

# Electrode Arms

New design of current conducting arms made of copper and steel for highest electrical efficiency



**NEW DESIGN!**  
Exclusively available at BSE

## Principles.

- A new electrode arm design – mutually developed by BSE and BSW – featuring a steel structure with copper as conducting material.
- Further improvement of efficiency while at the same time reducing maintenance efforts.
- The BSE portfolio still offers electrode arms made of aluminium for use in weight-critical situations.
- Available in monolithic design or in flange design for easy maintenance and flexible use of electrode holders.



Alternative design with aluminium for weight-critical situations

## Concept.

- Electrode supporting arm with core-superstructure made of steel.
- The casing as conducting part is made out of edge copper plates instead of copper-plated steel.
- Eliminating the “edge” problem by using a shape-bent hull of same material thickness.
- Direct cooling of the copper mantle.
- Elaborate calculation of high current flow for exact dimensioning of components and optimum power input of the complete system.



Tailor-made calculation of high current system...

## Advantages.

- Highest electrical efficiency due to tailor-made engineering and larger copper thickness.
- Improved cooling efficiency at reduced cooling water consumption.
- Compact design resulting in low weight.
- All proven advantages of the flange system:
  - Higher availability due to faster change of holder
  - Increased safety: standard maintenance of holder can be done at the workshop
  - Reduced investment in spare parts required.



...resulting in highest efficiency and durability of the equipment

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# BSE

BADISCHE STAHL-ENGINEERING GMBH

**From Steelmaker to Steelmaker**



**Consulting &  
Qualification**



**Tools &  
Equipment**



**Services &  
Spare Parts**



**Engineering  
& Projects**

# We are Steelmakers!

BSW and BSE – a unique partnership that will help you to reach even ambitious goals.

Since 1983, the Badische Stahl-Engineering GmbH (BSE) has been acting as a service provider for increasing the efficiency and productivity in the electric steel industry world-wide.

BSE is a sister company of the Badische Stahlwerke GmbH (BSW), one of the world's most efficient Electric Arc Furnace steel plants.

This unique partnership between BSW and BSE ensures that all products and services provided by BSE are not just based on mere theory, but on more than 4 decades of own proven operational experience.

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