FACT-SHEET

CURVED ELECTROMAGNETIC STIRRER (CES)

The Benefits..

→ Increases Furnace Productivity up to 25%*
→ Reduces Energy Consumption up to 15%*
→ Reduces Melt Loss up to 25%*
→ Rapid Chemical and Temperature Homogeneity
→ Air-Cooled Inductor
→ Very Reliable - No Moving Parts and Easy to Maintain

The System..

Based on their highly successful, versatile Electromagnetic Stirring (EMS) range, ALTEK have developed a curved electromagnetic stirrer design for applications where the furnace shell is curved or rounded, specifically dome furnaces. ALTEK inductor is still 100% air-cooled and does not require an expensive, complicated and potentially unsafe water cooling system close to the furnace. The curved inductor profile ensures the electromagnetic field penetrating through the refractory into the molten aluminium remains constant along its length. However its defining feature is ALTEK’s advanced controls which can instantly switch the direction of the electromagnetic flow. This creates significant molten metal flow into the centre of the dome furnace where most of the submerged scrap is located, and ensures excellent temperature and chemical homogeneity.