. This ensures the correct dosage of lubricant is sprayed from all of the nozzles.
* The Coolant Dryer System will dry the tube/profile before entering to the spray unit;
* Select the correct Spray box, which will apply, very accurately, a layer of rust prevention oil onto the surface of the tube/profile before the cut-off machine.

As you are aware, all protective fluids must be applied in a proper dosage in order to be effective and covering the entire outside surface. Any overdosage is wasteful and does not increase the protection rating.

Immagine che contiene diagramma

Descrizione generata automaticamenteThe scope of supply includes an encoder unit, which measures the line speed and automatically adjusts the LCP ANTIRUST for the proper oil feeding rate (g/m2).

The Dietronic LCP ANTIRUST works within a close loop, ensuring the complete recovery (recycling) of unused oil.

This means all oil, that is over-sprayed, or is collected in the extraction system, is returned to the recovery tank, filtered and recycled for re-use.

The Dietronic LCP ANTIRUST enables you to lower your operating costs, increase the protection of your tubes/pipes/profiles and eliminate customer claims for inadequately protected product.

**Which ADVANTAGES can you obtain**

Installing the Dietronic LCP ANTIRUST on your tube mill, will give you the following advantages:

* Complete Protection of Products against Rust!
* Total and Accurate Application of Oil in g/m² synchronized automatically to line speed.
* Recipe System to store all different Products based on outside dimensions/Oil quantity applied.
* No Wastage of Oil (therefore minimum quantity is used), it means: Saving Money!
* Diagnostic System for Fault Monitoring and Minimum Downtime!
* Measurement of Oil Used and Recovered – Process Control!

**HOW do you REDUCE YOUR COSTS**

How is this possible?

* + **REDUCE CONSUMPTION WHILE INCREASING PROTECTION**
    - * Rust preventative products are expensive!
      * Most customers do not apply the protection fluid to their end product in an efficient manner.

Using the Dietronic LCP ANTIRUST, you can apply the protective fluids directly onto the tube with the recommended dosages by the vendor.

In case the tube mill slows down or speeds up, the LCP ANTIRUST automatically adapts and keeps the correct dosage.

* + **RECYCLE**

Two methods help you recovering the protection fluid that is not applied to the product:

* + - * Any oil “mist” produced by the spray nozzles are removed by the triple level filter suction system. This creates an oil free environment and helps comply with OSHA health standards.
      * This collected fluid from the suction system together with any excess oil from the spray chamber are drained back together to the recovery tank, purified, filtered and returned to the main oil tank.

# **TECHNICAL SPECIFICATIONS**

Operator Touch Screen

Immagine che contiene macchina

Il contenuto generato dall'IA potrebbe non essere corretto.

Oil Tank

Electrical Control Cabinet

Extractable Spray Box

Oil Mist Extraction System

Recovery Tank

Motorized Height Adjustment

**Main Spray Unit**

**Immagine che contiene design

Il contenuto generato dall'IA potrebbe non essere corretto.**

Built within a rigid and robust steel frame and housing the following main components

* + - * Spray Box together with external automatic cover plates
      * Electrical Cabinet
      * Oil Tank
      * Oil Recovery Tank
      * Oil Mist Extraction System
      * Motorized Height Adjustment

*NOTE: LCP ANTIRUST is recommended to be installed prior to the cut-off machine where the product is stable and moving at a constant speed.*

Immagine che contiene macchina

Il contenuto generato dall'IA potrebbe non essere corretto.**Oil Tank & Control Cabinet**

The LCP ANTIRUST comes with its own oil tank/pump system and electrical cabinet.

Customer responsibility is to install the main system parts before providing mains power and compressed air to the cabinet. In addition the supplied cables/pipes should be connected as well as the line speed signal from supplied encoder. The system is then ready to operate.

The Oil Tank is equipped with a 30 litre tank connected to the machine.

The standard system comes with electric & visual filling level control, pump & connections to extract & refill the oil.

As option the tank can be provided with:

* + - * an auto refill system from barrel/IBC for an easy operation without needs of manual operations.

Electrical Control

The oiler control cabinet is fixed to the structure of the main tank unit and it is programmed in Siemens TIA Portal.

Spray Unit Visualization is programmed in multi-language. For an easy programming of the spray areas, the tube/profile shape is detected and shown on the screen.

The 7” HMI panel is positioned on the main tank unit.

The 7” HMI Touch Screen can control and manage the following parameters:

* + - * Monitor line speed
      * Monitor fluid levels
      * Select the quantity of Fluid dispersed in g/m²
      * Create/Use recipes for each of your products
      * Manual spray control
      * Activate/Deactivate of Spray nozzles
      * Monitor the Oil flow of each channel
      * Start/Stop of the Oil Pump
      * Monitor Suction System
      * Drive motorized Height Adjustment
      * Monitor & rectify system alarms.

Immagine che contiene stoviglie, tritacarne

Il contenuto generato dall'IA potrebbe non essere corretto.**Oil Recovery Tank**

The Recovery Filtering Unit is a steel structure composed of a 3 x chamber tank which collect the unused fluid from the Suction System and the Spray Chamber. Three filtration stages clean the recovered oil and automatically return it to the main tank, to be re-used.

*NOTE: The recovery system has a feature that ensures emulsion water from any open seam pipe that might accumulate in the spray box cannot enter the recovery system.*

**Oil Mist Extraction System**

Type ECO oil mist extractor aims to remove and purify the oil mists produced while spraying.

A pre-filtration system better holds pollutants and helps preserve also the other filters.

The main extractor is provided with a HEPA filter to ensure a high efficiency removal of the oil mists.

**Extractable Spray Box**

One of the main features of the LCP ANTIRUST is the Extractable Spray Box.

The nozzles are housed in a Removable Spray Box, which can be easily extracted for maintenance purposes or for quick size changeover.

The spray boxes are available in different sizes according to the product range of the mill.

In the case of an application with a wide selection of tubes or profiles, it is possible to use multiple spray boxes on the same line.

Thanks to the recipe you can manage each nozzle and off-line you can adjust their position according to the profile dimensions.

This adjustment is essential to ensure the best lubrication coverage and to optimize the amount of oil to applied.

The nozzles have a simple design and are very maintenance friendly.

Immagine che contiene elettronica, cerchio, design

Il contenuto generato dall'IA potrebbe non essere corretto.

**Antirust Spray Unit One Frame Solution**

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# **TECHNICAL SPECIFICATIONS**

|  |  |  |
| --- | --- | --- |
| Max Mill Speed: | 150 | m/min |
| Plant Voltage | 380/400V, 50 Hz, 3 phase - Multiple Voltages are Available  440 V, 60 Hz, 3 phase - Multiple Voltages are Available  480 V, 60 Hz, 3 phase - Multiple Voltages are Available  500 V, 60 Hz, 3 phase - Multiple Voltages are Available | V/Ø/Hz |
| Fluid Output Range | 1 to 20 | g/m2 |
| Min Plant Air Pressure | 0.551 – 6 bar | N/mm2 |
| Oil Tank Capacity | 30 | liters |
| Layout of the Machine | See Attached File | cm |
| Machine Weight [Basic machine] | 600 | kg |
| Power Required | 5 | [KW] |

# **THE STANDARD CONFIGURATION**

|  |  |
| --- | --- |
| Machine Colour: | RAL 2004  Note: Different Colours will be quoted separately. |
| Electrical Cabinet Colour: | RAL 7035 |
| Standard Cable Length | From the electric panel to the spray box 7 m  Note: Different lengths will be quote separately |

|  |  |
| --- | --- |
| PLC | Siemens 1200 series |
| HMI | Siemens TP 700 |
| CC Power Supply | Murr |
| Electrical Cabinet | DKC |
| Protection | Siemens / Murr |
| Plugs | Harting |
| Sensors | Ifm / Electrotech |
| Motor | Motovario |
| Pneumatic Part list | Smc |
| Oil devices Part list | Dietronic/Omal/Debem/Ufi Filter |

**WARRANTY CONDITIONS**

The Warranty goes into effect after maximum 60 days from when the new Dietronic unit has been delivered to the customer premises and expires at the end of the Warranty Period specified above.

The Warranty covers repairs to correct any unit defects related to materials or workmanship existing at the time of purchase. All requests must be approved by Dietronic prior to any work being performed during the Warranty Period. Specific exceptions to the Warranty are listed in the Exclusions section.

Dietronic will provide repairs to the unit during the Warranty Period in accordance with the Terms, Limitations, and Conditions. This is the sole Warranty provided by Dietronic.

**Exclusions**

Unit components subject to normal wear during the Warranty Period are not covered by Warranty and include the following items:

1. Filters (Oil tank, oiler suction systems filters)
2. Other wear parts

Component failure caused by customer misuse/abuse of the unit (e.g. incorrect modification of machine parameters that cause damages or the usage of incompatible materials), voids the Warranty.

Machine rupture caused by part handling/misuse or damages due to exposure to elements or incorrect storage of the equipment, voids the Warranty.

**Standard Equipment Warranty Coverage**

All unit components are warranted for 1-Years, except the items listed in the Exclusions section and workmanship.

Dietronic will supply new or remanufactured component of equal or better quality to replace the failed component, the works to complete the replacement of the faulty items are at customer's charge unless differently decided by Dietronic; it is the sole discretion of Dietronic to determine best method of replacement. The replaced component will be covered for the remainder of the Warranty Period or 90 days, whichever is longer.

The faulty material should be returned to Dietronic for check, unless differently specified by Dietronic, the costs incurred to return the material are solely at customer charge, it the items are not returned within 30 days from the reception on the replacement material they might be charged to the customer.

**Commissioning Conditions**

Please schedule a possible installation date with Mrs. Elisa Beccaria ([service@dietronic.eu](mailto:service@dietronic.eu))

The following preconditions need to be met for a successful commissioning:

1) The Machine has to be mounted and aligned

2) The electrical, pneumatic and liquid connections must have been installed

3) Electricity and compressed air should be available according to Dietronic specification

4) Free access to 230 V.

5) Customer must provide necessary safety training and access cards

6) Customer must guarantee working time without interruptions for Dietronic technicians

7) Commissioning will take place only once in Customer Plant

8) Working time 7 am to 5 pm; if technicians need to work extra hours, we will charge surpluses for night shifts or work during the weekends.

Scope of commissioning:

1) Functional control of the installation

2) Initial start-up of the system

Not included in the above price are the following items:

1) All sorts of mounting and installations works

2) Correcting mounting errors or deviations from Dietronic specifications

All waiting periods that go back to external factors or to non-compliance with the preconditions for a successful

commissioning will be invoiced according to the Dietronic pricelist for technicians.

An authorized person of the customer will have to confirm that the above services have been rendered directly after the end of the commissioning.

This must be done on the Dietronic form "confirmation commissioning". This confirmation ends the commissioning, the risk for running the machine will pass on to the customer.

A separate trip of the technicians to receive the customer's or end-customer's final acceptance is not included in this quotation/ order confirmation.

All additional services or items, that are not included in this quotation/ order confirmation will be charged according to the Dietronic pricelist for technicians.

See Our Video

