

FIRST EXTRUSION LINE FOR PRESEZZI EXTRUSION GROUP IN THE AMERICAN MARKET

Prezezzi Extrusion Group has won an important contract for its first complete extrusion line for the American market (Orrvillon - Holtec). The complete line was designed and engineered to serve the Nuclear, Aerospace and Automotive industry and to meet its extremely tight technical and quality needs. The project entrusted to Prezezzi Group consists of the construction of a state of the art extrusion line, both for its engineering and for the high performance that the line must guarantee during the production phase.

After a careful assessment, the customer's technical committee gave a high score to our technical solutions, and this fact has certainly contributed to its commercial success.

The key points of the project are the PRESEZZI 7200Ton Press, the COIM Jet heating type furnace, the HECS cooling system and the 720 Ton out line Stretcher. The new extrusion line will include a preheating furnace (COIM part of PE GROUP) at high forced conduction (JET HEATING type). This technology has been chosen in order to preheat with efficiency and homogeneity billets that are made in alloy with a very low thermal conductivity and that cannot be preheat with conventional direct fire billet furnaces. The JET HEATING type technology was already successfully applied in furnace for annealing for brass rods and copper pipes, using the vacuum technology and the inert atmosphere and this technology can guarantee heating tolerances within 5 degrees from inside core to the outside of the billet.

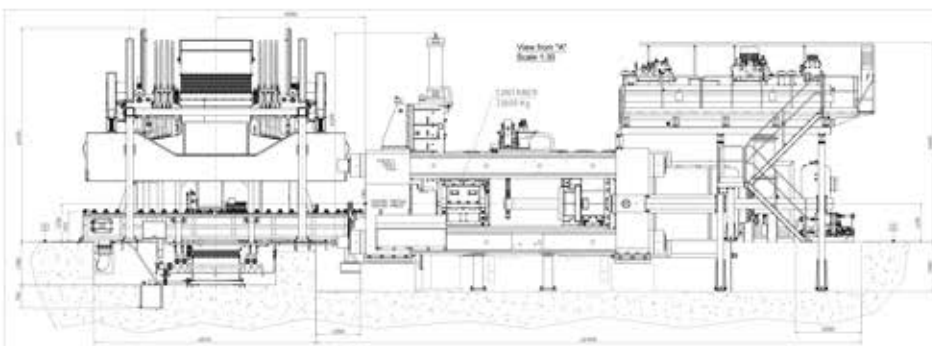
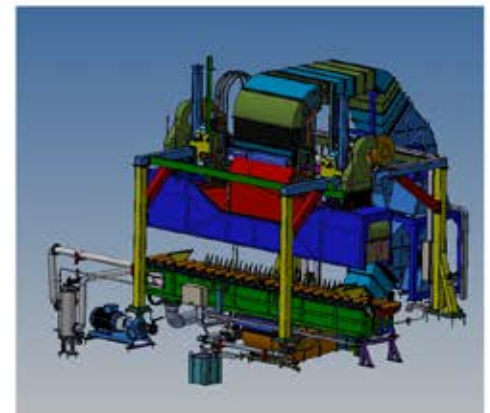


The new PRESEZZI press is 66 MN back loading press that can handle billet up to 60 inches in length.

The back loading shifting stem technology have been chosen due the particularity design of the METAMIC HT billets that will extrude. METAMIC HT is obtained by sintering process of aluminum powder and other elements and not by a traditional casting process. Since this procedure cannot guarantee a regular diameter and flat end faces, the back loading press is the best solution in order to guarantee the loading of every cycle of this particular very expensive alloy.

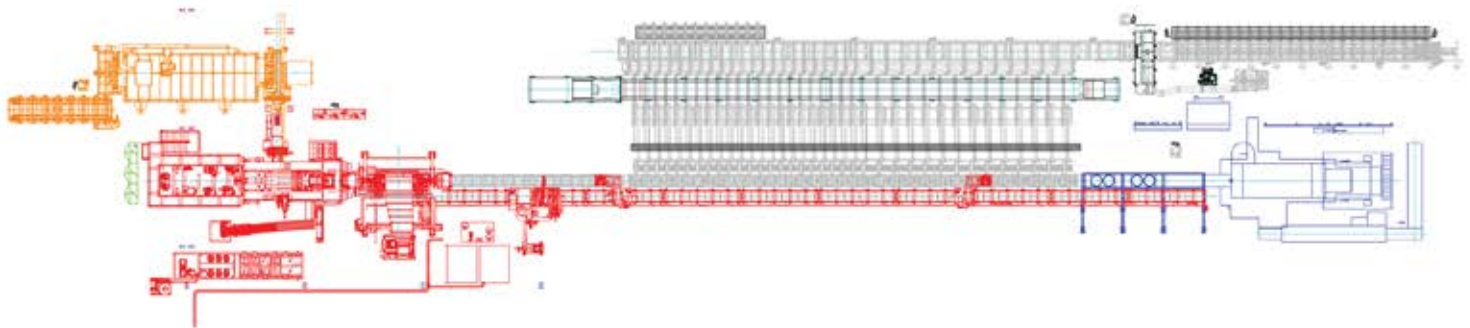
The press has been designed for the extrusion of different kind of alloys. Some of them, that require a very high specific pressure like METAMIC, will require that the press use a 12" tooling.

For Aluminum 2XXX and 7XXX series the press will use a 14" tooling and for 6XXX Series the press will use container up to 16". In order to guarantee the best mechanical properties and a constant result along the extrusion, a nitrogen cooling system and an isothermal system are also installed in the press.



The Prezezzi Data Manager software, for the management of all equipment recipes and extrusion data information, will support the proper Extrusion Process Certificates that this particular market require.

Other features of the press is the patented PE ESS hydraulic system that provides up to 30% in energy saving.



The press is fitted with an handling system that take into consideration the maximum dimensions of the special products and alloys products to be produced with a maximum height of the profiles of 430 mm (17") maximum width of 620 mm (24") and a maximum linear weight of 70 kg/meter (45lb/foot). The handling system have been designed in order to keep the existing press installed at the end of the table (opposite to the new press).

This solution was decided in order to keep the existing smaller press, that is able to extrude smaller profiles, on the same footprint optimizing the space available. The state of the art cooling and quenching system at the press exit, can work with intensive air or intensive water according to the required metallurgical and mechanical requirements of the various products, having the possibility to adjust the quantity of flow in six different zones to avoid distortions but guarantying the best quenching possible. A flying cut solution with puller saw and puller will give the possibility to cut the profiles on the die mark optimizing the scrap. A third puller, on the same rail, will be used when the existing press will be in operation meanwhile the new press will be stop.

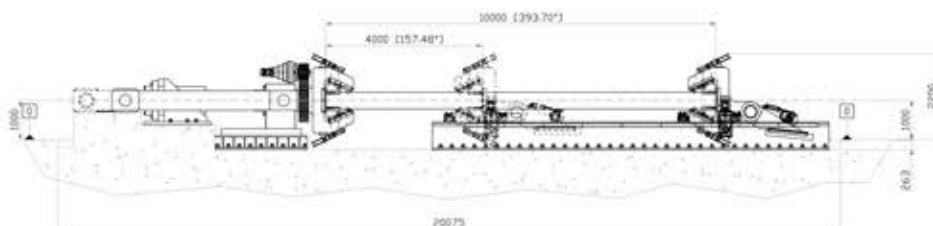
In addition to the existing stretcher, a new "off line stretcher" with de-twisting heads and a maximum stretching capacity of 6,5 MN (720 US ton) for



profiles up to maximum length of 10 meters (30 feet), will be places on the side of the extrusion line.

The independent machine, will have a semiautomatic loading and unloading system and an integrated table for geometrical and dimensional control of the product after stretching.

Prezezzi policy is mainly focused on the design and construction of high quality machines, always in step with the most advanced technologies available on the market. This is the trump card that rewards Prezezzi and the demonstration of this success it can be seen from the constant increase in the number of sales around the world but especially from the success of our customers.



ABOUT US

The **PE GROUP**, that is the union of Prezezzi Extrusion s.p.a, Coim s.r.l, Profile Automation s.r.l and Reiter&Crippa s.r.l, enables us to offer our customers high-level products thanks to the technical specialization that every company of the group develops with passion and expertise.

PREZEZZI EXTRUSION manufactures an entire range of systems for aluminium, copper, brass and steel extrusion including traditional, front loading, back loading, direct, indirect presses and presses with piercer. All the machines are equipped with the most advanced energy saving systems.

COIM is leader in the design and construction of furnaces and machines for the heating of aluminium, copper and brass billets. We're the most recognized in the industry for the highest quality of our products, made in accordance with customers specifications.

PROFILE AUTOMATION designs and manufactures packaging for extruded profiles, machines related to the handling of aluminium extruded profiles and automated warehouses for many sectors. Our high-quality products are of high quality and they fully satisfy our customers' requirements.

REITER&CRIPPA designs and supplies all the equipment for melting, heat treatment and scrap decoating. All the products are engineered with the most advanced technological solutions to reach the best performances in terms of energy saving and foundry metal loss.