

ADVANCED CRUCIBLE TECHNOLOGY

CHALLENGE

- Improve ingot quality
- Increase lifetime for crucibles and base plates
- Reduce distortion
- Reduce mechanical damage



SOLUTION

Seamless forged crucible with

- More homogenous grain structure and material
- High mechanical precision
- Excellent material properties
- High degree of thermal conductivity
- Good mechanical strength
- High softening / recrystallisation temperature

APPLICATION

- For all ESR and VAR furnaces remelting special alloys and Ti

ADVANCED CRUCIBLE TECHNOLOGY

ADVANTAGES

High performance seamless crucibles and base plates from special copper alloys lead to increased lifetimes. Furthermore an improved ingot quality.



The performance of the copper crucible and base plate is one item which plays a decisive role in increasing the productivity and performance of the furnace. The key to this performance improvement of the copper crucible, is selecting an alloy with the right combination of mechanical properties. The material must be precisely tailored to the application. Seamless forged crucibles made of Elbrodur® G (CuCrZr) are a new economical alternative to conventional copper (DHP-Cu or Cu-HCP) crucibles. The basic (longitudinally welded) construction and standard copper alloy has remained unchanged ever since this technology was introduced. Forged Elbrodur® G (CuCrZr) crucibles are the new economic alternative. Seamless forged crucibles and base plates made of Elbrodur® G in regular use have shown dramatic improvements in performance over conventional crucibles.