PRODUCTION

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SUCCESSFUL CZECH-GERMAN JOINT VENTURE HOB CerTec: WORLD PIONEER IN THE PRODUCTION OF 5-m CERAMIC ROLLS

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HOB CerTec Company has been founded as a joint venture with Keramika Horni Briza a.s. (HOB) Company for the production of ceramic rolls for roller furnaces for firing tile. A history of the enterprise and its work making possible the production of Jumbo 5-m ceramic rolls are presented in brief.

HOB CerTec Company has produced ceramic rolls for tile firing furnaces since 1994 in the town of Horni Briza (near Pilzen, Czech Republic) as a joint Czech-German venture with 80% ownership by the Czech firm Keramika Horni Briza a.s. (HOB) and 20% ownership by the German business partner H. K. Pelmann.

MARKET IN CERAMIC ROLLS

HOB CerTec joined the market in ceramic rolls when it was in a very poor state. Despite 20 – 30% overproduction of rolls in the world HOB CerTec managed to pave the way among established world competitors due to its aggressive marketing and price strategy. By 1998 the company had won about 6% of the world market and had increased the production volume from 20 thousand rolls a month in 1994 to 30 thousand.

A large part of European export falls to countries that lead the production of tile, namely, Italy, Spain, Germany, and Turkey. Sales in Eastern Europe grow steadily, especially in Russia. In the growing Asian market preference is given to Japan, Malaysia, Thailand, China, and Taiwan. The 20% reduction in sales to Asian countries in 1998 caused by the economic crisis was compensated by the growing consumption of rolls in Europe. On the whole HOB CerTec deals with consumers in 19 countries of the world.

It is expected that in the near future the competition in the market will change. Producers possessing advanced equipment, a well-organized investment structure, and enough capital in combination with powerful and rapidly acting management will dominate the market. HOB CerTec has taken measures to improve its future competitiveness, namely, it has fully automated the process of measuring ready rolls, certified the products as top quality, and developed production of Jumbo 5-m rolls.

The company aims at winning 30% of the European market and over 20% of the world market. In order to achieve this goal we developed a strategy consisting in full concentration on the key business, namely, production of ceramic rolls. The production of a new kind of product such as, for example, pyrometer pipes of pure Al₂O₃ for measuring temperature seems possible because we have the requisite know-how and high-temperature furnaces.

QUALITY CONTROL

In order to provide top quality the company uses only synthetic materials of high purity imported from German suppliers. Kaolin supplied by Czech mines is cleaned at the HOB CerTec plant.

From the founding of the company it has worked in accordance with ISO 9000; in June 1998 we received a certificate from British Lloyd’s, which is actually only part of the base for attaining the goal of “zero defect.” The Japanese managing style Kaisen consisting in continuous improvement and optimization of the activities of the company will be used by HOB CerTec for attaining better and better quality parameters.

Some producers of ceramic products have made the mistake of assuming that they can reduce the number of defects and improve the quality just by introducing the ISO 9000
Manager of the HOB CerTec Company H. K. Pelmann (first on the left) with representatives of Russia, Italy, Spain, and China at the CeramiTec'97 exhibition in Munich.

RANGE OF PRODUCTS

The standard range of products of HOB CerTec includes three basic types of rolls, namely, Specialroll for service at up to 1250°C, Superroll for service at up to 1280°C, and Toproll for up to 1350°C.

The last two types have the following advantages:
- safer operation of the furnace even for a large cross sectional area that requires rolls from 3.5 to 4.5 m long;
- longer service life (up to 50%); the tile in the firing zones of the furnace does not fall because of the failure of rolls;
- the possibility of optimizing the density of the charge, because the rolls withstand large loads and provide greater safety if the tile piles up;
- higher firing temperatures;
- higher capacity in manufacturing large flat tile;
- the rolls do not bend under load at the firing temperature;
- precision polishing of the ends of the rolls provides excellent fitting of the drive adapters.

At the present time tile producers have increased the tile size, which along with the need to diminish the expenses has made furnace producers create wider and more economical devices. In order to meet the requirements of this new direction HOB CerTec turned to the production of Jumbo 5-m rolls. Well-known tile producers in Germany, Italy, Spain,