

The invention relates to arc welding and can be used to improve the quality of welded joints. Arc welding method with a non-consumable electrode involves the electromagnetic agitation of the molten weld pool. Once the axial magnetic field pulses have ended, the electrode is relocated in the direction of welding by a distance equal to the product of the welding speed and the pulse duration. Once the pauses are over, the electrode is returned to its initial position. The technical result of the invention is to ensure high-quality weld formation and to improve the metal resistance to hot cracking as the welding speed increases.