November 2016

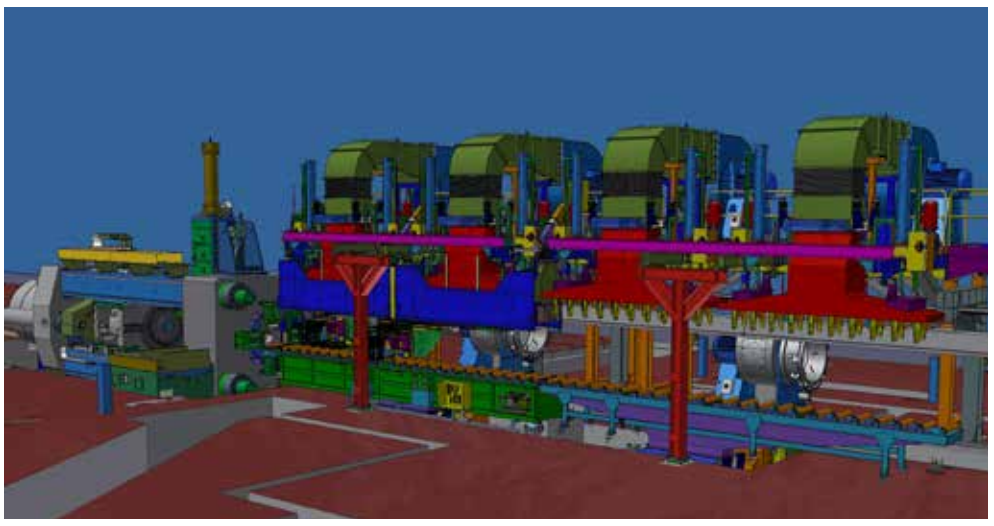
# Presezzi Extrusion Group Journal

www.presezziextrusiongroup.com

Presezzi Extrusion S.p.A. | Profile Automation S.r.l. | Coim S.r.l.

PRESEZZI EXTRUSION GROUP - BENTELER

## Presezzi Extrusion Group Delivers Energy Saving Extrusion plant to BENTELER Automotive division



BENTELER Automotive division awarded Presezzi Extrusion Group with the contract for the supply of a complete extrusion line with a 55 MN 11" front loading press.

The investment will provide the company a new state-of-the art extrusion line with the best performances in terms of energy saving and extrusion quality, dedicated to serve the growing demand for aluminum extrusion in the automotive industry.

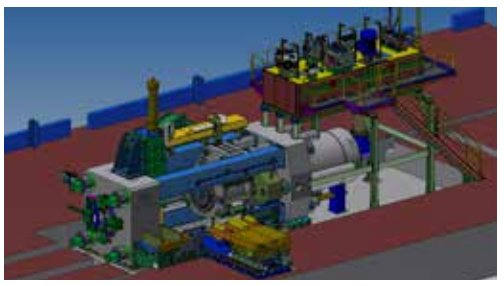
BENTELER, especially thanks to the innovative solutions presented by Presezzi Extrusion Group, has chosen to invest in a plant not only for consistency and competitiveness in terms of production but also for its cost-effectiveness and environmentally friendly reasons/aspects.

The cornerstone of continuous innovation, focused not only on performance but also on energy savings, has allowed the Presezzi Extrusion Group to convince the top player like BENTELER. In fact, thanks to the new billet heating (with) magnetic furnace ZPE (Zero Pollution Energy) and newly established PE.E.S.S. (Energy Saving System) technology for the press, several highly qualified engineers and managers from the BENTELER project team have chosen the PE Group.
The new line will include the complete upstream equipment for logs and pre-cut billets, including log vertical storages, washing machine, double ZPE billet heater, log cold saw with chips aspiration and billet conveyor to the press.

The new Presezzi patented ZPE magnetic billet heater can save up to 40% energy compare to higher level induction ovens in the market and allow to produce high accuracy profiles and dramatically reduce pollution .

The new Presezzi press is a 55 MN front loading 11", the press includes Presezzi's patented PE.E.S.S. hydraulic system, and can give a 25% energy saving (depending on what is being produced), a nitrogen die cooling system; a shear to cut the profile between the die ring and bolster, avoiding manual cutting of the profile, and press mouth protection.

The handling system after the extrusion press is equipped with High Efficiency Cooling System "HECS" with a double tandem quench and "Optimization Software" HECS-OS that automatically simulate and suggest the best cooling parameters (air or water) according to the shape of profile. After the double tandem quench, an additional adjustable air cooling above and lower the lead out table made by nozzles is foreseen.



The handling of the profile during extrusion is made by a double puller of lateral type with hot-saw machine which is completely electrical.
The handling table with a 150Tons automatic stretcher move the profiles on a double finishing saw. The movable belt at the exit of the cut-to-length table, the rejected profiles can be conveyed to a lower scrap belt that feed a 150Tons scrap shear.
The short profiles are piled up by an automatic robot on the pallets. An automatic packing line will also strap and unload all the pallets.
The long profiles will be automatically stacked and the handling of spacer bins is completely automatic.

The handling of dies includes an automatic die storage system and an automatic die hoist designed to transfer dies from the die storage to the assembly machine, the die ovens till the press and vice versa.

Since the whole group is able to provide complete extrusion lines, it is increasingly necessary to have a system of management and supervision like Data Manager that is able to manage all the machines involved in the extrusion process on a single and easy to use data platform.
The new Data Manager is also included in the supply in order to manage the complete extrusion lines with a technological product that increase productivity, reduce scrap and simplify the work of operators.

PANDOLFO INTERVIEW

### Long Term Customer Satisfaction

Eng. Mauro Favaretto is Operations Manager of Pandolfo Alluminio Spa which has been an excellent reference point in the field of aluminium extrusion in Italy and Europe for over 40 years. Very politely, he has been available to give us this interview.

*Read the interview article on page 2*

MELTING TECHNOLOGY - L.E.C.

### L.E.C. Low Energy Consumption

The Low Energy Consumption stirrer in both versions for Melting & Holding furnaces creates a strong turbulent flow mixing the melt in the vertical & horizontal directions.

*Read the article on page 5*

PRESEZZI EXTRUSION - Z.P.E.

### Z.P.E. - ZERO POLLUTION ENERGY

A new system of PRESEZZI EXTRUSION, the ZPE « Zero Pollution Energy » is our last result of innovation for Aluminium heating solution.

*Read the article on page 10*

PANDOLFO INTERVIEW

# LONG TERM CUSTOMER SATISFACTION

## Pandolfo's experience with COIM billet furnaces


*Eng. Mauro Favaretto is Operations Manager of Pandolfo Alluminio Spa (www.pandolfoalluminio.com), which has been an excellent reference point in the field of aluminium extrusion in Italy and Europe for over 40 years. Very politely, he has been available to give us this interview.*

**Eng. Favaretto, could you briefly introduce Pandolfo Alluminio Spa and, in particular, the extrusion department?**

The production structure of Pandolfo Alluminio consists of two modern and extensive production facilities, both located in the province of Belluno, each specializing on certain types of processing. The company can count on a modern foundry plant, four extrusion lines, surface processing facilities and advanced machining. Lentiai (BL) houses our plant dedicated to extrusion (in addition to downstream processing) characterized by a covered area of 40.000 square metres and a production capacity of over 30.000 tons/year of aluminium profiles.

**Which is the corporate Vision that guides the choice of plants?**

By serving demanding and high-level customers, both in Italy and abroad, Pandolfo Alluminio has always preferred a high quality technology for its production plants, in order to ensure a reliable production process and an excellent and competitive product to its customers. The high technical and plant level reached by Lentiai establishment is the result of a wide five-year renovation plan, which involved considerable industrial investments.

**This plan involved COIM, with the installation of a new furnace to heat billets.**

Right. IN 2009, we bought and installed a COIM gas furnace to heat 7" logs.

**What led you to choose COIM?**

COIM enjoyed excellent references and guaranteed performances above average, in terms of energy efficiency and reliability.
Clearly, that was not enough: we asked for and got the analysis of the technological features of the furnace, comparing its characteristics with those of the furnaces already in our possession and we are convinced that the COIM furnace is the best choice.

**After 7 years now, how do you consider Pandolfo experience with COIM?**

Very positive. The plant has completely satisfied our demands in terms of productivity, fuel efficiency and control of the temperature and the homogeneity of the billet, also thanks to a thermocouple reading system, which is water-cooled and very efficient. The furnace can guarantee excellent performance even if a conical heating profiles.

**Thus, did the plant prove to be performant from the energy point of view as well?**

The parameters declared by COIM on energy consumption, in terms of gas and electricity, have been confirmed by us during testing. I can say that those are, by far, the best performances tested by us over the years on all our billets furnaces.

**As for reliability and running costs?**

As promised, the plant proved to be very reliable.
The furnace stops for extraordinary maintenance are very few. To make an example, to date, the plant had no the need for replacing rollers, burners, nor repair or replacement of refractory parts.
Also, costs for ordinary maintenance proved to be very low and, in any case, much lower than the costs for the other furnaces in our possession.

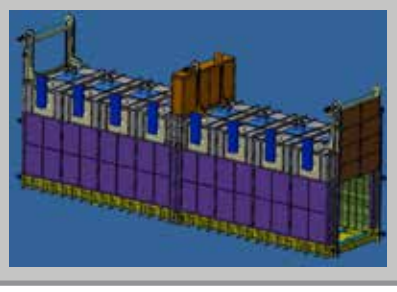
**Finally, did after-sales support and COIM Service meet your expectations so far?**

Objectively ... we have had very little need! Let me say that our maintenance department is particularly efficient and that all our systems are regularly maintained and cared for. However, the few times we needed for COIM support, this was immediate and satisfying.

G.JAMES - AUSTRALIA

### COIM TRASVERSAL AGEING OVENS FOR G.JAMES

In addition to the supply of the billet feeding line (log storages, gas-fired billet oven, hot saw) COIM will participate at this important project with the design of 2 special Ageing Ovens for Aluminium Profiles.
The ovens will treat 16 Baskets, Double Length and will include Feeding and Evacuation Roller Conveyors.
The Customer has proved to be very demanding in terms of quality of heat treatment, both for accuracy and for homogeneity. COIM's technical proposal with "transversal" heat flow perfectly satisfied their requests. The cycle can be also reverted by the use of frequency converters, for an optimum control of the temperatures in every single point of the heating chamber, both during the heating ramp and the holding time.
The double chambers moreover will allow the Customers to compound high throughput with a good level of flexibility. A door placed in the middle of the oven is foreseen to divide the oven into two independent ageing areas.
Furthermore, the generous quantity of high efficient self-recuperative gas burners will guarantee a very low consumption of Natural Gas.
G.JAMES appreciated COIM typical approach to ovens' design, with strong and generous sizes, detailed solutions to increase the reliability and reduce the maintenances costs, high level of attention to the energy saving.
Last, but not least, the scope of supply will include a careful analysis of the Australian rules: all gas control systems and components will comply with the highly demanding Queensland and Australian GAS Standard (AGA).



**Low Energy Consumption for 80t Melting Furnace IN OPERATION**

During the month of September it has been carried out successfully the commissioning of one new Low Energy Consumption stirrers for 80t Melting Furnace purchased by one primary Italian Company. The Low Energy Consumption stirrer for Melting furnaces creates a strong turbulent flow mixing the melt in the vertical & horizontal directions. The combination of rotation and translation movements contributes considerably to the drop melting decrease (maximizing the scrap metal return) and to the minimization of the specific energy consumption of methane gas. This new stirrer ensures better efficiency than any other conventional system and does not require water piping, pumps and water treatment plant. Using the new L.E.C. Stirrer the customer has reached an average consumption during the process steps of 25,66 kWh. In this single chamber Melting Furnace with 80t capacity working with the new Low Energy Consumption stirrer the customer can achieve an annual energy saving of 523.644 kW.

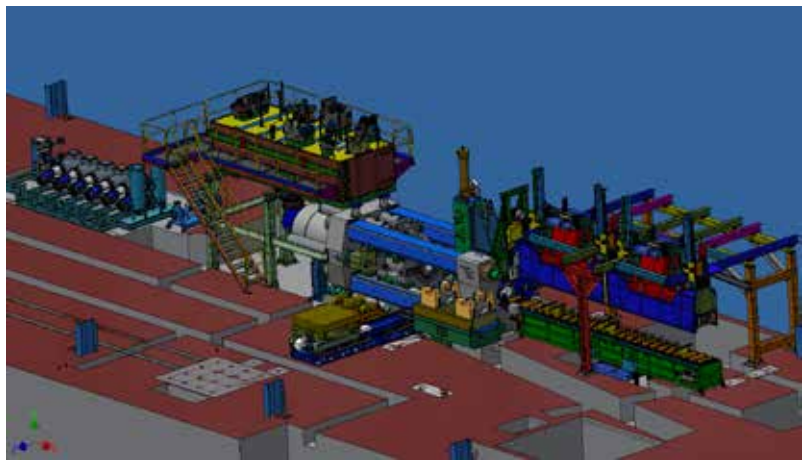
Aluminium 2016

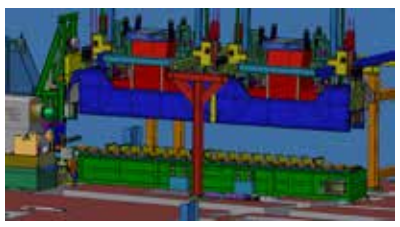
### Come to visit us - Booth 14 A30

We are pleased to announce that we will be exhibiting at ALUMINIUM 2016 from 29th November to 01th December 2016.
Meet us at booth 14A30 at Messe Düsseldor - Germany, where we will present all our latest news.

G.JAMES - AUSTRALIA

# Presezzi Extrusion Group lands in Australia





**The new "welcome", which speaks Australian, inaugurates Presezzi Extrusion Group penetration into the Australian Continent markets, and a complete "turn-key" 10" extrusion line for the facility of G JAMES in Brisbane will be our business card.**

The project as a whole involves a new 35 MN 10" Front loading press, delivered by **Presezzi Extrusion**. The 10" press is fitted with an handling system that takes into consideration the maximum dimensions of the special products and alloys products to be produced with a maximum height of the profiles of 250 mm maximum width of 450mm and a maximum linear weight of 20 kg/meter.
The new line will include the complete upstream equipment, including log vertical storages with 260 ton of capacity, brushing machine, 6 ton/h gas-fired billet heater with powered rolls, log hot saw with chips aspiration and Billet Conveyor to The Press. The customer will benefit from all the guaranteed added values **COIM** furnaces, such as the long guaranteed life of rolls and insulating parts, the low energy consumptions, the general high reliability of the equipment and the great accuracy of heating.
The new Presezzi press is 35 MN front loading 10", the press includes Presezzi's patented PE.E.S. hydraulic system, that can give up to 30% energy saving (depending on what is being produced), a nitrogen die cooling system; a shear to cut the profile between the die ring and bolster, avoiding manual cutting of the profile, and press mouth protection.
The handling system, after the Extrusion Press, is equipped with hot-saw machine installed directly on the press platen (for the first extrusion) and High Efficiency Cooling System "HECS" with a Double Tandem Quench 2 x 7.5 meters long.
The First Quench is composed by a Twins hood air and water 3.6 meters long and a Second quench composed by a Twins cooling hoods only air 3.6 meters long both equipped with high lowering speed in order to achieve the required cooling rates at the required maximum extrusion speed and minimize the scrap during the first extrusion.
The cooling units willing in line can be operated together or separately (air or water) at highest or reduced power to reach the parameter cooling and the mechanical property request.
The quench is equipped with "Optimization Software" HECS-OS, this innovative software automatically simulates and suggests to the operator the best cooling parameters (air or water) according to the shape of profile.
For additional cooling of the profiles, after the Double Tandem Quench, is foreseen an additional air cooling above and lower the lead out table made by nozzles. Above by means N° 4 Movable hoods and lower by means N° 3 cooling set on the total length in order to deliver the profile to the beginning of the run out table at 50°C.

The system to handle the profile during the extrusion is made by means of a double puller (lateral type) with hot-saw machine (operator side), the proposed system allows to cut the extruded profiles on the die mark during the dead cycle time of the press. Each pullers can come near the press platen for the first extrusion (with the cooling hoods in open position) and take the profile directly from the fixed saw-machine on the press platen.

For all the movements of the pullers and the hot-saw machine, as the main motor unit, the puller jaw rotation, jaw height adjust and IN/OUT of the jaws are foreseen by means of AC drives with frequency converter installed on board of the carriage.
The handling table includes 5 sets of belts, an automatic sample saw installed at the beginning of the cooling belts and a 120 Tons stretcher for profiles till 52m. The stretcher can work either manually or with semi-automatic and automatic control with two men, one man and no man operations.
The finishing saw is equipped with an automatic system for the removal of the head/tail pieces and the cut-to -length table allow a maximum length of the profiles of 16m. The operator at the saw, by means of movable belt at the exit of the cut-to-length table, can decide to reject the defective profiles in the lower scrap belt conveyor that feed a 150Tons scrap shear. By means of two underground belt conveyors, the scrap removal system is able to divide hard and soft alloys and drive them directly in the re-melt area.

An automatic profile stacker for profiles till 16m loads the profile into the extrusion baskets. The handling of the spacer bins is completely automatic. The basket handling system will also include all the ancillary machines and conveyors required to distribute the full and empty baskets all around the plant and prevent the need for any forklifts which could represent a safety hazard.
A completely automatic overhead 3 axis bridge crane will be installed for loading of the two ageing ovens and an additional 2 axis cross-over crane with a 18 meter span in the main logistics centre, designed to transfer both long (made by 2 coupled single basket) and short full baskets to the various parts of the plant, the automatic storage or the packing lines, as well as returning empty baskets to the presses.

The oven and loading rollers have been designed to allow the maximum flexibility.
In addition to the standard input-output doors a further door has been placed in the middle of the oven.
The oven may be operated with this third door open or closed. With third door open the oven can be loaded with up to 16000 mm long profiles and an aluminium load up to 16 tons. With third door closed the oven works as two totally independent ovens. Each of these smaller ovens can be loaded with profiles up to 8000 mm long and an aluminium load up to 8 tons. Each oven can be programmed with its own heating cycle and loaded and unloaded independently.
To achieve this goal the flow of heating air has been modified if compared with traditional double length ageing ovens.
Instead of two fans placed at one end of the oven, a number of smaller fans has been placed along one side of the oven, each with its own burner and radiating pipe. Dedicated air ducts allow the radial circulation of heating air. Radial circulation of air warrants a more uniform heating of aluminium profiles during the heating ramp if compared with traditional double length ageing ovens.

The scope of supply includes the automatic die storage system with 9000 dies ranging in diameter from 261mm to 600mm and also includes all the conveyors to transfer the dies to the die workshop and to the cleaning area.
An innovative die hoist is designed to transfer dies automatically from the die oven area assembly/storage area to the die oven zone for subsequent loading into the press. The same monorail will also be able to transfer dies automatically from the die storage area assembly/ storage area to the die oven zone.

The manipulator can be equipped with an additional tools for the lifting of the dies. In this configuration, it can be used in manual mode and move the die from the die tilting to the assembly machines. At the end of the assembly process the manipulator can lift the die-stack and can be switch in automatic mode.

Presezzi Extrusion Group does not only create high performance and reliable equipment but can also supply any specific complementary tools to use with this machinery, such as **Data Manager.** Data Manager (DM) is a complete, powerful and flexible software system, born from the twenty years expertise of Presezzi Extrusion, developed by the synergy of technicians expert in programming software engineering.

Since the whole group is able to provide complete extrusion lines, it is increasingly necessary to have a management and supervision system that is able to manage all the machines involved in the extrusion process on a single and easy to use data platform.

The new DM is a technological product designed for our most demanding customers, who are asking to increase productivity, reduce scrap and simplify the work of operators.

Extensive work had been carried out on the project over several years by both the project teams at PE as well as at G-JAMES and had involved numerous meetings and workshops to ensure that all the latest technology and innovations were forefront in order to limit any oversights in the implementation phase.

We involved many qualified engineers and managers on the project in order to ensure that the knowledge acquired over many years of experience, in a highly competitive and technologically advanced market, would be put to good use in ensuring that any investments made would be at the highest level of technology available in the industry.

## STRONG TECHNOLOCICAL PARTNERSHIP BETWEEN PRESEZZI GROUP AND CUPRUM SA.DE.CV

# NEVER 2 WITHOUT 3, 4, 5 AND 6

PRESEZZI GROUP successfully start up in a record time the new front loading 18MN Press and Log heating system in CUPRUM Monterrey division. This is the press number 3 of 6 presses that have been awarded to PRESEZZI
The new investment, focused in particular in architectonic field, has as center piece a 18MN 7" PRESEZZI and a COIM high efficiency log furnace.
Press 4 and 5, that will be delivered respectively during December 2016 and during June 2017, will have a 28MN front loading press 8/9" and a high efficiency COIM furnace, and they will be focused in the industrial and automotive market.
After so strong collaboration and technological partnership, CUPRUM decided to award PRESEZZI GROUP with the last project that involve a complete extrusion line for light profiles with extremely high tolerances. The new line will have as a centerpiece a 14MN front loading press 5/6", a high efficiency COIM furnace and a complete handling system manufactured by PA Profile Automation (PRESEZZI's handling and packing division).
CUPRUM SA de CV is the largest extrusion manufacturer in Mexico and in all Latin America.
The company, originally born in 1948 with a small press dedicated to the extrusion of copper became sooner the biggest and most known aluminum extrusion manufacturer in all Latin America. On '90 two big acquisitions (Tiendas Alutodo and Alcomex) determinate the big step for CUPRUM on the Mexican market of aluminum profiles for architectonic, ladders and industrial business.
The CUPRUM Group that include more than 4000 employees, has three extrusion divisions, located in Monterrey, Mexico City and Guadalajara with a total of 15 presses and by the end of 2017 will have 18 presses in full production.
On 2011 after the acquisition of Aluminio Conesa in Guadalajara, CUPRUM decided immediately to invest in the replacement of an old press, maintaining the original furnace and handling system. PRESEZZI team, after a careful review, proposed to supply a 20MN compact model and also a Presezzi log furnace with hot shear, in order to increase the productivity, and reduce the scrap.
On 2014, due the increasing demand of extruded profiles in particular for the growing automotive market, CUPRUM decided to invest in a dedicated new state of the art line. After a carefully long review, CUPRUM team decided to award PE GROUP for the delivery of a PRESEZZI 28MN 8/9" (3150UST) front loading press and a COIM log furnace with hot saw.

The main characteristics of the line 2, 4 and 5, are:
PRESEZZI 28MN (3150UST) 8/9" front loading press
The press can develop a specific pressure of 118,000PSI with a billet of 8" and 93,000PSI with a billet of 9". The high specific pressure was required in particular for the high extrusion ratios, and the ability to extrude hard 6XXX alloys and low 7XXX, typical alloys for the automotive field.
The length of the billet that can be loaded into the press is 48" (1200mm).
The dead cycle time with the longest billet is 14.5 sec. (including the burp cycle). With the advantage of the front loading that reduce the dead cycle time proportionally with the reduce of the length of the billet (a billet of 40" will have a dead cycle time of approximately 12sec.)

The press is loaded with all the most important options and futures as:

The ENERGY SAVING SYSTEM with only four main pumps that brings the advantage to save energy but at the same time reduce the number of other components since no auxiliary, container sealing and pilot pumps are used.
The Isothermal system that allow to have a better control of the temperature of the profile at the exit of the press guarantying the mechanical properties along the profile meanwhile the productivity is boosted at the maximum levels. The Isothermal system has the capability to adjust the proper tapered heating and ram speed, in order to get the same temperature at the exit of the press. This is one of the most important key factors to guarantee good mechanical properties in a delicate field as is the Automotive.
The Protection at the exit of the press with the incorporated camera. PRESEZZI few years ago introduced as an option the possibility to have in all presses, an anti-blast door at the exit of the front platen in order to give to all customers the possibility to avoid accidents to the operators that are used to look into the front platen opening. Mounted on the 2" special steel door, there is a high-resolution camera that allow to record the critical break trough of the profile trough the die. The video can be used by the die shop team, to review and adjust the die properly.
The Data Manager software packaged, a dedicated software that allow to send and receive all the proper production receipts to all the equipment, including upstream and downstream area. This software is a "must" when a specific process and quality control is required. From the data manager system, the manufacturer can also recollect all the information of each single extrusion. Such information, like set point of the log temperature and real temperatures, press extrusion parameters as speed, pressure, ramps, butt end length, press exit temperature and quenching exit temperature, quenching set ups and stretching set ups and aging oven treatment cycle are just few of the data that the system recollect. All this information of course can be used to issue the relative quality certificates.
The Die Nitrogen cooling system, a special automatic device that connect the liquid nitrogen to the die. This system is a "must" when the high die face pressure and high extrusion speed are applying to complicate shapes and in particular in high yield alloys like 6082 or low 7XXX.
The high specific pressure and the robust pre-stressed frame construction, allows to have faster ramp maintaining very tight shape tolerances along all the extruded profile.

COIM FURNACE
The furnace design is capable to heat logs of 8' and 9" with a production of up to 8400lb/h.
The line includes a special system to reject the bent logs and a high performance HOT SAW.
The linearity control was a special request form CUPRUM due the fact that bent logs are sometime loaded in the system causing damages to the equipment and stops of the production. The system consists in a multi laser checking system that control the linearity of the logs as soon the log is transferred from the log table to the pushing line. At this point if the system detects a bent log, a reject cycle is activated moving the log into a separate log table for reject log.

The COIM furnace was chosen for the robust construction, the long warranties and the highest efficiency. The furnace is able to guarantee an homogeneous temperature of the log from the skin to the core of the log and a constant temperature billet after billet.

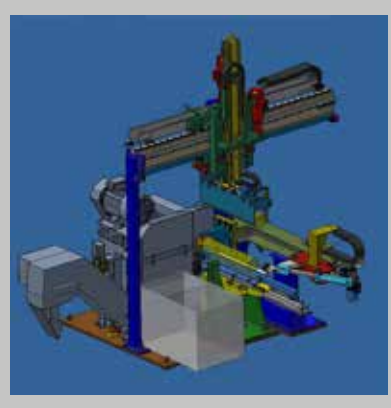
An Hot Log saw was chose for the advantage to have a clean flat cut that can help to reduce the quantity of air entrapped into the container and avoid blisters. The tapered heating option, integrated in all COIM furnaces, is able to guarantee a tapered heating of the billet with a difference from the head to the tail up to 80F in a billet of 48".
With the furnace tapered heating option plus the isothermal system installed on the press and the die cooling system, the productivity of the line jumps to higher levels guaranteeing the highest levels of mechanical properties that the automotive market request.

## Low Energy Consumption STIRRER IN OPERATION

During the month of October it has been carried out successfully the commissioning of two new Low Energy Consumption stirrers for 25t Holding Furnaces purchased by the company Arzyz (Nuevo Leon, Mexico). The L.E.C. stirrer for holding furnaces allow to speed up the alloying activity, furthermore it allows to distribute over the whole volume the nitrogen & salts mix during fluxing phase with minimum energy consumption. This new stirrer ensures better efficiency than any other conventional system and does not require water piping, pumps and water treatment plant. These benefits allow to increase productivity, less time for activities before casting, and improve metal quality.
Using the new L.E.C. Stirrer the customer has reached an average consumption during the process steps of 15,2 kWh.

## Coim - 8 HOT LOG SAWS IN ONLY 2 YEARS !

With a prompt and effective answer to the recent, several inquiries, COIM was able to supply only in the last two years 8 Hot Saws for Aluminium Logs. The "big names" of extrusion in Europe and North America are more (and more) interested in this cutting solution for logs, being involved in the growing market of Aluminum extrusion destined to Automotive.
The perfect hot log cut reduces the risk of blister during the extrusion and this represents a guarantee of quality for the very demanding final product.
Actually, the company of Castelcovati was able to add big value to the log feeding line, with its personal concept of saw. Strong, precise and reliable: the Customers appreciate COIM's technology applied to this equipment. Only in these last two years, 8 new Hot Saws by COIM have been sold and commissioned around the world.



While keeping on the market its classic and reliable solution of Hot Shear, COIM gave to PE Group customers "something more" in terms of solidity and precision of cut.

MELTING TECHNOLOGY - LEC

# L.E.C - LOW ENERGY CONSUMPTION

## The new concept of stirring

Without stirring the submerged scrap would take a very long time to melt down as it relies on conduction and convection heat transfer. Stirring the bath breaks this limitation and the heat transfer is greatly increased by convection effects.

The Low Energy Consumption stirrer in both versions for Melting & Holding furnaces creates a strong turbulent flow mixing the melt in the vertical & horizontal directions.

This flow has a lot of benefits like increase melting capacity, speed up alloying process and reduce dross generation.

### Main Features

- Possibility of synchronous and asynchronous rotating
- High-intensity of magnetic field
- Fully customizable and programmable working cycles
- Combination of rotating and translation movement
- Air cooling through 2 dedicated fans (this stirrer does not require water piping, pumps and treatment plant)
- 80% less power used than conventional electromagnetic stirrers

*MAIN DATA*
***MELTING FURNACE VERSION***

The following data refer to a L.E.C. Stirrer designed for an 80t Melting furnace with a melting rate of 7 t/h:

- Table rotating motor power: 55 kW
- Trolley translation motor power: 3 kW
- Motor power for trolley up/down: 7,5 kW
- Cooling fans motor power: 2 x 0,25 kW
- Average consumption*: 26 kWh

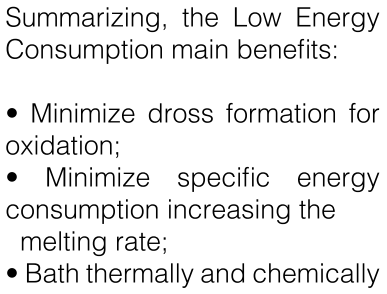
*MAIN DATA*
***HOLDING FURNACE VERSION***

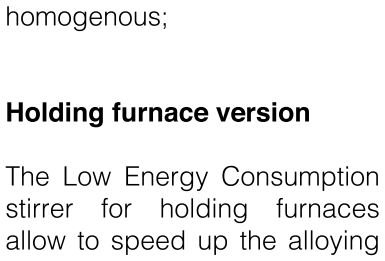
The following data refer to a L.E.C. Stirrer designed for an 25t Holding furnace :

Table rotating motor power:30 kW
Motor power for trolley up/down: 3 kW
Cooling fans motor power: 2 x 0,25 kW
Average consumption*: 15,2 kWh

### New concept of stirring

This new stirrer ensures better efficiency than any other conventional electromagnetic system (there is no heat loss by Joule effect), moreover the costs of installation and maintenance are negligible. The economic impact of this new stirrer on business costs is about 4 times less than the conventional electromagnetic stirrer.
The combination of rotation and translation movements contributes considerably to the drop melting decrease (maximizing the scrap metal return) and to the minimization of the specific energy consumption of methane gas.
The aluminium bath, before each transfer, will be homogeneous thermally (variation of 2-3 °C between start and end of transfer) and chemically (the heavy elements such as Fe and Mn become homogeneously distributed over the whole bath volume avoiding the stratification phenomenon).
The difference between roof temperature and bath temperature increase, leading to a better utilization of the energy from the burners and reducing dross formation: colder bath surface is less oxidable.





Summarizing, the Low Energy Consumption main benefits:

- Minimize dross formation for oxidation;
- Minimize specific energy consumption increasing the melting rate;
- Bath thermally and chemically homogenous;

### Holding furnace version

The Low Energy Consumption stirrer for holding furnaces allow to speed up the alloying activity, furthermore it allows to distribute over the whole volume the nitrogen & salts mix during fluxing phase. These benefits allow to increase productivity (less time for activities before casting) and improve metal quality. This version can be applied in holding furnaces dedicated to the production of aluminium ingots, billets, slabs or rod (discontinuous productions)


### ENERGETIC CONSUMPTIONS SAVING

In a single chamber Melting Furnace with 80t capacity working with the new Low Energy Consumption stirrer we can achieve the following hourly energy consumption

((33 kW * 20 minutes) + (22 kW * 40 minutes)) / 60 minutes = 25,66 kWh

The traditional electromagnetic stirring technology consumption is around 105 kWh. Considering 330 days/year of operation the annual energy saving working with the Low Energy Consumption Stirrer instead of with traditional stirrer is:

(105 kWh – 25,66 kWh) * 20 h/day * 330 days/year = **523.644 kW / year**

***For Information:***
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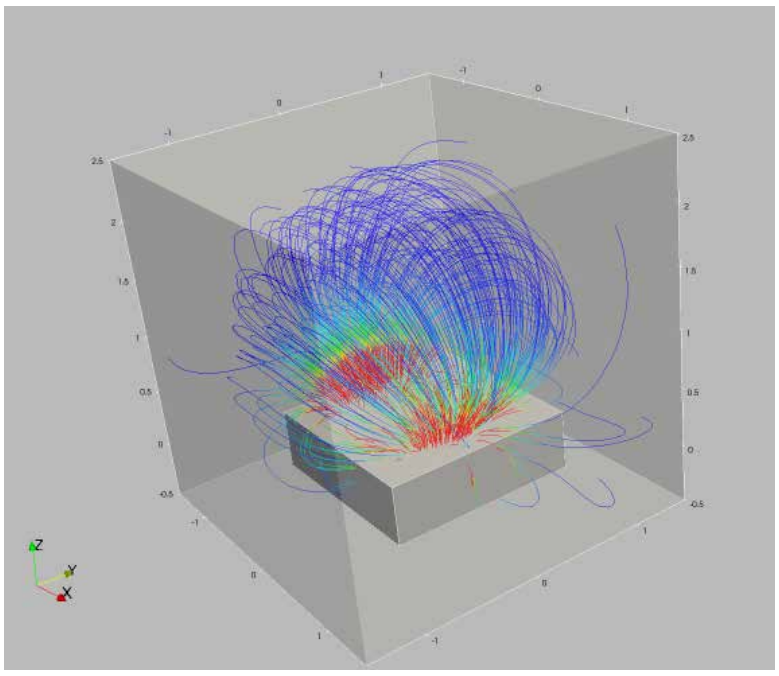


ALUMINIUM RECYCLING

# MELTING TECHNOLOGY - Aluminium Scrap Decoaters

*before and after decoating*

**With the creation of a special division operating in the melting technology sector. Presezzi Extrusion Group is now operative in the field of the metallurgy of non-ferrous alloys, and particularly aluminium alloys.** Our products are engineered with the most advanced technological solutions for heating, insulation and control, to reach the best efficiency in terms of energy saving and metal loss. Below the products we proudly supply:

- Ingot pre-heating, melting and holding furnaces;
- Charging and skimming machines for melting furnaces;
- Homogenization, annealing and ageing furnaces for semis;
- UBC and aluminium scrap decoaters.

The **Melting Technology** division is now manufacturing complete foundry plants as well as aluminium scrap decoaters.

The decoater machine is able to process various types of scraps like UBC (urban waste collection or certificated type), extrusion painted profiles, beverage caps, thermal breaks profiles and others aluminium scraps.

Decoating is the process by which paint, plastic, oil, ink and paper are removed from the surface of aluminium scraps. All coatings contain either organic or inorganic compounds and very often both. When released by thermal degradation and/or oxidation they invariably undergo chemical changes as the complex compounds are reduced to their basic form. For example polypropylene is reduced to carbon monoxide, carbon dioxide, hydrogen and water vapor.

Today there are two main reasons why Aluminium companies have to decoat their scrap:

- **Reduction of metal loss:** if we assume that the current aluminium market price is 1.552 $/t (on February 22nd) each 1% metal loss is worth 15,5 $/t in lost revenue.
- **Environmental Emissions:** our plants ensures the emission limits according to the Best Available Technologies dated February 2013.

With our decoating technology the scrap is heated in a rotary drum where the organic content is removed via convective thermal exchange. In our counterflow rotary drum the hot gas from afterburner, heat exchanger and de-dusting cyclone enters the kiln at the metal discharge end and flows counter to the scrap movement. This ensures the highest temperature and oxygen are in contact exactly where it is needed. Consequently counter flow kilns produce very good quality decoating.

This kind of rotary drums does not require an internal refractory lining but only an external insulation.

In the drum the oxygen level and the gas temperature are continuously controlled via redundant instrumentations in order to minimize metal oxidation and consequently the dross formation in the melting furnace and to obtain the best decoating quality. The oxygen level is fundamental for final scrap quality and emission (TOC concentration) and it's adjusted by adding secondary hot air directly in the afterburner.

The internal drum temperature is controlled with the heat exchanger exit temperature: the gases that previously passed through an afterburner are cooled with a counter-flow heat-exchanger.

Adjusting the refractory by-pass valve position the internal drum temperature can be controlled. We can also control the internal temperature with recirculation gas flow rate (variable speed fan).

Drum internal pressure is controlled by pressure transducers and the "zero-point" valve adjusts the set point: the exhaust gas flow is processed in a second after burner strictly to reduce CO and TOC followed by a quenching unit to avoid the dioxin formation.

With our aluminium scrap decoating machine we can now ensure a very high quality of product, that allows to minimize the melting furnace metal loss.

Some striking figures:

With UBC we can reach and ensure the following results:

- Metal recovery in melting furnace : 94-95%;
- Surface aspect: LIGHT;
- Temperature: 400-450°C;
- Specific fuel consumption: 30-35 $Nm^3/t$
- TOC emission: 3-6 $mg/Nm^3$

**Presezzi Extrusion Group for social**
**ASD Vimercatese Oreno**

We have been supporting the local football association since 2000 and proudly we can announce that the number of registetered children year after year is increasing.

With commitment and enthusiasm we encourage children in sports, making football and amazing experience!

www.vimercateseoreno.it

# Our Melting Technology

**Presezzi Extrusion (with Melting Technology division) is manufacturing furnaces for aluminium: melting, holding and heat treatment furnaces, as well as aluminium scrap decoaters, automatic charging and skimming machines at the highest technological level.**


Besides a 70t Fixed Double-Chamber Melting Furnace, featuring two regenerative burners (North American), one oxygen/NG burner and laser oxygen probe for control of complete fume oxidation, a complete foundry plant has been realized, including: one aluminium scrap decoater 7 t/h, 80t Fixed Furnace with LOTUSS + recirculation pump system + OTS pump for metal transfer, regenerative burners (Bloom) and a complete dedusting and fume treatment plant.

Moreover, an important complete casthouse modernization for the company Arzyz (Mexico) has been commisioned.

The supply included:
- Conversion of two 35t melting furnaces to double chamber 50t melting furnaces;
- Two dedicated automatic charging machines;
- One dedicated automatic skimming machine;
- Two Low Energy Consumption stirrers for holding furnaces designed by the R&D center of Presezzi Extrusion Group;
- One complete supervision system DATA MANAGER;

This new order came from Arzyz requirements to minimize specific consumption and maximize scrap metal recovering. The new furnaces are equipped with the new “cold chambers” that are provided with two couples of high velocity burners in order to optimize with high turbulence the “decoating” process. A special fan (one for each furnace) brings the unburned fumes with high content of CO to the existent “dry chambers” in order to recover the heat amount resulting from carbon monoxide oxidation lowering the gas consumption for sows and t-bar melting.

These furnaces and these special machines have been designed by our Technical Department and we fully own the know-how of furnaces at the best state of the art, as the ones described above.
Therefore for any kind of furnaces we are able to propose the right solutions in terms of furnace design (stationary or tilting), combustion system, charging system or device, melt transfer system (tap, transfer pump), according to the needs of the process and of the layout.
Actually our internal R&D department is developing a new concept of double-chamber furnace. The calorific value of “decoating gas” is exploited in a special burner (the CO content is controlled with an advanced probe) minimizing fuel consumption (indirectly heating) and oxygen level while a special dumper valve controls the flue gas flow through the opening in the partition. In this way the dirty scrap is processed with low energy consumption and very high metal yield.
The unburned fumes are conveyed in the hot chamber through a special fan in which two Ultra Low NOX regenerative burners operate with a controlled stoichiometric ratio (oxygen probe).

In the past years also a 30 ton tilting holding furnace, to feed an aluminium billet casting line, and a 4 coil annealing furnace for a strip plant, were supplied.

Further, we can supply complete billet or slab casting plants as well, thanks to our internal expertise in the field and to our cooperation with primary manufacturers of casting equipment.

Our projects manage complete “turnkey” installations wordwide as well as part supply contracts whereby our customers may only require engineering design or critical components.

## Presezzi Extrusion Group for Social

**Presezzi Eztrusion Group is partecipating in requalizing the whole area of the Hospice “Santa Maria delle Grazie”, in Monza where terminally ill patients are nursed with love and patience.**

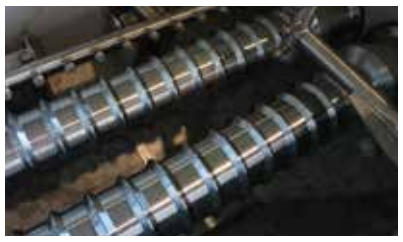
FOR COPPER

# Descaler System Special Device

In the extrusion plants of copper billets (and some of its alloys), the heating of the billet to elevated temperatures causes the surface oxidation which damages the quality of the final extruded products.

In order to keep a high quality of the extruded products, a special device with a high pressure water system that removes the surface oxides is used before the loading of the billet into the press. This device is called “DESCALER”.

The working principles of the “descaler” device are the following:
while the billet rotates on two special rollers, the water by means of a high pressure system is sprayed on the outer surface



*Before treatment*

of the billet by means of special nozzles.
As an example we show photos of the descaler unit and billet before and after treatment with descaler.

*After treatment*



GHIDINI - ITALY

# New brass extrusion line in Ghidini Trafilerie

**Who says that the brass market is slack? Not it Italy! Ghidini Trafilerie S.p.A., Italian leading manufacturer of brass bars and rods for machining and forging, is challenging the market uncertainty with a new, high spirited investment for a new brass extrusion line.**

Ghidini Trafilerie S.p.A. produces brass rods for industrial use. It also produces copper rope, wire, flat and tube for plumbing and industrial uses. The Ghidini family’s first industrial enterprise was set up in 1860 at Lumezzane (Italy), one of the most famous districts in the world for brass casting, extrusion, forging and machining. Already in 1929, Ghidini family members were specialised in working non-ferrous metals such as copper, brass, aluminium and German silver. Comm. Giampietro Ghidini is the leader of a wide range of different activities, such as the production of copper tube, flats, wires and ropes and brass rods. Ghidini produces also brass and plastic siphons for plumbing.

The installation of the new line is being performed during Summer 2016. Presezzi Extrusion Group (PEG) is protagonist of the new project, with the supply of one 50MN direct-indirect extrusion press by Presezzi Extrusion and one 25 tonnes per hour capacity gas-fired billet heater by COIM. Presezzi Extrusion is deeply rooted in its Italian homeland, where all design and manufacturing takes place and has emerged in the international market as a prestigious manufacturer of extrusion presses.

Since 2013, Presezzi Extrusion has grown with the formation of the Presezzi Extrusion Group, capable of the manufacture of complete extrusion lines for aluminium, hard alloys, copper and brass, adding (among others) the expertise of COIM, a world leader in design and manufacture of gas-fired billet heaters for the extrusion of copper, brass and aluminium.

Presezzi and COIM epitomise worldwide excellence and expertise in energy efficiency, robustness and reliability, as their choosing by a market leader such Ghidini Trafilerie S.p.A. demonstrates. The progress of the Presezzi Extrusion Group is the perfect example of how courageous and far-sighted business leaders succeed not only to consolidate the position of their company but also to strengthen its market leadership worldwide. Presezzi Extrusion Group is a flagship of the Italian industrial system, and the only enterprise that can provide a complete extrusion line in addition to individual machines.

AL TAISSER- MIDDLE EAST

# Profile Automation is a leader as a supplier in the Middle East Area

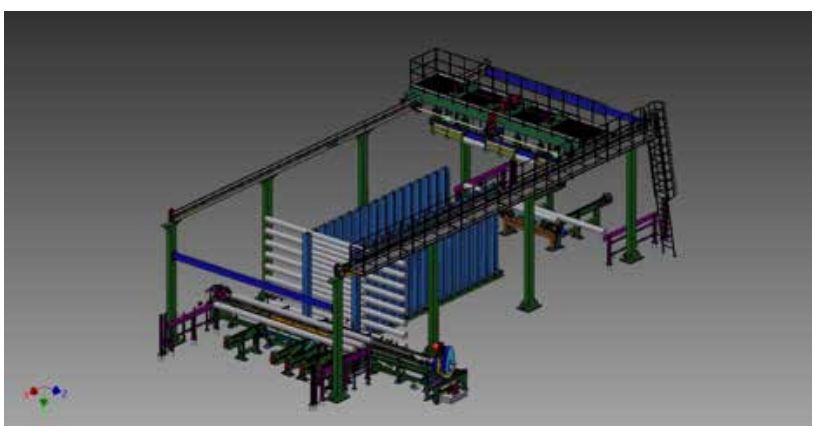
Profile Automation confirms itself as a notable supplier in the Middle East Area, for the packing and handling sector. In fact, another important order for a complete packing line has been delivered and already started up for the customer Al Taisser, with head office in Riyadh (KSA).
The packing line consists in an innovative system of loading and unloading of the baskets that, thanks to its special 2 levels layout, allows to optimize the spaces and to reduce the waiting time of the operators. The very packaging part is composed by a profile wrapping line for high levels of production and by a semi-automatic strapping line, particularly effective for its reduced dimensions and for its functional simplicity.
The system of loading and unloading of the baskets is composed by 2 levels of catenary, one higher and movable and one lower and fixed, by one hydraulic platform for the lifting of the baskets towards the upper floor and by two more hydraulic platforms that allow to keep the profiles at an ergonomic highness, thus facilitating and accelerating the operators work.

The wrapping line is equipped with a loading table that automatically feed the wrapper and the taping machine for the front end and back end of the packs. At unloading, a special bundle stacking machine, is able to form the packs with the insertion of a cardboard that protects the lower part during the forklift grip.
At unloading of the wrapping line the packs are weighed and piled up before the final phase of packing. An innovative overhead linear strapping machine allows, with just one operator, to load and fix the wood blocks.

The head of the strapping machine is programmed to stop automatically in the position of insertion of the wood blocks where the operator, by pushing a button, can switch on the strap to later weld it with a pneumatic strapping machine fixed on the movable cart.

This kind of system, particularly simple and easy to use, allows to get great results in terms of production, maintaining to the minimum the initial investment cost and reducing considerably the labor costs.

# Not only billet heaters for Coim



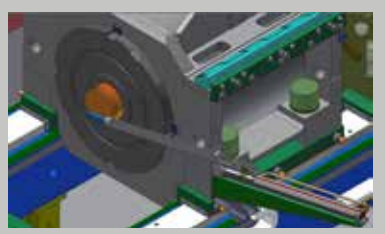
Not only billet heaters… COIM is highly specialized in strong, customized and fully automatic vertical storages for logs or pre-cut billets.
A long experience was gained in many years of working with the so heavy weights of copper alloy billets. Among other projects, COIM had supplied to Eredi Gnutti (Italy) a huge vertical storage for brass logs with a total capacity of 60.000 ton !
Several custom-designed vertical storages were supplied in Italy, Swiss, China, with particular care of the software logics of stock, connecting the Customer's ERP with the Data Manager of the storage and of the extrusion line.
Two main projects were commissioned to COIM for 2016: G.JAMES (Australia) will equip the new COIM feeding line with a vertical storage for Aluminum logs, while Buntmetall (Wieland Group) chose COIM's vertical storage and software to manage their stock of pre-cut billets, before the new COIM gas billet heaters of their new extrusion line in Amstetten (Austria).

## Our Technologies
## Energy Saving System

Our well know patented system reduces the energy consumption of an extrusion press by up to 30 percent (average data according to the different types of production) compared with a hydraulically operated press equipped with a conventional and modern drive system. The system basically reduces the consumption of energy by switching off the hydraulic pumps when the press is not in operation or when it does not need them during a particular phase in the extrusion cycle. Unlike the PE.E.E.S., all pumps are continuously in operation with traditional drive systems, thus consuming energy when they are not needed, thus wasting money. By contrast PE.E. S. only uses the amount of energy that is really needed.
PE. E.E.S. system allows the press to generate only the exact force and speed needed for the particular extrusion operation as and when it is really required. Pumps that are not needed during the extrusion phase are completely at rest.
The pump flow rate is therefore not controlled by servo valves (as in conventional presses), which send excess pumped oil to the drain. The pump motors are controlled by frequency inverters; the volume of the oil delivered is exactly the one required for the movement of the press during each operation.
The PE.E.E.S patent system can be installed also on existing presses, in fact in the last years Presezzi has carried out (with high result) a lot of this revamping, where after having studied the press type, the old hydraulic plant has been changed with the new PE.E.E.S. system, including all the required modifications and integration of the new parts, such as piping, electrical, electronic and software.
The advantages that these kind of motors offer can be summarized as follows:

- reduction of the motors power and dimension,
- oil, pumps and motors have a longer life,
- reduced need for spare parts and maintenance,
- less space is needed for the pumps room installation
- reduction of noise generated during operation.

## Our Technologies
## EXTROLUB - ANTI-METALLIZATION TREATMENT



Found a modern and highly efficient solution to the problem, of metal billet adhesion in aluminium, brass or steel on contact surfaces of the dummy block during the hot extrusion processusing a synthetic, advanced product soluble in water that produces a delicate, dry, adherent and white film on the hot surface of the dummy block that easily resists temperatures up to 900°C.

This material offers very high detachment characteristics and does not release harmful emissions: as soon as it comes in contact with the hot surface of the dummy block, it releases water that creates the solution to form the synthetic, white deposit.

It differs from graphite and boron nitride due to a unique characteristic: it returns to a water solution after the dry film has formed. This exclusive property enables quick and easy cleaning of the equipment and the machine, when necessary, and eliminates the risk of build up on hot surfaces.

Using the Airless spraying method, Presezzi has integrated the most efficient, economic and advanced means on its machines to offer a truly complete and operational turnkey solution.

***For Information:***
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PRESEZZI EXTRUSION - ZPE

# New Magnetic Oven: ZPE “Zero Pollution Energy”

A new system of PRESEZZI EXTRUSION, the ZPE « Zero Pollution Energy » is our last result of innovation for Aluminium heating solution.

High saving and zero emission are the key factor of one of the best result in terms of technological innovation in the aluminium extrusion.

The Zero Pollution Emission (Z.P.E.) is the result of years of research, studies and tests performed in collaboration with one of the most famous universities of Milan, and where other manufacturers tried to arrive without success, Presezzi succeeded!

The ZPE is a magnetic oven solution suitable for aluminium alloys and for non-ferrous material billets. It is a patented system that allows the saving of energy with a consumption of 165 kWh/Ton, compared with the other traditional induction solution, the magnetic oven leads to an energy saving up to 40 %.
Our great goal has been to sell the first two magnetic ovens in Japan to our customer Kato Light Metal.

It is well known that Japan is one of the most technologically advanced countries in the world and the ZPE has proved to live up the customer expectations and Japanese technological standards.

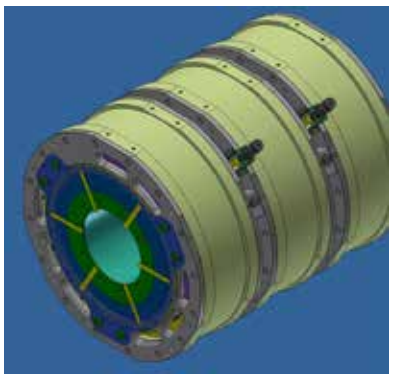
*Billet Ø 6” / 8”*
*Max. billet length: 800 mm*
*Capacity: 40 bill/h*
*Consumption: 165 kwh/Ton*
*Temperature Uniformity and Repeatability: ± 3 °C*
*Max. Taper: 100 °C/m*
*Power supply: 420 V - 60 Hz*

The installation in Japan consists into two magnetic ovens suitable for 6” and 8” diameter, with a maximum capacity of 40 billet per hour.

The peculiarity of this project, which was installed in place of an induction oven, it was the introduction of a vertical loading, solution exclusively born due to the limited space for installation.
With ZPE the customer increased the productivity significantly, going from 30 billets to the actual 40 billets per hour, and reducing significantly the energy consumption.

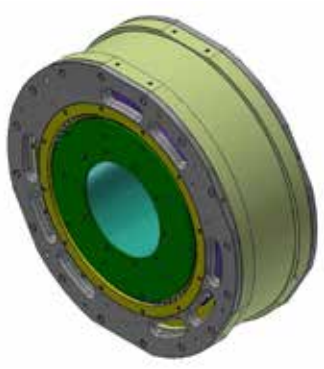
Furthermore, the ZPE does not involve the installation of a dedicated transformer, this reduces greatly the required space and the cost that customer has to face for traditional induction heater.

The heating of the billet is obtained thanks to the magnetic field that is created during the rotation of the permanent magnets, assembled on the rotor of a coaxial motor.
The force lines that are created by the magnetic field, penetrate deeply into the material, thereby obtaining the heatin with rising gradients on all the material.
Depending on the length of the billet, the project foresees a different number of section, calculated so as to cover the whole length to ensure an uniform or tapered heating of the billet.



*A representative example of a ZPE oven with three heating sections*

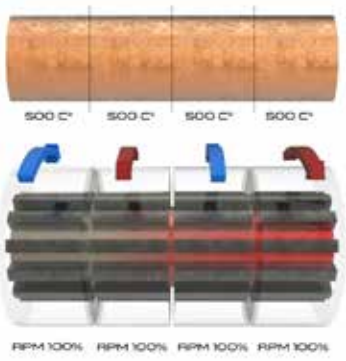
*The image represents a single section of the ZPE with its magnets installed on the rotor*

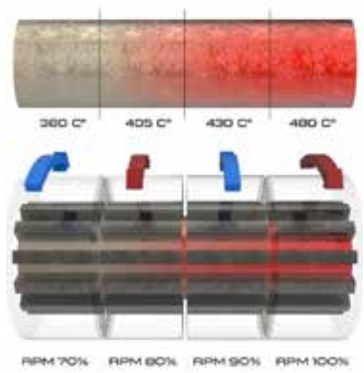


Each section has its own motor which is controlled by a frequency converter. Acting on the rotation speed is possible to obtain different temperature result in the same cycle time.

The accurate calculation of the heating control, takes into account the type of alloy and the starting temperature, automatically calculating the exact time and speed of adjustment to obtain the desired temperature.

Always according to the total length of the billet the number of section engaged for the heating change so the unused sections remain off.




*Example of several heating possibilities*

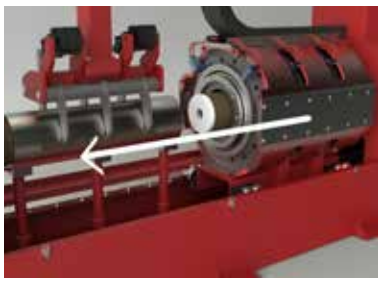
Despite the calculation is precise and accurate, to keep always under control the temperature of the billet, different thermocouples are installed on the ZPE: one on the head, one on the back and one for each section of the oven.

*In the ZPE all components that are subject to the magnetic field, are made of non-magnetic material, so as not to compromise the operation.*

To avoid any possible movement of the billet the ZPE has a specific locking system, managed by a load cell and a linear transducer.

The billet when is loaded into the oven it is locked between a mechanical support and a movable stopper which adapts its position depending on the billet length.

When the billet is well locked, the oven moves to cover the length of the billet then the heating starts



*The oven moves on special guides with rollers and is actuated by a linear actuator provided with electric servomotor*

The ZPE has various safety systems to prevent the load of non-uniform billets, overheating of the magnets and melting of the billet. A further advantage in terms of safety, the ZPE has no influence on the environment and people, since the magnetic field is limited to within.

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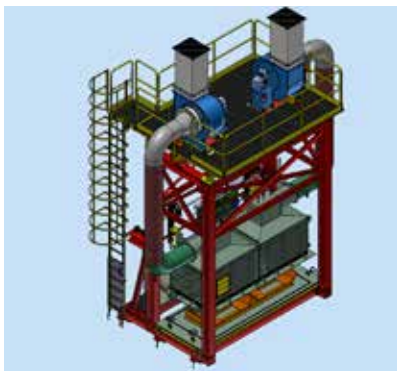
DROSS COOLER

## A NEW WAY TO RECOVER ALUMINIUM FROM DROSS



Melting Technology (part of Presezzi Extrusion) has studied a new way to recover aluminum from furnaces dross: the PE Dross Cooler. Due to thermiting, the cooling time may take many hours to cool below 400°C, the temperature at which thermiting ceases depending on the cooling process. Various cooling methods are in existence: vibrating table, rotary drum cooler, dross press and last, but not least, the PE Dross Cooler. This method is the most efficient, safest and environmentally sound of all the cooling methods. The recovery of aluminum with PE Dross Cooler is always higher than with other methods: this can be explained by the fact that thermiting is stopped as soon as the inert gas is applied. This new equipment can process up to 1200 kg of dross (black and non-reactive or white and reactive) and should be placed nearby the furnaces to minimize the oxidation time before cooling.
PE Dross Cooler has the following features:
- Completely safe because this cooling process doesn’t use water or oil
- Environmentally sound, therefore no emission of dust, fumes or acid gases
- High aluminum recovery up to 30% more respect cooling in air;
- High cooling speed (90 min for 500 kg & 120 min for 1000 kg);
- Typical Payback: 12 months;

Melting Technology sold 6 PE Dross Coolers in Mexico (Nuevo Leon) that we will put in operation during the month of November.

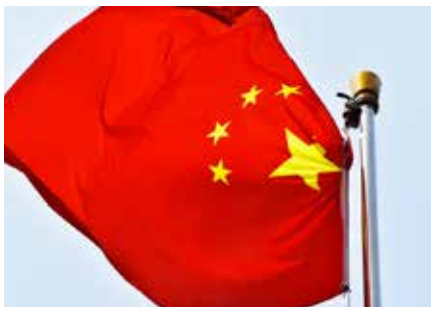
ET 2016

## Great success at the ET ‘16 in Chicago!

ET ‘16 in Chicago was really successful for Presezzi Extrusion Group. It was a great pleasure for us to meet and to greet all our customers in our booth!

# OUR LATEST NEWS

## PRESEZZI LANDS AGAIN IN CHINA!



The company Huaian Hetong , has chosen Presezzi Extrusion as the supplier of the 13 MN front loading extrusion press. Since always Presezzi Extrusion's policy consists in designing and manufacturing plants of excellent quality and up to date with the most advanced technologies, without ever neglecting the relationship between cost, efficiency and energy savings, the primary goal in order to be competitive and successful on the market.
All the machines made by Presezzi Extrusion are equipped with the most advanced automation systems and energy saving, this press too will be equipped with the very tested Energy Saving System (PE.E.S.S.) Also this press will be completely assembled in the Presezzi workshop, in order to fully test each component, moreover in Presezzi's workshop will be made even all pipes and electrical cables to reduce to a few days the installation time at the customer.

## NEW ORDER IN TURKEY!

The company AKPA ALUMINYUM AS from TURKIYE has chosen Presezzi Extrusion Group as the supplier of the 35 MN Front loading press 8"/10", together with a COIM feeding line (logs furnace with hot shear and billet transport plier). The request perfectly matched with the technical and technological level of Presezzi Extrusion staff, who has also been able to meet the specific requirements thanks to the considerable experience.. All the machines made by Presezzi Extrusion are equipped with the most advanced automation systems and energy saving, this press too will be equipped with the very tested Energy Saving System (PE.E.S.S ), while the furnace will work with the COIM triple heat recover system. The machine will be manufactured with the highest quality levels and will have as its most important features the efficiency and accuracy of operation. The design, hardware and software and all the details will be Italian or of European origin.

## PRESEZZI EXTRUSION AGAIN IN THE USA!

Profile Precision Extrusion awarded Presezzi Extrusion for the design and manufacturing of a new 11MN front loading press with piercer. The new press will allow to extrude more tight tolerances and the piercer will allow to extrude small seamless pipes for special markets. This press will be the most technically advanced machine, dedicated to the Precision Miniature Extrusion market.

Presezzi Extrusion was chosen over other manufactures for a number of reasons such as:

- Long standing history between Presezzi and Profile.
- Superior forged construction of major components.
- Ability to maintain the precision tolerances of our extrusions.
- Technical innovations on die changing, shearing and energy savings.
- Capability to manufacture seamless tubing.

The company Profile Precision was founded in 1994 and acquired the Profile Precision Extrusions in 1997. PPE operates from its 40,000 sqft. plant in Phoenix Arizona and it is the leading manufacturer of small, precision aluminum extrusions and extruded tubing for the medical, aerospace and industrial markets. In addition to extrusions, it offers also CNC machining, anodizing and custom cutting fabrication services.

## BUNTMETALL (AUSTRIA - WIELAND GROUP) SELECTS COIM

We're proud to announce that Buntmetall (Wieland Group) chose COIM for the supply of the new gas-fired heating plant for copper billets, to be installed in 2017 in the facility of Amstetten (Austria).

Buntmetall itself represents a new, important reference for COIM, but the new contract gives continuity to the long-term relationship between COIM and WIELAND GROUP (world leader in copper extrusion) which Buntmetall is part of and which had already installed 5 billet heaters in their facility in Germany.

COIM will install two big heaters with a total capacity of 27.000 kg/h and the scope of supply will include a vertical storages for pre-cut billet with a total capacity of 1.100 billets of different alloys and diameters. A custom-designed software will manage the data of the heaters and storage, with direct connection with the Customers' ERP.

## TO.MA. S.p.a.: ENERGY EFFICIENCY TITLES, THANKS TO COIM!

TO.MA. S.p.a. represents the only solid and competitive reality in Apulia. TO.MA. operates in the aluminum extrusion industry, the company actually produces over 22,000 tons of aluminum profiles per year.
Starting August 2016, the current 1,850 ton Presezzi Extrusion Press will be coupled with a new oven made by COIM. The oven will be designed for 7" logs with a 2,500 kg/h capacity.

The oven made by COIM will allow the company to increase its production line's performances, improving the energy efficiency and reducing the maintenance related costs.
The PE Group will support TO.MA. in the procedure of obtaining Energy Efficiency Titles (Blank Certificates). These titles will be guaranteed by the installation of the new high efficiency oven.

## NEW ORDER FROM TURKEY!

Sarbak awarded Presezzi Extrusion for the design and manufacturing of a new 20 MN direct press with piercer 3.58 MN for brass and eco/brass.
Since always Presezzi Extrusion's policy consists in designing and manufacturing plants of excellent quality infect all the main components are made in forged steel. In addition, it has been paid a special attention first to the container housing construction in order to obtain an alignment stability that ensures a better concentricity of performed bar, but also a careful attention to the working environment due to the presence of suction fumes hoods foreseen in the lubrication zones.

All the machines made by Presezzi Extrusion are equipped with the most advanced automation systems and the very tested Energy Saving System (PE.E.S.S) that allows an excellent control of the extrusion speed also during very low extrusion speeds.

## Presezzi Extrusion Group for social
## Villa d'Este Golf

Presezzi Extrusion Group was the main sponsor of an important event in Villa d'Este (Como - Italy), where the income was donated to the Hospice "Santa Maria delle Grazie" Monza, important center that helps terminally ill patients.


# Thanks to all our customers

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