

Russia Speaks Italian

In recent years "made in Italy" is apparently strengthening and confirming its success and leadership in Russian Federation, even beyond those typical and well-known sectors such as fashion and food & wine industries. In fact, the Italian industrial mechanics is peacefully invading the Federation, spreading its state-of-the-art technology and know-how throughout the entire Former Soviet Union Republics, even reaching the most far-off districts. A sensational case is the one of *Bongioanni Macchine* of Fossano that, in collaboration with Mr. Testa (an italo-french businessman who has been living in Russia for many years now) and his company *SARL Inkeram SA* having headquarters in Moscow and branch office in Kiev, have installed machines and extrusions line almost everywhere in the country.

The installation of an extruder type TECNO 450, equipped with electric control panel and extrusion dies, accomplished in 2006 in Leopoldis, marked the first cautious step of Bongioanni Macchine and Inkeram onto the stage of this market.

In addition to this, the same year was strongly marked by the installation of a roller mill type COMPACT LS810 (\varnothing 800 mm x 1000 mm) in the Ukrainian town of Donetsk and by the setting up of a line for milling, storing and mixing clay and for the extrusion of clay products, in the district of Tver.

Nowadays in 2008, Bongioanni Macchine can show off the sale of other roller mills, as for instance the one installed in Kaluga, of extruders (in Donetsk) and, above all, of complete lines for the preparation, storing and extrusion.

In principle, these lines were designed to reach an output capacity of 60 million pieces of "normal format" per year but, in some cases, their capacity ranges from 20 to more than 100 million pieces of "normal format" per year.

These plants are scattered throughout the whole Federation: from the district of Tomsk to the one of Krasnodar, from the district of Moscow to the Caucasian regions, for a total of more than 80 key-machines installed in two years, not counting outfits and minor equipment such as automatic box feeders,



Fig. 1 Tecno 750 steam extrusion system

rubber belt conveyors, grinding lathes, electric boards, etc...

There appears to be more than a reason behind this success but, the major one is definitely the choice of customer who wisely focus on the core-section of their plants: that is the line for the extrusion of products.

With this regard, Bongioanni has given customers ample and convincing proof that, thanks to its extruders type TECNO, it is possible to combine electronics and mechanics in order to achieve incomparable economic and qualitative results.

This is why, the system RAV has aroused lively interest when Bongioanni introduced it on occasion of the annual conference KERAMTEX, hosted this year in St. Petersburg. This groundbreaking system conceived by Bongioanni Macchine S.p.A. allows to control automatically the rotation of the extruder's auger according to the quantity of extruded clay, that leads to the attainment of excellent results in terms of quality and of energy saving. In particular, it is so innovative as to reach performances with specific consumptions between 0,14 and 0,09 kW/ton/bar.

This means that power consumptions can be reduced of even 20 % to 30 % with respect to conventional extruders

How would one test and prove such a considerable result?

Actually, the method is quite easy: calculate the specific consumption, yet not only considering the tons with respect to the kW – as usually



Fig. 2 Compact LS 1012

many do – but reckoning the factor of extrusion pressure as well.

In fact, dividing the value of absorbed kW by the quantity expressed in tons of extruded wet product and then dividing again by the value of pressure bars, you get a value that, as far as Bongioanni Macchine's extruders are concerned, stays within 0,09 and 0,14; the



Fig. 3 Bongioanni Macchine's premises: assembly line of roller mills

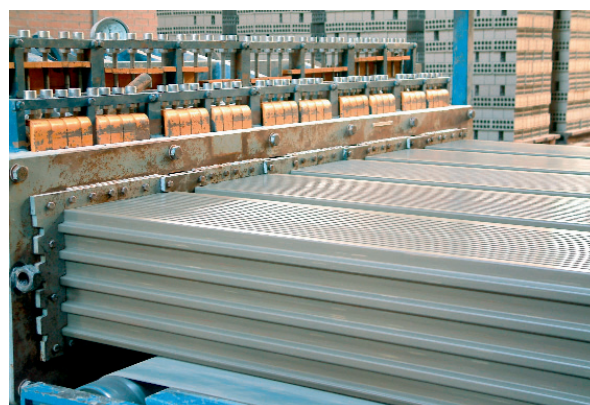
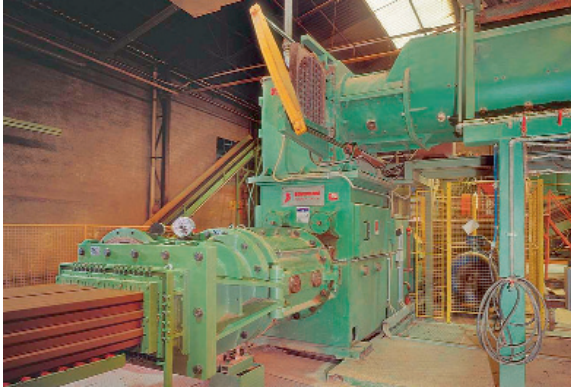


Fig. 4 5-exits "Euroblock" on Tecno 650

BONGIOANNI
MACCHINE
S.p.A.
info@bongioanni
macchine.com
www.bongioanni
macchine.com
O.O.O. INKERAM
117418 MOCKBA
inkeram@
caravan.ru
www.inkeram.ru

Fig. 5 left
Tecno 650

Fig. 6 right
Bongioanni Macchine's premises:
assembly line of extruders



same value attained by traditional extruders is of 0,20.

After all, it is possible to condense this concept in the two main effects resulting from it and namely:

- the possibility to keep the auger at the optimum minimum revolving speed and
- to grant a constant feeding of clay to the extrusion die.

In particular the attainment of the optimum minimum revolving speed of the augers means:

- Reduction of power consumptions
- Reduction of maintenance costs (working at a slower speed, the machine gets worn out more slowly)
- Reduction of production costs

- No more human errors (since the system is completely automatic)

Furthermore the effects of a constant feeding of clay to the extrusion die are:

- A more homogeneous density of the mixture
- A more uniform pushing surface
- An improvement in the quality of extruded products.

This system patented some years ago by the "100 % Italian" Company Bongioanni Macchine S.p.A., has been taken up by other manufacturers who used it as their own. However, despite their attempts, competitors did not succeed in imitating this system in an efficient way: in fact some exquisite mechanical principles adopted by

Bongioanni in manufacturing its extruders, play down the real effect of such attempts, making useless and worthless the results thus obtained.

In its new headquarters in Fossano, that lies in the north-western Italy, Bongioanni Macchine manufactures its whole range of machines and, in particular, all those machines suitable to prepare and refine raw material and to form clay products, including mechanical presses for roofing tiles which are the core business of the company.

Bongioanni Stampi, that is the associated company of Bongioanni Macchine, is based in Fossano too. This company is perhaps the greatest industrial reality exclusively committed to the production of moulds for tiles.