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

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.

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.

Comparison Table

<table>
<thead>
<tr>
<th>Product name</th>
<th>Production output</th>
<th>Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing Crucible</td>
<td>34029 kg</td>
<td>+20%</td>
</tr>
<tr>
<td>Syncarb with ResCoat Coating</td>
<td>40823 kg</td>
<td></td>
</tr>
</tbody>
</table>

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