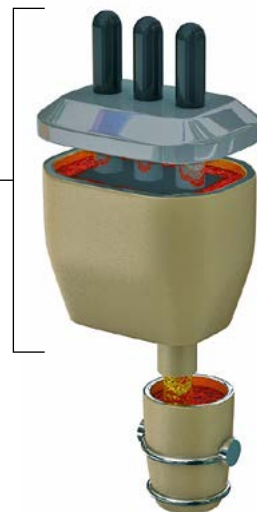


Steel Melting and Casting Flowchart

- Preparation of scrap
- Preparation of deoxidizers, materials and ferroalloys.
- Charging of steel making furnace

Electric arc furnace

1. Melting



2. Treatment of steel in ladle furnace

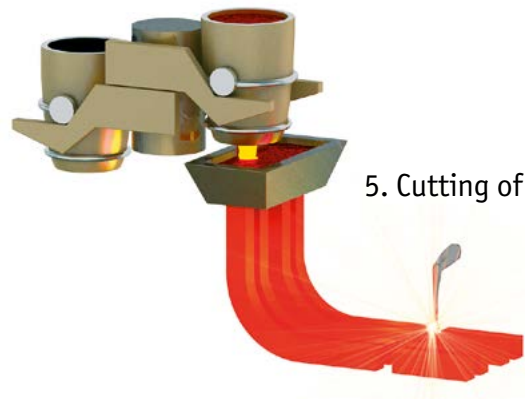
Ladle furnace



3. Vacuum degassing
(applicable for high grades of steel)



4. Continuous steel casting.
Production of square and round billets



5. Cutting of billets

6. Cooling and marking of billets*



7. Acceptance of billets, heats.
Delivery to storage or shipment



*Turning of round billets is performed if required.

Controlled parameters: scrap weight, chemical composition and sizes; materials gravimetric and chemical composition, humidity, weight; metal temperature; vacuum degree, cooling regimens, casting rate; cut length and quality; billetwise traceability, outside surface, geometric sizes, billet quality, macrostructure.