

## Efficient billet heating for tube production





COIM srl, part of Presezzi Extrusion Group, is a world leader in designing and manufacturing gas-fired billet heaters for the extrusion of copper, brass and aluminium. Since 1978, the brand COIM has meant worldwide excellence and expertise in energy efficiency, accuracy of heating, robustness and reliability. COIM gas-fired billet heaters are universally known by the most important extruders of brass, copper and copper alloys as the most performing, efficient and reliable on the market. The COIM exclusive heat recovery system allows attainment of the top level of energy efficiency and the lowest gas consumption, significantly above the performances of competitors.

A COIM heater guarantees a very good homogeneity of the billet heating, both between surface and core, and along the length. The generous dimensions of the equipment, the high quality of the installed components and a very well balanced heating system allow also a drastic reduction of maintenance frequency and costs, with the longest guarantees about lifetime of refractory, heat resistant rolls,

and burners. The high performances are reached thanks to continuous investments in the Research & Development Department of Presezzi Extrusion Group, and today COIM is ready and proud to introduce its revolutionary solution for billet heating for copper tube extrusion.

As known, until today the most used available technologies with gas heating were the 'Pusher Type' and the 'Walking Beam'. With brass, up to 920-950°C, COIM had always preferred (and still prefers) the first one. The pusher type guarantees high efficiency (COIM reaches up to 75%), low oxidation, low maintenance costs and few stops of the press, with no need for cleaning and substitution of the internal components (rolls, refractory, burners) for a lot of years.

With pure copper for tubes extrusion, some possible problems are still encountered with this method: more frequent cleaning or substitution of the internal parts, possible sticking of billets, and frequent maintenance, for example. All these problems are very well known by the extruders of copper tubes. COIM's R&D department has been working for many years for a solution to this matter. The



Gas-fired billet heater design

result was the revolutionary gas fired billet heater with carriers:

Not the billets, but the carriers (with the billet on them) are pushed one after the other, moving on the idle rolls. The immediate advantages are that the copper oxide falls from the billet into the carrier (and comes out of the furnace, before being cleaned by an automatic system). Thus the billets cannot stick anymore. Moreover, the rolls are now far from the flames and they don't touch the billet: this means lower costs of maintenance.

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alloys, such as aluminum-bronzes www.coimsrl.net