

ELETTRA CPL: ELECTROLYTIC PICKLING FOR COIL

ELETTRA series, designed by Condoroil for the electrolytic pickling of stainless steel, is enriched by model ELETTRA CPL for pickling of coil on annealing lines in continuous

Exploiting the technical knowledge and experience matured in developing pickling plants in continuous for tubes, this new unit presents big innovations compared to the usual technology used at this aim:

- Possibility to implement the group of cells in existing tanks
- A particular drawing of the cells, which allows to dramatically reduce the dissipated current.

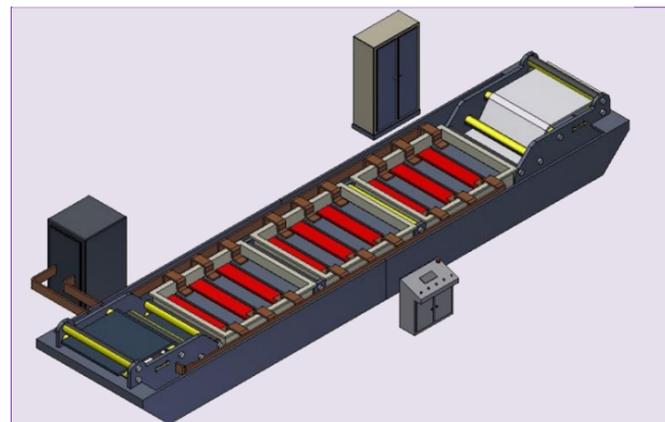
Cells of the ELETTRA CPL unit allow to exploit, almost totally, the supplied current reducing to minimum values the electrical consumption and to obtain surfaces almost pickled already at the exit of the electrolytic tank. This means also a reduced consumption of the acids used in the last chemical section.

An important help in reduction of electrical consumption is also granted by the use of our DESCALINOX P 23.

This product, sulfuric acid based, has, indeed, an extremely high conductivity that allows to keep electrodes at a safety distance even operating at medium voltage.

Use of DESCALINOX P 23 allows, moreover, respect to the simple sulfuric acid, to focus the action of metal dissolution of the surface roughness by improving the final aspect.

The product can be regenerated in continuous by our acid retardation units RESIBED.



EVENTO DI BENEFICENZA - ISOLA DI ALBARELLA



Condoroil, in pursuing its social commitment, decided to join as sponsor the charity event organized by Fondazione Marcegaglia Onlus together with Fondazione Vialli e Mauro for research and sport Onlus, held on Albarella island Sept. 11 and 12.

Numerous the major artists who entertained the guests at the gala dinner.



OBJECTIVES

FONDAZIONE VIALLI E MAURO PER LA RICERCA E LO SPORT ONLUS

Vialli and Mauro Foundation, together with Cariplo Foundation, Teletthon Foundation and ARISLA is among the founding members of ARISLA - Italian Research Foundation for ALS. ARISLA was born in 2008 with the intention of combining the economic resources and excellent minds to promote, coordinate and fund the best Italian research, the only way to "attack" effectively Amyotrophic Lateral Sclerosis, of which today are not yet known the causes and for which there is no cure. ARISLA receives a fixed annual allocation amounts to € 1,000,000.00 by the four founding partners. The Vialli and Mauro Foundation contributes € 100,000.00 per year.

Fondazione Marcegaglia

Marcegaglia Foundation supports and promotes actions of solidarity and development cooperation projects. In Italy it supports actions to combat social exclusion and new poverty. Abroad it focuses on female entrepreneurship with job placement and the creation of micro-enterprises and the development of local health systems through training of local human resources and the promotion of innovative interventions.

CONDOROIL News

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EUROBLECH - HANNOVER 25-29 OCTOBER 2016



CONDOROIL will exhibit for the first time at EUROBLECH show that will take place in Hannover (D) next October 25-29

EUROBLECH is known as the key place where latests developments, in terms of equipment and services related to sheet at 360°C, can be found

1.600 exhibitors, 40 countries, 60.000 visitors. These are the numbers Euroblech is giving us.

Condoroil with its complete package of chemical products and paints for coils, active since more than 10 years in this field, and supplier of the major Italian players, can be an excellent partner for your needs.

Here below you will find the main products Condoroil can offer

- Chemicals for **Pickling lines** (Corrosion Inhibitors, Rinse Additives, Protective Oils), **Hot Dip Galvanizing lines** (Degreasers, Skinpass Detergents, Passivating, Permanent Coating, Protective Oils), **Electro galvanizing Lines** (Degreasers, Liquid Activators, Phosphating, Passivating Agents), **Organic Coating lines** (Degreasers, Conversion Treatments, Passivating Agents), **Temper Mill** (Temper Fluid, Protective Oils), **Paints for Coil Coating lines** (Primers, Back Coat, Top Coat). **Rolling Oils**.
- Several machineries such as ultrafiltration plants to regenerate degreasers **mod. MINERVA**; ultrafiltration plants to treat spent emulsions **mod. SEPAR**, crystallization plants for sulphuric acid regeneration **mod. CRYSTAL**; complete units zero discharge for coil lines **mod. ARTEMIS**; Preparation units for chemical coater.

And more...

Come and visit us in **Hall 13 stand E58**.

Our technicians will be waiting for you.

NIR OVEN FOR LABORATORY

In order to develop paints to be used on lines equipped with curing ovens using NIR technologies (near infrared reflectant), CONDOROIL CHEMICAL has recently purchased a pilot unit for the research and development lab.

The oven, which has been put in operation in September, develops, through the use of infrared lamps, and particular mirrors with high reflectance, a power of 75 Kw which allows to bring the sheet samples to a PMT higher than 240°C in less than 2 seconds.



ROLLING OIL - CONDORLUBE ROLL 15

Condoroil laboratories have developed a conventional rolling oil called CONDORLUBE ROLL 15, totally synthetic based, used in reversible cold rolling mills and in Sendzmir plants.

With The use of selected synthetic esters, the product provides high lubrication, which minimizes the friction between coil and the work rolls ensuring reduced wear of the cylinders themselves and increasing the duration.

The formula, thanks to an effective package of emulsifiers, ensures a low surface tension of the emulsion. It helps emulsion wetting and consequently the cooling and cleaning of the coil, greatly reducing carbonaceous and ferrous residues and also optimizing the subsequent annealing step.

The quality of the synthetic esters present in the formula can increase rolling speed and productivity.



WELCOME

Welcome to Dr. Elisa Longhini, latest young recruit who joined Condoroil team.

Elisa has a degree in Chemical Sciences and has been working for some years as researcher in the field of chemistry applied to art. In condoroil Elisa will join the team of paints for coil in order to develop new formulas.

**ECCA: MEETING TECHNICAL COMMITTEE
BRUXELLES SEPTEMBER 13**

On 13 September 2016 the periodical Technical Committee (TC) meeting of ECCA, the European Coil Coating Association, has been held in Brussels. Among the topics in agenda, some have been subject of more attention.

The future of titanium dioxide has been discussed with concern. This raw material is widely used, mainly as pigment and dye, for the production of paint and varnishes, plastics, concrete, cosmetics and even foodstuff. The European Chemical Agency (ECHA) is taking into account the possibility of classifying titanium dioxide as possibly cancerogenic to humans, with the consequence of limitations and regulation of its use. Within 18 months the agency will decide if, to use this raw material, authorization will be necessary and in which industry branches its use will be still allowed. If limitations are adopted on the use of titanium dioxide, a lot of industries, including the coil coating industry, will deal with many complications since, by now, this raw material seems to be irreplaceable.

The Titanium Dioxide Industry Consortium (TDIC) has contracted Risk & Policy Analysts Ltd (RPA) to collect information and prepare a high-level analysis of the socio-economic impacts of the proposed Carc Cat 1B harmonised classification for TiO2. The collected data will be submitted to ECHA for the final evaluation.



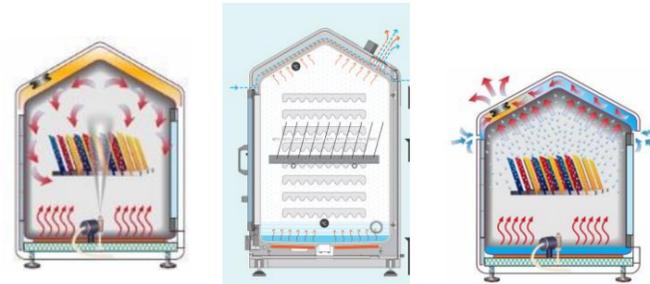
During the meeting, specific attention has been drawn on the TC projects: outdoor exposure test and accelerated corrosion tests for aluminum and steel.

In the last years, ECCA collected many information about the exposure of coils at different latitudes and climates. However, from the data collected is not possible to find a correlation between the climate and the coils degradation. This kind of information would be very useful for coil coating manufacturers in order to recommend the right product to the customers. Sharing the data that all the ECCA members have collected during the years would be very useful to find the right correlations. Unfortunately sharing this kind of information is delicate as part of the company know-how.

The TC is also working on the development of standardized tests for the evaluation of production processes and coils performances. Among them the accelerated corrosion tests for aluminum and steel (ACT-Alu and ACT-steel respectively) have been highlighted. The goal is to develop an accelerated test that simulates the outdoor exposure. For both the tests is necessary to develop an exposure cabinet (similar to the ones used for the neutral salty spray test and the acetic spray test) with a homogeneous environment in every cabinet zone. Moreover, the development of the exposure solution and a cycle that alternate temperature, humidity and fog will be developed.

The TC is collecting aluminum coils samples in order to carry out the test in parallel in different cabinets and collect a sufficient number of data for a significant interpretation of the ACT-Alu results.

The ECCA will conduct new tests for the development of the ACT-steel in collaboration with an external institute that will be choose by the ECCA Board. One of the greatest difficulties to be faced in will be development of tests that use accessible systems, with low costs and without sophisticated devices.



For more information please contact Dr. Rocco at e.rocco@condoroil.com e-mail.

**METAL BULLETIN: 21th GALVANIZING & COIL COATING CONFERENCE
BRATISLAVA SEPT. 6-7 2016**

Sept. 6 and 7, the 21st Galvanizing and coil coating conference was held in Bratislava. Condoroil was present for an extensive networking Major discussed topics: the Chinese overproduction of steel, the antidumping imposed by US to protect the market. We remind that actually in Italy the antidumping policy concerns only pre-painted metal but not galvanized steel.

Numerous were the remarkable presentations and, concerning our range of interest, we indicate the following papers:

- Presented in the Zinc market dynamics and the implications for galvanized and coated steel session – EUROMONEY PLC & VOTORANTIM GMBH
- Presented in the Global automotive market trends and the implications for the steel industry session – EREGLI IRON & STEEL WORKS
- Presented in the Tracking the continued growth if the MENA flat steel market session – AL GHURAIR IRON & STEEL LLC



GEICO FOR MAN VW GROUP

Also for the new contract with the German MAN, Geico Taikisha , general contractor and leader for automotive plants, chose CONDOROIL as supplier of the technology for the pretreatment of the effluents coming from drain of car bodies cleaning solutions.

In particular, it is our SEPAR unit which allows to eliminate free and emulsified oils from the waste, making it suitable to a chemical physical purification treatment.

It is an unit very similar to the one recently supplied for the new Mercedes lines of Iracemopolis (Brasil). It is composed by a series of pretreatment technologies while the heart of the separation involves the use of ultrafiltration modules working with tubular ceramic membranes.

The unit is dimensioned to process a waste volume higher than 1000 lt/h and to concentrate the retained oils in a small volume to dispose



GLUE FOR COILS COLAMINATES FOR INDUSTRIAL USE

The latest solvent based product designed by CONDOROIL R&D is a glue suitable for colaminated Coil. (PVC,PP,PET,PE).

This product is formulated with a polyester resin with high molecular weight and excellent adhesion to the substrate (HDG CRS) which reticulates with a very reactive melamminic resin

Main characteristic of this glue is its reactivity since, when applied and reticulate, can be softened at a lower temperature than a traditional glue



Application:

APPLICATION METHOD :	CHEMICAL COATER
SUBSTRATE:	HDG,CRS
VISCOSITY (CF4)	80 seconds
PMT:	232-241°C
SOFTENING TEMPERATURE	120°C

CONDOROIL -SO.PR.AD COOPERATION



Temporary protective films (often called strippable films) are very important to guarantee the protection of the finished surface of pre-painted metals and to facilitate the mechanical processes. These films, indeed, in addition to ensure that the final surface is exactly as intended, speed up the mechanical processes reducing friction between surface and shaping.

Several strippable films are available with different types of adhesives. To choose the right adhesive on the film, the top-coat paint system, the mechanical process, the time and conditions of storage should be taken into account.

Unfortunately, there are some negative points for the use of temporary film. With age, it is possible that the film will be more difficult to remove and there will be the increased risk of leaving stains, adhesive residues or affecting color. The causes of such problems are difficult to determine, especially without comprehensive studies, and the finger often gets pointed on the temporary film manufacturer. However, compatibility between the surface and the film can be a result of the production process, storage or top-coat system.

To solve these problems Condoroil has decided to establish a working relation with SO.PR.AD. s.r.l., an Italian company boasting 40 years of experience in protective films manufacture.

The aim of this partnership will be the development of compatible products and the study of the causes that, with aging, can give anesthetic defects. Thanks to this partnership Condoroil and So.pr.ad can recommend to their customers, respectively, paints and temporary films mutually compatible, guarantying aesthetic quality after film removal.

Part of the collaboration will be dedicated to the development of new products to open the doors to new markets and new application fields.

