

APPLICATIONS.

We offer complete and practical solutions for nearly all types of furnaces, such as

Walking beam furnaces
Walking hearth furnaces
Pusher furnaces
Flat hearth pusher furnaces
Rotary hearth furnaces
Rotary plate furnaces
Bogie hearth furnaces
Batch type furnaces
HD-furnaces
Roller hearth furnaces
Soaking pits
Boiler plants



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FURNACE- & PLANT ENGINEERING.

MADE IN PLETTENBERG

www.beka-feuerfest.de

 **Beck
u. Kaltheuner**
FEUERFESTE ERZEUGNISSE



**TODAY AND IN FUTURE.
TOGETHER.
TECHNOLOGY.**

... Progress made in Plettenberg.

// TODAY AND IN FUTURE

ABOUT US.

**FOR MORE THAN HALF A CENTURY,
WE SUPPLY REFRACTORIES WORLDWIDE.**

Because we love our work, we assure our customers that we deliver high technology and best quality orientated products and services.

Beck u. Kaltheuner operates at two locations in Plettenberg as well as in Duisburg and has an experienced technical- and engineering department, its own product development site as well as an assembly department and a large machinery park.

The BEKA-team, consists of 107 well experienced constructors, electronic technicians, mechatronic technicians, procurement and sales engineers and has last but not least committed themselves to the production of valued and reliable refractories.

We are an innovative, medium-sized company, which was founded in 1953 in Plettenberg in the Sauerland. Today, we are known as a renowned, intercontinental supplier of refractories and carry our quality seal "Made in Plettenberg" into the world of refractories.



**HERE YOU GO
TO THE IMAGE FILM**



JUST SCAN



// TOGETHER

WHAT WE OFFER.

Engineering – starting from the first drawing creating: the best!



At our engineering plant we develop all blocks and new linings for furnaces, but also complete systems. There, we work closely together with renowned furnace and plant constructors as well as universities.

Research & development – the time does not stand still, we don't either!



We work with our research and development team continuously on innovative and economical product solutions for different kinds of applications, which are produced afterwards in our plants.

Installation – from one of the best teams in Germany!



Our professional and experienced supervisors take care of demolition and installation of refractories and elements. Repairs with modern methods and tools is their everyday life.

// TOGETHER

BEKA KNOW-HOW.



Quality assurance - we achieve the maximum!

With the help of our ingenious quality management system, we are not only able to meet the demands of our customers, but to surpass them. Standardized and economical processes, combined with continuous controls, ensure that safety and health protection are in accordance with all necessary criteria, and beyond.



Machinery – Full-Service by diversity!

With our balanced machinery park we are able to carry out demanding linings and repairs.



// TECHNOLOGY

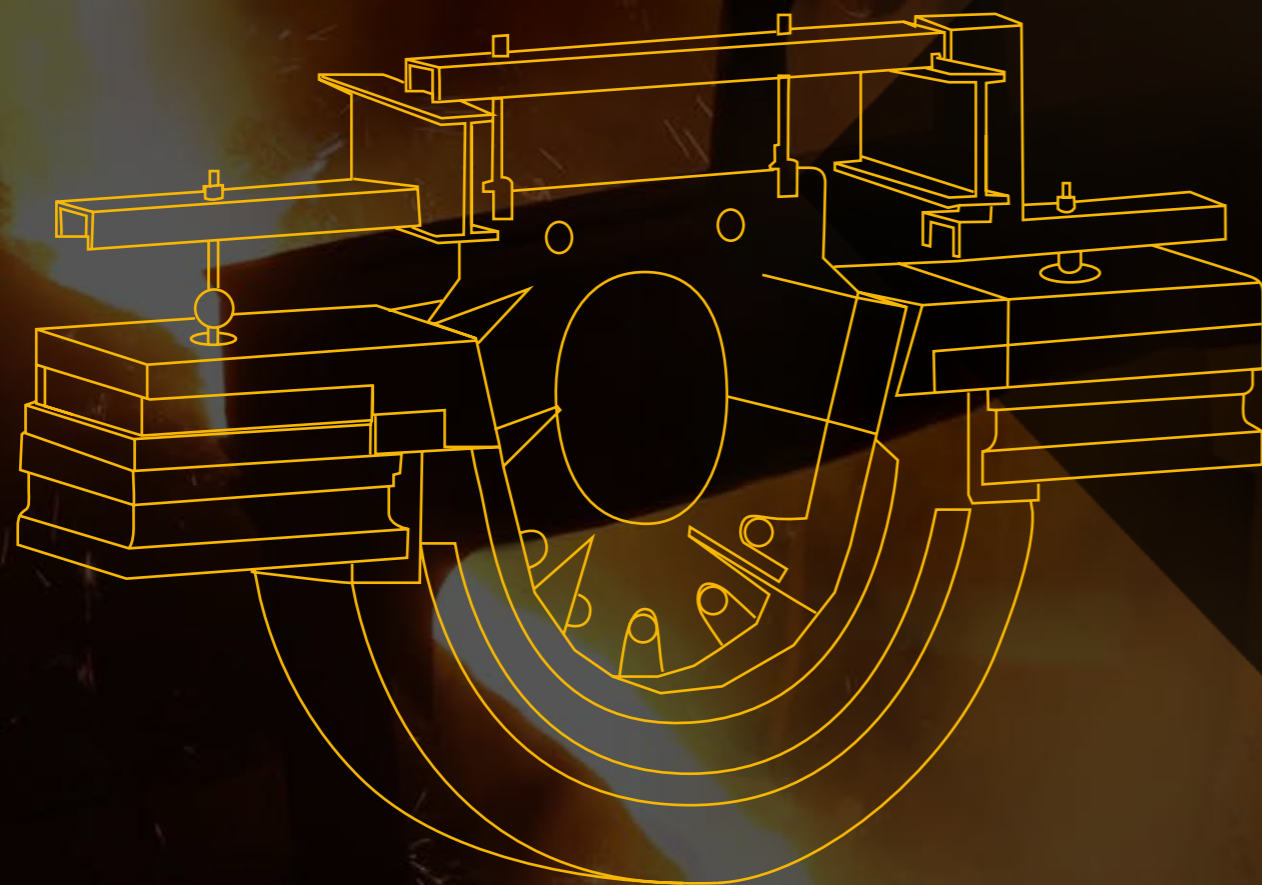
FURNACE- & PLANT ENGINEERING.

Complete solutions and supplies for all types of industry furnaces.

- Qualified partner for lining of new furnaces and repairs
- Full-Service from one-hand: engineering, installation and supervision on-site
- Project documentation, in order to guarantee consequent development of plant
- The supply program contains roof systems, curve blocks, sandwich blocks, lintel and diaphragm blocks, hearth blocks, burner blocks and many more...



ROOF CURVES.



Prefabricated roof curves

Often used in rolling furnaces for separating the burner zone from the rest are battle lintels running across the furnace. The repairs are complicated and take a lot of time.

Separation curves made of individual prefabricated pieces allow an extremely short installation time of only 1-2 days for a complete curve.

- controlled production process
- steel frame and anchors are pre-assembled at our works
- short installation time, no shuttering necessary
- screw mounting allows exact adjustment of block
- minimum heating-up time = fast operational readiness after installation

// TECHNOLOGY

ROOF BLOCK SYSTEM.

Roof block system

- immediate installation after arrival possible, as already pre-assembled at our works, incl. insulation blocks and ceramic anchor bricks
- before delivery blocks are completely dried and burned
- guaranteed high life time
- due to production process rammed blocks allow higher elasticity
- coordinated anchor system allows construction variety and exact adjustment

Reduction of failing times

- high operation security, long life time
- fast heating-up time after shut down
- easy repair of small damages

Saving of energy

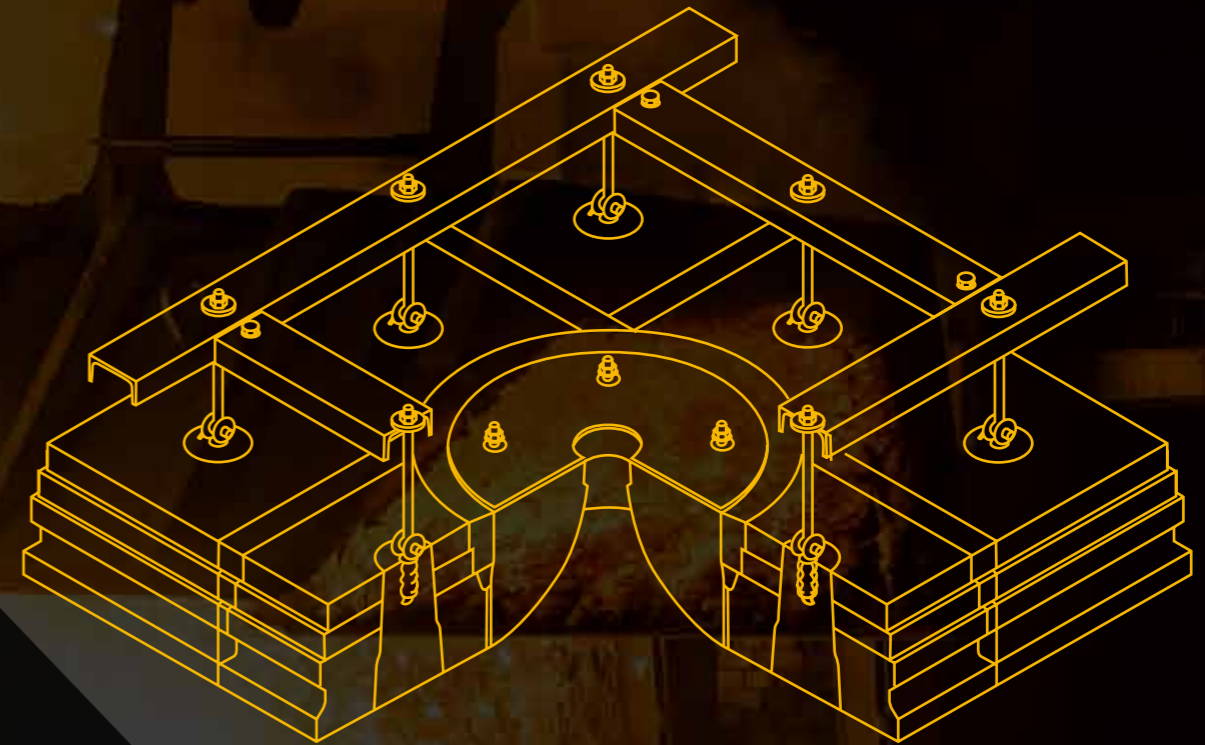
- low heat loss
- low surface temperature
- low blow out losses

Install quality

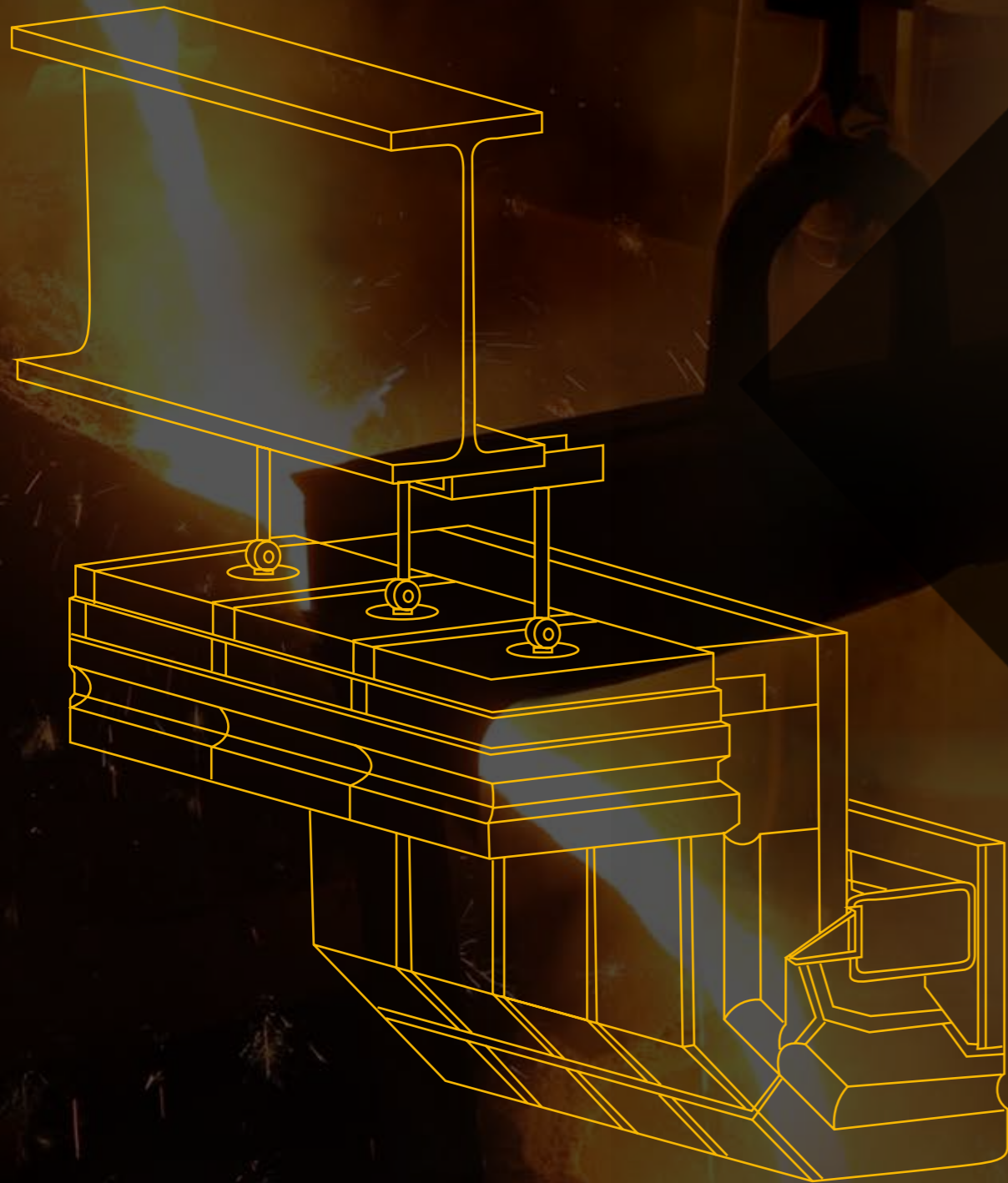
- by quality securement
- controlled block-production at our works

Easy installation

- not qualified personal necessary
- no complicated shuttering necessary
- short heating-up time



LINTEL BLOCKS.



Lintel blocks: a special solution by BEKA

- refractory products with high temperature resistance
- individual customized production
- construction variety and exact adjustment by coordinated anchor system
- minimum heating-up time = fast operational readiness after installation

Accurate dimensional blocks are rammed, concreted and completely dried and burned.

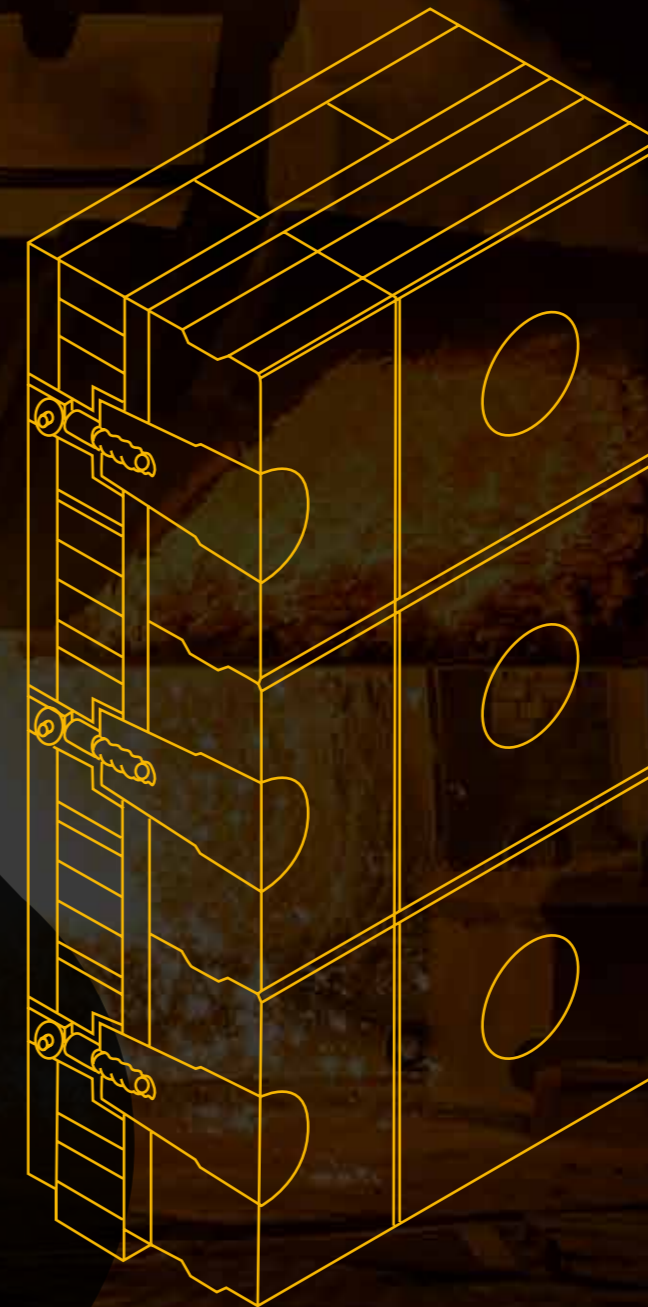
- anchoring according to surrounding
- the blocks weight forces are intercepted by appropriate installation of matching consoles, this results that nearby refractory zones in the furnace stay free of load.
- short installation time, less shuttering works necessary

// TECHNOLOGY

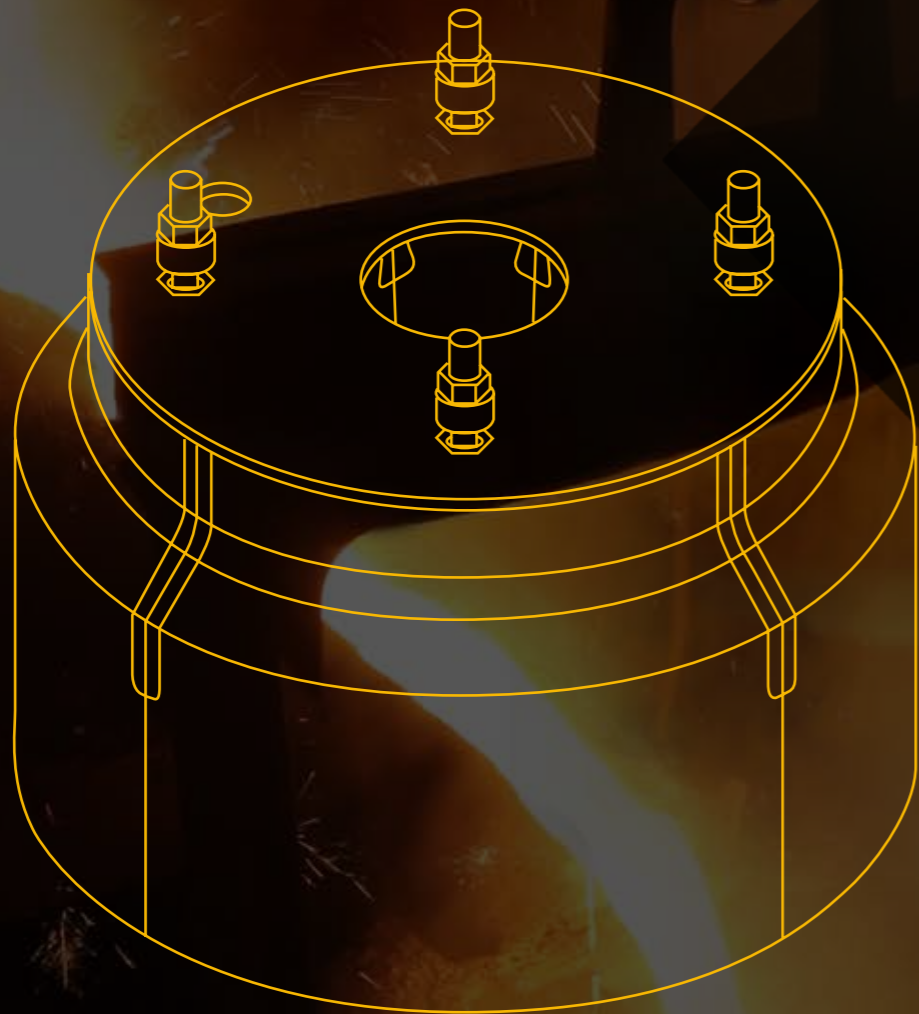
BLOCK WALLS.

Block walls: a special solution by BEKA for all wall linings

- construction of individual wall blocks according to the furnace geometry and with a slot-spring connection
- anchoring is executed by support of a ceramic and metallic fixing element onto the existing steel construction
- supply of the elements after these have been completely dried and burned
- installation of the wall blocks is done without shuttering
- short installation time
- short heating-up time = fast operational readiness after installation



BURNER- & NOZZLE BLOCKS.



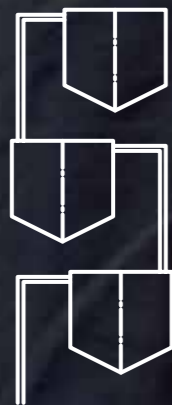
- are rammed or concreted according to details from the customer or burner producer
- production can be done single or multiple, complicated geometry is no knock-out factor
- the patented **BEKA** anchoring system can be useful for fixing on any other steel construction
- suitable versions for each roof- and wall system
- products can be delivered totally dried and burned
- on request, it is possible to install a special sealing system next to the refractory material
- short heating-up times = fast operational readiness

TECHNOLOGIES.



BLAST FURNACE

The blast furnace route, so called integrated route, is still the most significant method in order to produce raw iron.



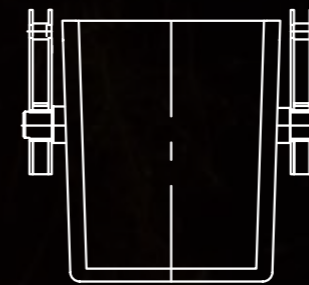
CEMENT

The product portfolio of Beck u. Kaltheuner includes high-alumina monolithic products with special properties, specially designed and developed for the use in cement works.



COKE OVENS

We have many years of experience in the delivery range of door plug systems with anchor bolts anchorage for coke oven doors.



STEEL PLANTS

Accurate dimensions and all in one-hand service solutions, is our reaction to the worldwide increasing demands for refractory masses and monolithic prefabricated blocks.



ALUMINUM

Our service includes the maintenance as well as the repair of firm plants and can be executed while the system is running or switched off position.