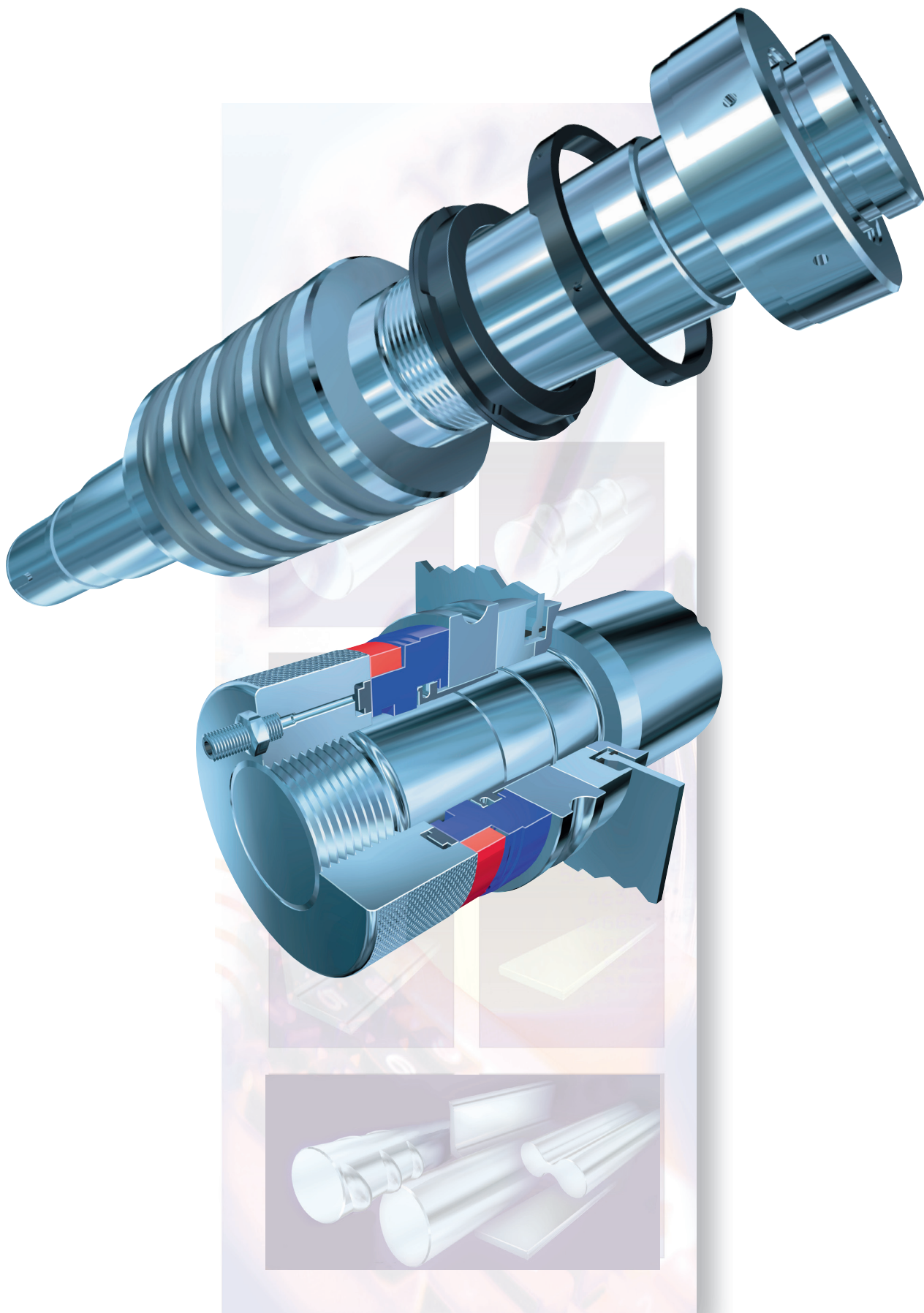


# **KAFIX**

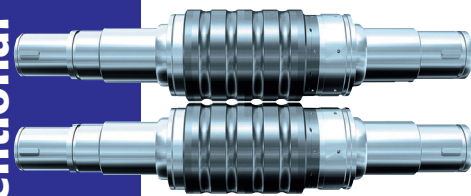
***composite roll***



# THE SECURE CLAMPING SYSTEM

- Minimized mill downtime
- Purely axial roll ring clamping
- Improved rod shape and surface finish
- Complete stainless steel clamping system
- ISO 9001 certified manufacturing process for total customer satisfaction

Conventional Stands



**KAFIX**  
composite roll **A**

Highest flexibility due to:

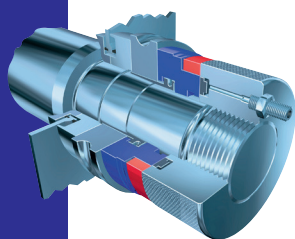
- Capability to mount roll rings of all materials, such as TC, PM and cast – according to the campaign needs
- Compatible to all roll ring brands
- Easy assembly and disassembly at the roll shop

**KAFIX**  
composite roll **F**

Ready to use:

- More usable barrel length available – more passes available
- Higher transferable torques – enable a much broader application range
- Reduced spare parts - clamping system consists only out of three parts
- Fully adaptable to existing ring dimensions
- Available as one way **or** reusable system
- Complete solution (ready to roll)

Finishing Block /  
Cantilever Stand



**KAFIX**  
composite roll **AF**

Pure axial clamping for the finishing block and cantilever stands:

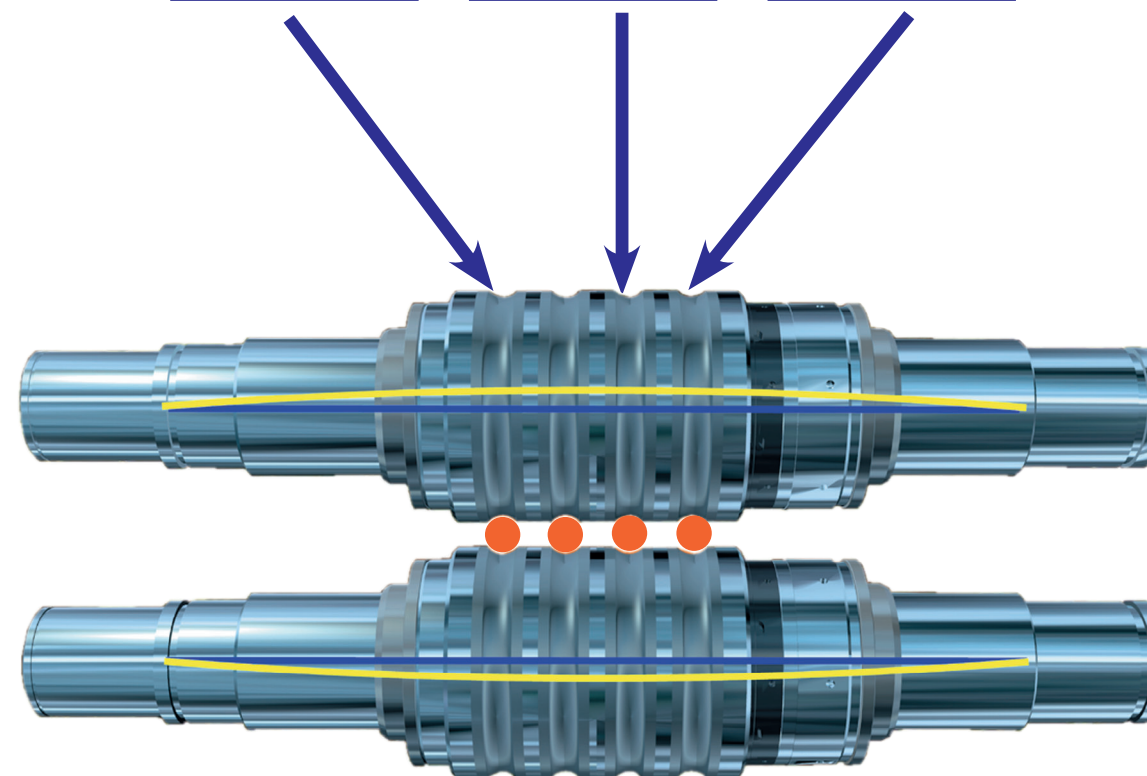
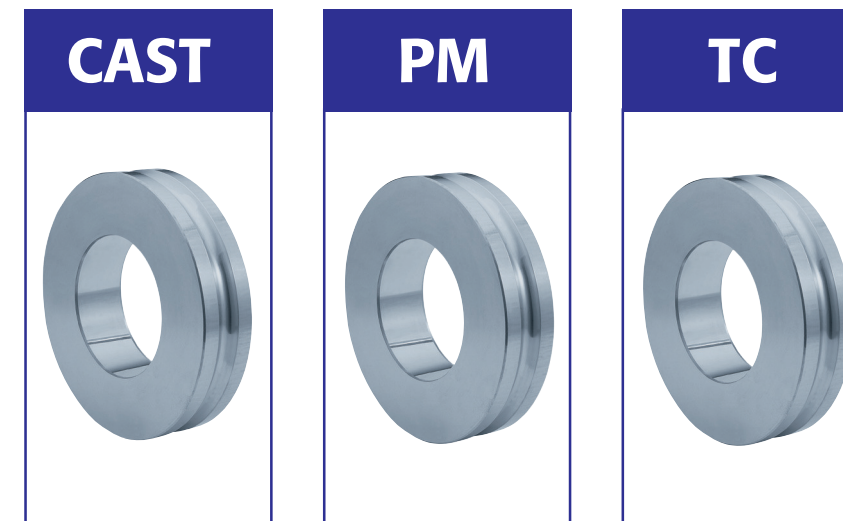
- Exactly defined clamping forces only
- Quick and easy roll ring changes
- Exact positioning of the pass center (no offset)
- Possible reduction of the ring width, compared to radial systems
- Economic use of TC-rings with low binder content possible
- Minimized wear and maintenance

## KAFIX Principle:

The basic principle on which the **KAFIX** axial clamping system operates is simple: The shaft is stretched by a fixed amount by hydraulic means and the gap which then develops between the hydraulic nut and the other shaft components must then be mechanically filled with the highest accuracy, without any play.

Therefore a defined pretensioning force is given.

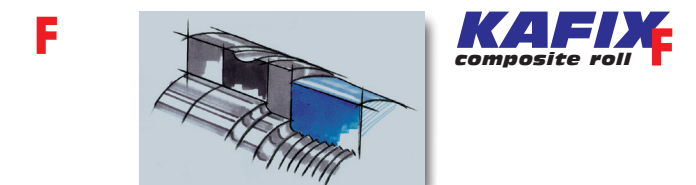
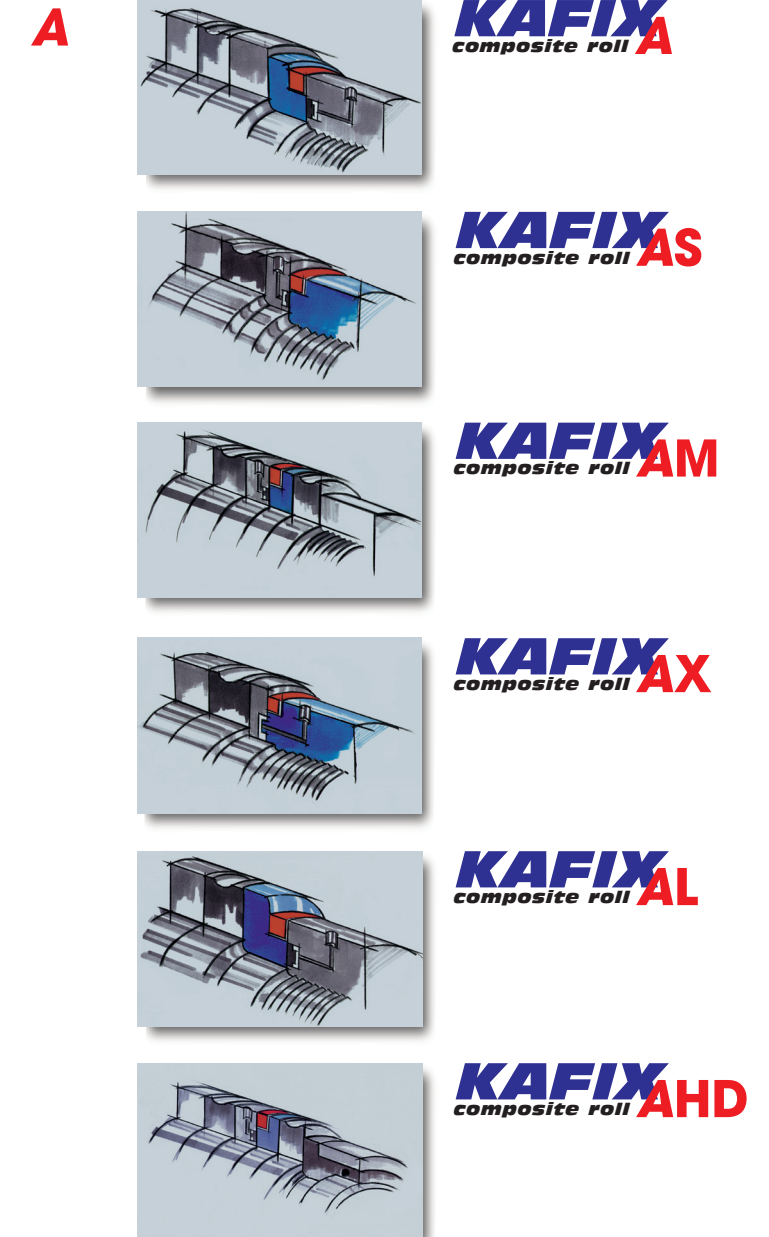
Most suitable materials for every application and campaign demands:



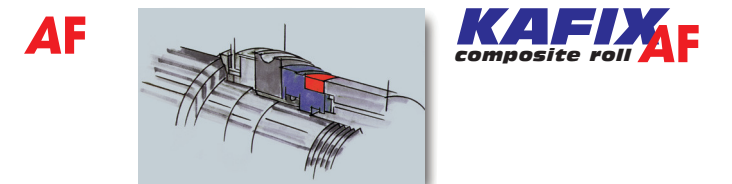
— bending of a conventional cast iron roll  
— minimized bending with **KAFIX** Composite Rolls

## KAFIX Types:

Intermediate Train (wire) / Finishing Train (rod)



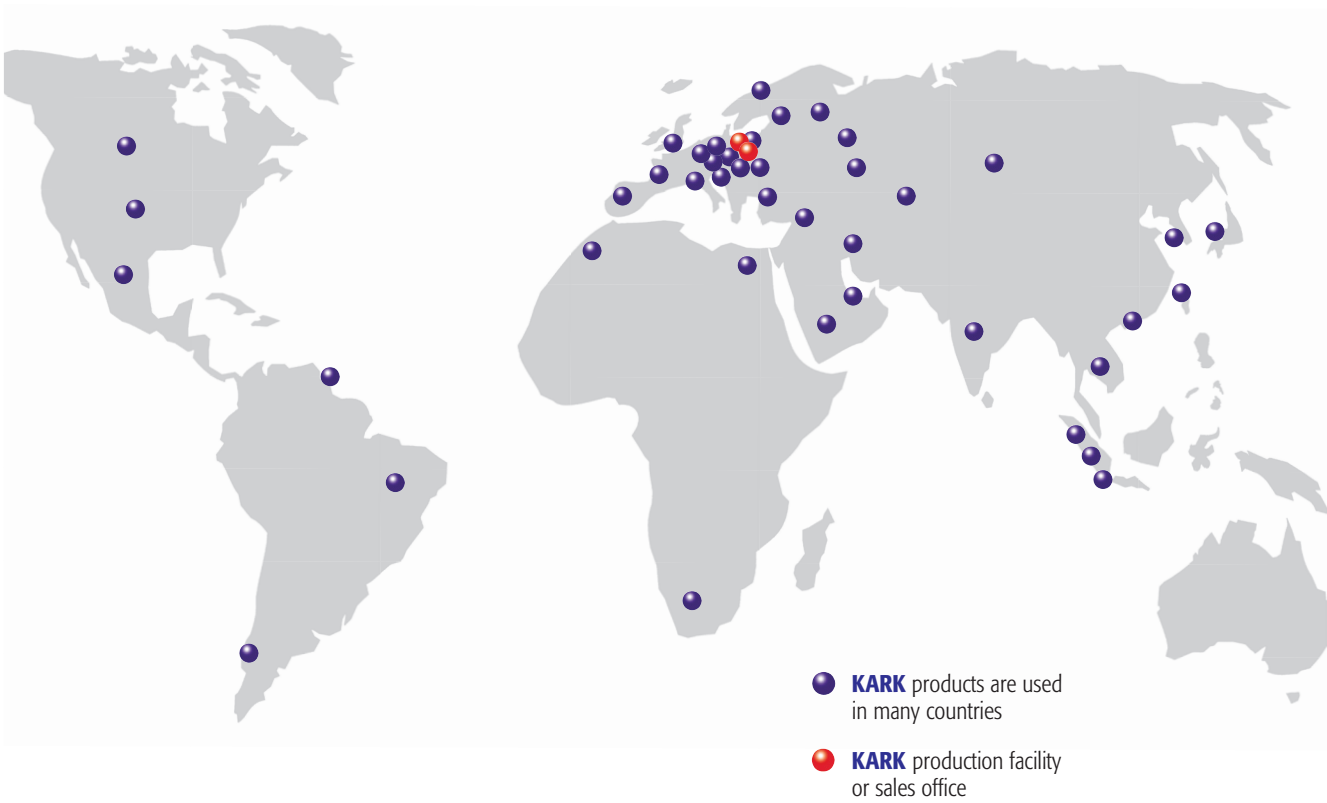
Block



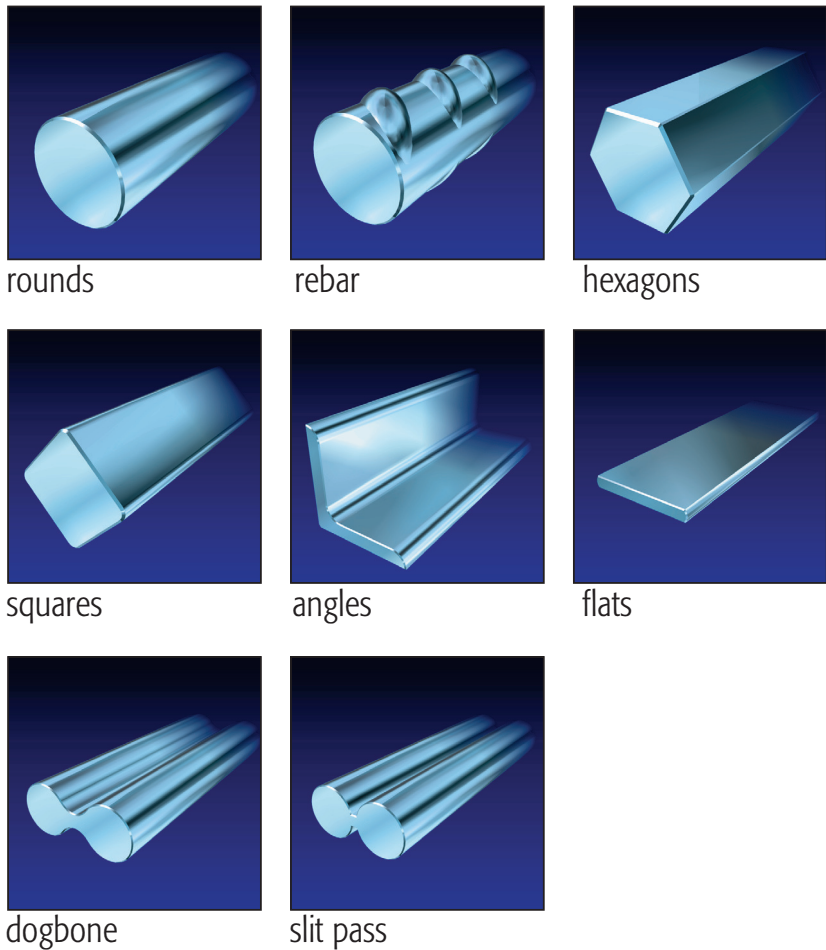


# History:

- 1978 First composite rolls with special thrust bolts are manufactured at Kark for a contiguous steel plant.
- 1980 Kark produces the first composite rolls with a design of their own. The roll rings are fixed by means of a taper sleeve.
- 1983 Kark produces the first roll shafts for a finishing block.
- 1988/89 First implementation of the KAFIX A and KAFIX AF clamping system.
- 2003 On demand of a customer and due to higher rolling forces, KARK designs an axial clamping system without thread for four strand rolling. The forces are transmitted through a divided ring.
- 2015 Implementation of KAFIX F.



**KAFIX** rolls are the perfect tool in the manufacture of various light shapes and sizes, like:



- ArcelorMittal
- BSW
- BMZ
- Cape Gate
- Celsa
- FnSteel
- Gerdau
- Ovako
- Qatar Steel
- Rahji Steel
- Scaw Metals
- Sonasid
- Southern Steel
- Tata Steel
- Třinec Železárny, A.s.
- Megasa S.A.
- Schmolz + Bickenbach AG
- Bangkok Steel Industry
- Saudi Iron Steel



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