







Revision No: 001 Date: 07/10 Product Datasheet - Melt Shop Refractories

## **ENERTEK**

Premium crucibles for non-ferrous applications

**Product Description** 

High thermal efficiency crucibles designed to minimize energy consumption in aluminium holding furnaces.



Benefits

The thermal performance of the crucible has a significant impact on foundry costs and can lead to a considerable energy cost saving and related reduction in  $\mathrm{CO}_2$  emissions. This is particularly true of aluminium holding furnace applications where the energy consumed over the lifetime of the crucible represents a cost that is many times that of the original purchase price of that crucible.

**ENERTEK** crucibles have been formulated and manufactured to offer the most thermally efficient crucibles for holding molten aluminium.

ENERTEK crucibles can be applied to all standard designs of aluminium holding furnace but are particularly effective in electrically heated furnaces. To achieve the maximum benefit from ENERTEK crucibles, they should be installed and operated in accordance with the published Foseco use and care guidelines.

The formulation and manufacturing process for ENERTEK crucibles have been selected to give maximum thermal efficiency. The external protective glazes have been chosen to work effectively at the lower temperature typically found in aluminium holding furnace applications thereby maintaining typical crucible life.

Application

Holding of aluminium as well as other low temperature applications.

To "dry-out" the crucible and furnace slowly heat up to 200°C in 2 hours.

Then quickly heat up within one hour to min. 800°C to ensure a uniform fusion of the glaze with additional anti-oxidation coating.

Subsequently, bring the crucible to working temperature and charge immediately.

After its first use the "dry-out" cycle of 2 hours is no longer necessary, only if the crucible is out of use for several days do you have to repeat the start up procedure.

Heating the crucible too slowly or failure to achieve a temperature of 800°C during the first use will have a considerable negative influence on crucible life.

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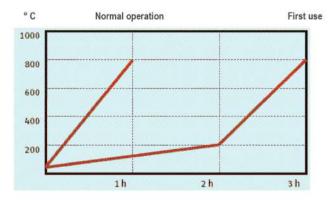




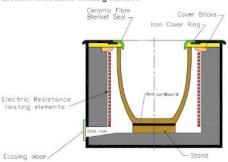




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## Electric resistance holding furnace



Crucible sizes available

Packaging

ENERTEK crucibles are available in a range of sizes typically used for aluminium holding furnace

The table below in Appendix 1 details the standard sizes currently available. Further sizes and designs can be provided upon request.

Standard Packaging is shrink-wrapped on pallets.

Storage & Shelf Life ENERTEK crucibles should be stored in warm and dry conditions.

(For more information see our catalogue and crucible use & care guide)

Health & Safety See Material Safety Data Sheet, copies of which are available on request.

**Further Remarks** ENERTEK crucibles are manufactured to ISO9001 and ISO14001 quality standards.

> For safety reasons the product mentioned above must only be used according to these application guidelines. The above-mentioned data are guidelines only and do not represent a specification. All rights to make technical changes to improve the product are reserved.

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### Appendix 1

Currently available ENERTEK Crucible sizes in Europe. Further sizes and designs can be provided upon request

ENERTEK Description	Nominal Aluminium Capacity (Kg)
ENERTEK BU 200	200
ENERTEK BU 250	250
ENERTEK BU 300	300
ENERTEK BU 350	350
ENERTEK BU 500	500
ENERTEK BU 600	600
ENERTEK BP 200	200
ENERTEK BP 300	300
ENERTEK BP 350	350
ENERTEK BP 500	500
ENERTEK BP 600	600
ENERTEK BP 750	750
ENERTEK BP 800	800
ENERTEK BPS 800	800
ENERTEK BPS 1000	1000
ENERTEK A 500	150
ENERTEK A 600	180
ENERTEK A 800	250

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