

New victories for **SIGMA's** high purity **alumina A 95 V**



Inspired by SIGMA's recent whopping supply of special refractories around the world, the editorial team at Glass Machinery Plants & Accessories spoke some days ago to Commercial Manager Alberto Tedeschi as well as the company's Chief Operating Officer Federico Mari and its Area Sales Manager, Elia Somaschini.

SUCCESS STORY



Plovdiv facility

GMP&A: ALBERTO, PLEASE GIVE US A BRIEF OVERVIEW OF CORPORATE DEVELOPMENTS AT SIGMA IN RECENT YEARS - ESPECIALLY IN THIS POST-COVID PERIOD.

AT: Sigma made its global footprint much more visible considerably in the last years, while increasing its turnover as well. Notably, the company increased the quantity of refractories manufactured and distributed on the global market, thus placing itself in a leadership position with regard to the production of special pieces.

I started working here in June 1998. At that time Sigma had just 26 people. The main market was domestic - Italy, thus we exported relatively few products. Today we are exactly in the opposite situation, exporting over 80 percent of the total range. By the way I would like to add that, while our production being initially based in our HQ in Locate Varesino, we count now on two production facilities: one here in Italy and the second one in Plovdiv, Bulgaria. Sigma Group has currently 100 employees. Initially

Sigma started here with just one small building, then gradually developed, finally reaching the coverage of the whole industrial area surrounding, next to the main street. The construction of the first unit in Bulgaria began in August 2013 and the production then in March 2014. We have just completed the construction of a fourth industrial building in Plovdiv. In Bulgaria we can nowadays boast of seven sintering kilns. Along with nine ones in our HQ in Italy, we count in total

on 16 sintering kilns. What just said makes Sigma an international leader of special shapes, particularly those of considerable tonnage, with an average monthly production of around 600 tons of shaped refractories and 650/700 tons of pressed refractories.

GMP&A: How are you perceived by the glassworks? Would you rank Sigma as the ideal partner for special refractories?

Locate Varesino facility





Channel blocks layout

AT: Yes, surely. Glass manufacturers always need a reliable partner, which can technically guarantee all materials - both special pieces and standard bricks for glass furnaces, forehearth and regenerators. This makes Sigma really eclectic in case of any glassworks' requirement. As a matter of fact, it may happen that one supplier only is able to present the most convenient and reliable path for a glasswork, thus placing it in a safe condition. On the other hand, concerning large Groups, the parceling out of purchases is quite normal. That may happen thanks to their clear structure, including technical staffs responsible both for standard and special products. In this way, a Group can get also different prices. Considering that several refractories' producers play on the market, we do not all make the same product. The same may happen with the refractory grades required in case of glass furnaces rebuilds. The only way in some cases is to trade certain products, thus to match the customer needs as well as widen the suppleable range. However, in some cases it may be easier and more convenient for glassworks to have an interlocutor only, who is able to constantly

look after their needs. Sometimes Sigma takes the role of main contractor. A recent example is our latest deal with Vetreria Etrusca, which commissioned us the whole range of refractories for their furnace rebuild, excluding fused cast materials.

GMP&A: Of course, in many cases you do not act alone. Do you have any partnership with engineering companies?

AT: Engineering companies acquire the whole furnace construction package and we may sometimes become their suppli-

ers. They must guarantee to the final customer both the validity of their projects and the quality of all refractories selected and then installed on site. We practically work with all engineering companies worldwide. By the way, we recently received a very important approval from the company Sorg regarding our high alumina premium quality A 95 V. Sorg performed corrosion tests on a wide range of high alumina products available on the market and finally identified Sigma's quality like the best in comparison with the other ones, in terms of glass corrosion resistance, by soda-lime glass.



Forehearth superstructures

SUCCESS STORY



Ultrasonic test

GMP&A: Speaking of quality, what tests are performed on your product, and are they carried out by the glassworks or by Sigma itself?

AT: In case of important orders and always, if required, we can certify the quality of our products through issuing the relevant quality certificates. In this way the customer knows that the refrac-

tories installed show exactly the properties certified by our internal tests. Sigma is any time able to carry out specific tests on its products. There is actually an European standard, which identifies the chemical analysis of different products and, on this base, Sigma can always accompany its products with the above-mentioned quality certification. In this way our customers can any time

check that what has been provided really corresponds to what has been declared. Sometimes it may happen that the customer asks for samples of the materials purchased and we are always ready to fulfil its needs. Our internal laboratory checks daily that the production complies with the parameters fixed according to the European standard. As a matter of fact, the values guaranteed are not absolute, they must be inside a range established

Spare parts for feeder





Forehearth superstructures

by those standards. The reason can be searched in the fact that the refractories are non-homogeneous materials, essentially coming from diverse natural raw materials.

SUCCESS STORY GMP&A:

Can you speak on new market areas developed and new customers?

AT: Sure, we are present on all five continents. We are grateful for the trust received by all our customers, one of our most important target is now and will always be in the future to deliver worldwide added value, both in terms of best quality and excellent service. Of course, the sales penetration in the

different areas can change accordingly. Some shall be further developed, while business activity needing to be intensified. That is why we hired new sales people, such as Elia Somaschini, who will mainly deal with the Middle East.

GMP&A: You mentioned several very important Groups. Let's take your latest big project for example: what was exactly Sigma's contribution to the new green field plant in Milan area?

FM: Firstly, let's say that we are really glad to be a part of the worldwide glass family. We are also very proud to have taken on supply of the new green field plant in Milan area. This is not just because the plant is close to us, but also since the supply was really meaningful. We are talking about materials for two furnaces, purchased and supplied like a single order. It does not deal just with the forehearth's glass contact material - channels; it is all Sigma material in the forehearth's - from the beginning to the gob area. Another important supply was to Vetreria Piegarese for furnaces at both the new San Giorgio di Nogaro and the Piegara plants. Once more, all materials ordered are completely Sigma - from the beginning to the forming machines. Furthermore, among the recent and most important supplies, the Eskisehir plant in Turkey should be certainly mentioned.

GMP&A: Besides your A 95 V high alumina premium quality, what are your other leading products?

FM: Definitely, our zircon-mullite grade, which is used for feeders - the last part of the forehearth, leading to the gob forming. Another important quality is our premium mullite grade MUL 70 M, mainly used to manufacture bricks for regenerator chambers.

GMP&A: Will experimentation recently being carried out on the new furnaces generation somehow affect refractory materials?

FM: I think so. There will be surely some important changes in the future. Probably, the special refractories will keep on being required worldwide. Sigma is meanwhile preparing to face this new challenge. It is not yet exactly known, if the glass furnaces will turn into electric, or based on a hydrogen-oxygen mix combustion. It is on the other hand clear, that glass furnaces will always need forehearth's materials, thus to make the gob forming possible. ■



 **SIGMA GROUP**
REFRATORIES with passion

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