

Case Study ResCoat Coating

-better erosion resistance & increased production output

Info

Product name: ZYLS 815 x 610 with ResCoat Coating

Application: Copper alloy melting

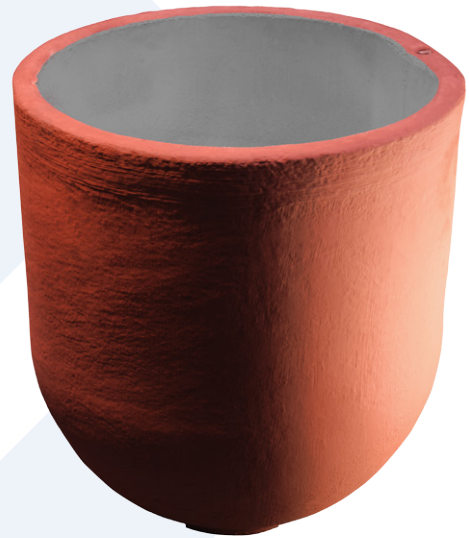
Parameters

Furnace: Induction furnace (180Hz)

Capacity: Ca. 580 kg (1279 lbs.)

Casting temperature: 1100°C (2012°F)

Alloy: SnPbZn - Copper - Alloy



Picture: BNS 600 PT with ResCoat Coating

Benefits – Comparison of Syncarb with ResCoat Coating against existing crucible*



better erosion resistance



increased lifetime



less crucible change overs



higher metal output

*For more details, please refer to page 2.

Existing Crucible

The customer was using an ISO pressed, clay bonded, cylindrical crucible for melting a Copper alloy in an induction furnace at 180 Hz. The low frequency operation created significant metal movement during melting which was wearing off the crucible faster and led to failure of the crucible by erosion.



Picture 1 SnPbZn copper alloy melting.

Syncarb with ResCoat Coating

With ResCoat, the customer achieved 20% higher metal output over the crucible life. This was due to better erosion resistance provided by ResCoat which led to higher crucible life.



Picture 2 Syncarb with ResCoat Coating.

Comparison Table

Product name	Production output	Improvement
Existing Crucible	34029 kg	+20%
Syncarb with ResCoat Coating	40823 kg	

Benefits

- Less erosion
- Improved lifetime
- Higher output
- Less crucible changes