AE Electric

Ladle Refining Furnace (LRF)

Ladle Refining Furnace is used to refine the molten steel from primary melting furnace (electric arc furnace, induction furnace, converter and etc.), meanwhile have the function of adjusting molten steel temperature, and be a buffer of the whole process. It is described to be soul of the best production line (primary melting furnace + LF+ CCM). It is widely used in refining of kinds of steel grade, such as Ball bearing steel, alloy structural steel, tool steel, spring steel, carbon steel and etc.

Whenever LRF is installed online, liquid metal is transferred from the main melting source to the LRF at a nominal tapping temperature and either Argon/Nitrogen is purged from the bottom apart from arcing (using electrodes) on the top to bring about homogeneity of liquid metal composition and temperature. Fused lime/CaSi is added to the liquid metal to reduce sulphur and bring it within acceptable limits. And temperature is raised for the next casting operation.

Characteristic:

1. Even the molten steel composition and temperature 2. Desulfidation, degassing, deoxidation and removing non-metallic impurities.

3. Increase production capacity.

Ladle Rated Capacity (ton)	Ladle Diameter (mm)	Transformer Rated Capacity (KVA)	Electrode Diameter (mm)	Electrode distribution circle Diameter (mm)	Molten steel Temperature raising speed (Co/min)
20	2200	3150	200	500	2-3
40	2900	6300	350	650	2-3
60	3100	10000	350	650	2-3.5
70	3200	12500	400	700	2-3.5
100	3400	18000	400	700	2-3.5
150	3900	20000	450	800	2-3.5