

A photograph of a large, multi-layered archway made of light-colored refractory bricks, set against a dark red background. The archway is viewed from a low angle, looking through the opening.

Refractory Systems | **Carbon Black Reactor**

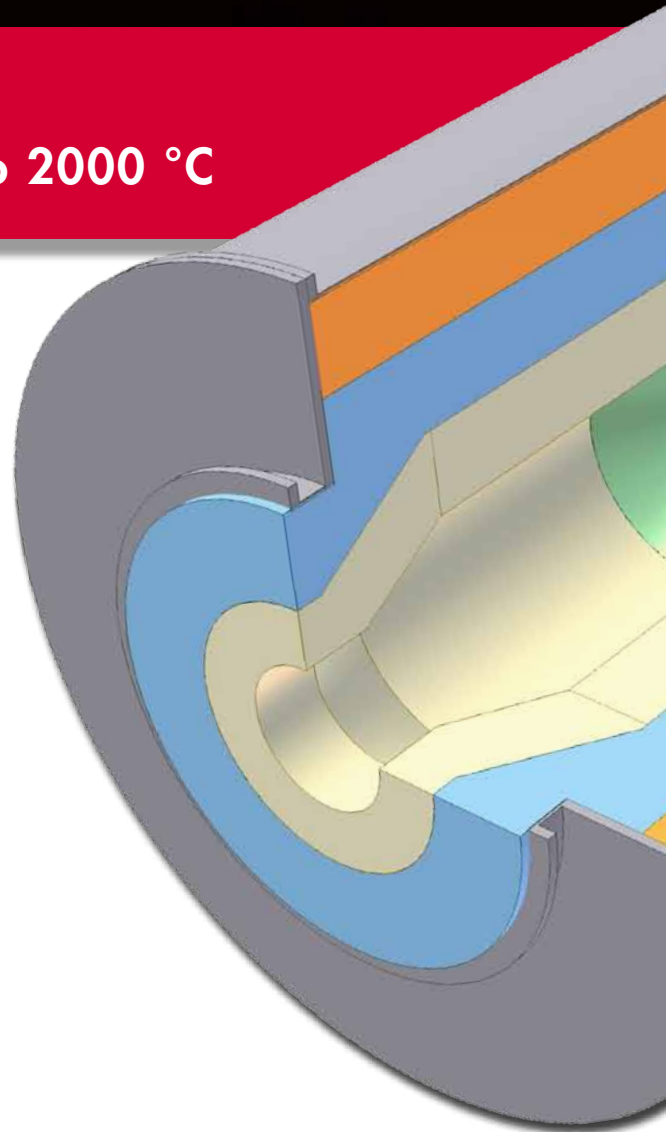


Left: Special shaped bricks in corundum and mullite.

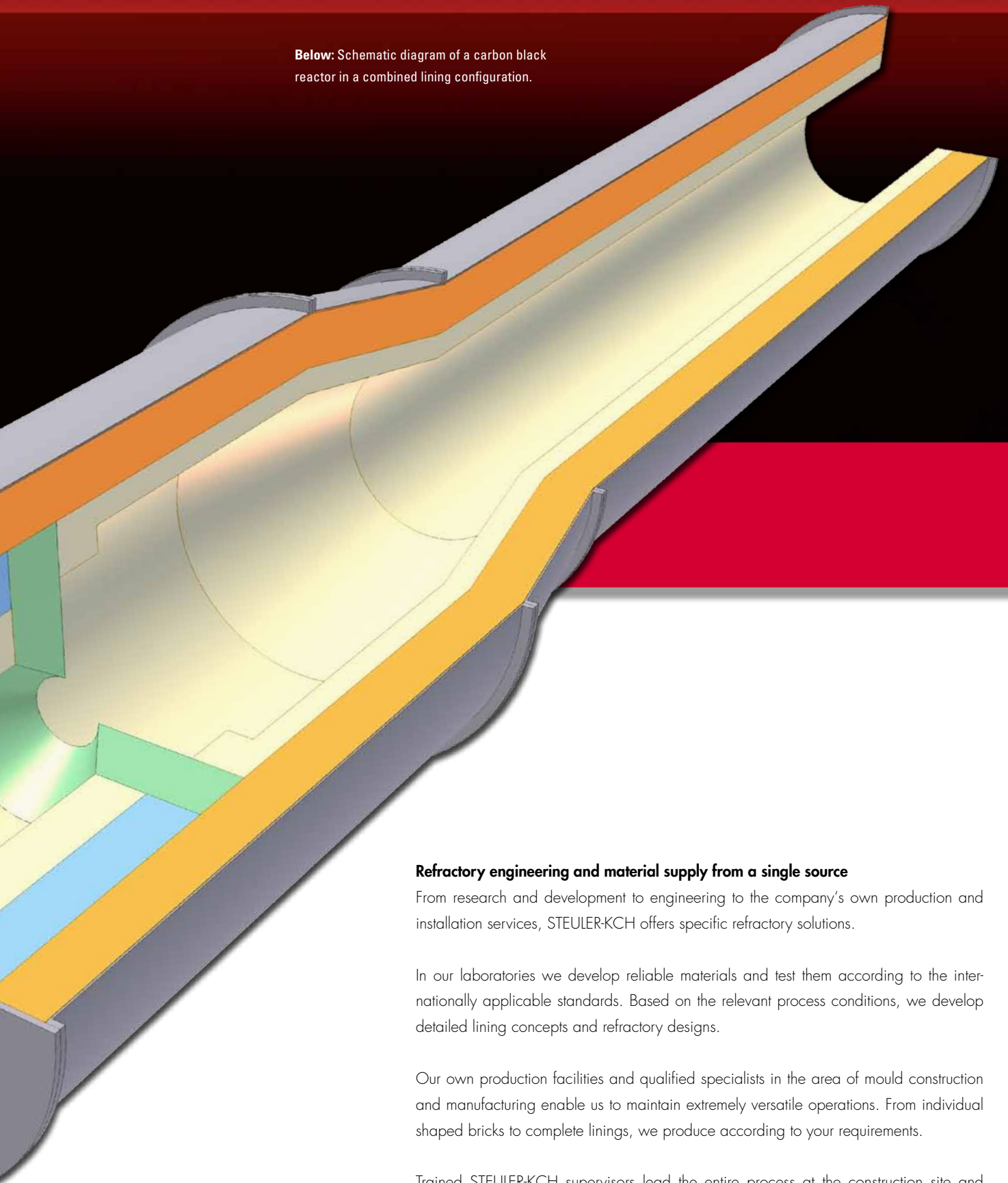
## STEULER-KCH as specialist for high-temperature linings for up to 2000 °C

In the production of carbon black, process reactor temperatures of up to 2000°C are reached. This can only be achieved using specially developed high-temperature ceramics. And high temperatures are not the only challenge. Other conditions such as temperature changes, different atmospheres and extreme flow rates with changing pressures subject refractory materials to extremely high stresses. These processes use materials based on corundum and mullite, which have been especially developed to withstand these stresses.

In collaboration with the plant operators, there is continuous optimisation and further development in this area. Special manufacturing processes and the design of special formats - appropriately complemented by standard products - provide a high level of wear protection, thereby extending service life.



**Below:** Schematic diagram of a carbon black reactor in a combined lining configuration.



### **Refractory engineering and material supply from a single source**

From research and development to engineering to the company's own production and installation services, STEULER-KCH offers specific refractory solutions.

In our laboratories we develop reliable materials and test them according to the internationally applicable standards. Based on the relevant process conditions, we develop detailed lining concepts and refractory designs.

Our own production facilities and qualified specialists in the area of mould construction and manufacturing enable us to maintain extremely versatile operations. From individual shaped bricks to complete linings, we produce according to your requirements.

Trained STEULER-KCH supervisors lead the entire process at the construction site and ensure proper installation monitoring. This also assures the qualified implementation of our refractory solutions.



**Steuler Técnica S.L.**  
Spain

**Steuler France S.A.R.L.**  
France

**Ditescor S.A. de C.V.**  
Mexico

**Steuler Maroc S.A.R.L.**  
Marocco

**Alphaplast S.A.**  
Spain

**Steuler Nordic AB**  
Sweden

**Shanghai STEULER-KCH  
Anticorrosion Engineering  
Co. Ltd.**  
China

**CIMA S.r.l.**  
Italy

**KCT Sp. z o.o.**  
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Branch Austria



Together with its international subsidiaries and representations, STEULER-KCH offers its customers a worldwide network which develops and implements comprehensive system solutions.



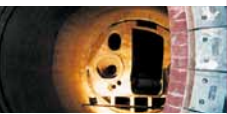
#### **SURFACE PROTECTION SYSTEMS**

Lining and flooring systems  
Cements, jointing materials, masonry systems,  
rubber linings



#### **PLASTICS TECHNOLOGY**

Thermoplastic lining systems  
Equipment, piping and tanks made of  
duroplastics and thermoplastics



#### **REFRACTORY SYSTEMS**

High temperature refractory linings



#### **POOL CONSTRUCTION**

STEULER-Q<sup>7</sup> lining systems



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**Focus on Progress**