

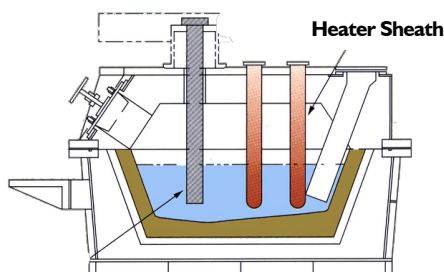
Immersion Heater Sheaths

MORGANITE ACE IHS

For crucible-less furnaces and casthouses

Morganite ACE Immersion Heater Sheaths are manufactured from advanced ceramic materials, offering superior thermal conductivity, high temperature and oxidation resistance, making them ideal for protecting heating elements from harsh environments and ensuring uniform heat distribution for melting and holding non-ferrous alloys in crucible-less furnaces in foundries and casthouses.

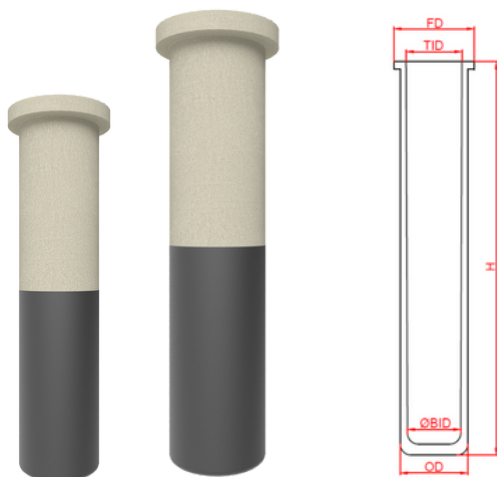
Advanced coatings play a crucial role in reducing dross build-up on heater sheaths. This not only boosts productivity but also plays a key role in improving the overall quality of the castings.



Vertical Immersion Heater Sheath in crucible-less furnace

Operational Excellence Benefits

- Uniform heat distribution throughout service life
- 3x service life improvement compared to ceramic sheaths
- Min. dross accumulation, prevents cracking during service
- Ease of cleaning - lower downtime and improved productivity



Morganite ACE IHS are available in different sizes and can be customized to suit a variety of applications in electric immersion heater furnaces.

Item	Max FD(mm)	BID(mm)	TID(mm)	Min OD(mm)	H(mm)
1	200	95	104	140	1350
2	240	115	124	160	1350
3	240	140	145	180	1350
4	250	145	154	190	1350
5	260	175	183	220	1350
6	280	195	201	240	1350
7	290	209	219	260	1350

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Case Study: Immersion Heater Sheaths

Customer: Casthouse manufacturing aluminium slab, Asia

Application

Holding chamber of Alpur Novelis furnace (flow rate 35 tons/hr)

Immersion Heater Sheaths (size): L1350 x ø220 - 2 pcs.

Current challenges

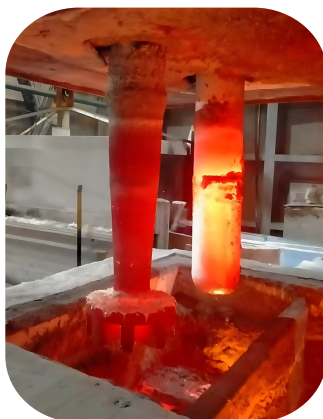
- Heavy dross adhesion leading to lower conductivity during service
- Oxidation of Heater Sheaths above melt line led to cracking
- Inconsistent lifespan of 2-3 month

Morgan Solution

- Highly conductive material for uniform heat distribution
- An innovative material with high oxidation resistance
- Non-wetting coating minimizes dross accumulation

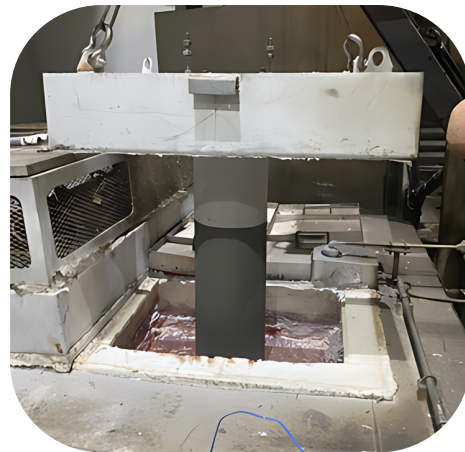


Heavy dross accumulation on
Ceramic Heater Sheaths



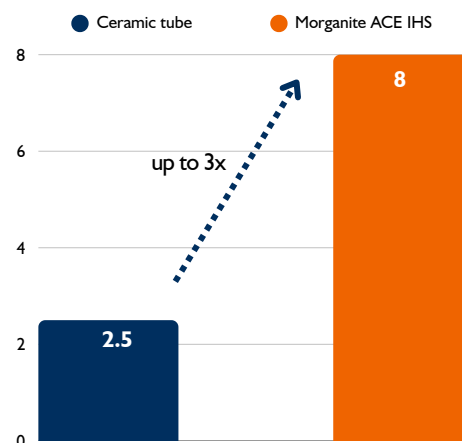
Morganite ACE IHS - no dross sticking
after 6 month in service

MORGANITE ACE IHS



Heater Sheath installed in
the holding chamber

Life comparison (months)



Operational Excellence Benefits

- Uniform heat distribution throughout lifespan
- Extended service lifespan up to 3x
- 60% savings per year on consumable costs
- Enhancing productivity by reducing machine downtime

For all inquiries, please contact our specialized sales offices.

MORGANITE ACE
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