

An invention relates to the field of ferrous metallurgy, in particular, to the method for out-of-furnace treatment of steel. Method for out-of-furnace treatment of steel involves chemistry adjustment of steel melt by introduction of solid dopants into the ladle. A water-cooled fettle cover is disposed on a ladle, in which cover plasmatrons of indirect action are placed with an opportunity of their fixed longitudinal moving. A part of plasmatrons is assigned for the top blowing of metal, and last - for bottom. The top blowing is carried out on interface border of a slag - metal, and bottom - in a reversing mode from 0.5 up to 0.9 of steel melt height in a ladle. The process is directed with regulation of heating capacity of specified melt, plasmaforming gas expense, introduction of additives, and also by control of structure and temperature of steel melt. The invention provides uniformity of chemical structure and temperatures of steel in a worked volume, decrease of amount of non metal inclusions in steel melt and duration of all process.