

The group of inventions relates to the branch of restoration of damaged refractory lining of industrial furnaces with ceramic welding deposition and can be used in coke-chemical, metallurgical, glass-making and other fields of industry. The method of restoration of refractory lining of industrial furnaces is in burning fuel components of the mix for ceramic welding deposition in jet of oxygen with formation of jet, with melting refractory powders of the mix by means of that jet with simultaneous melting of the surface layer of the section of lining being restored, with its restoration by melt of refractory powders. The mix for ceramic welding deposition undergoes effect of weak pulse magnetic field. Apparatus for implementation of the method has feeder of the mix for ceramic welding deposition, source of compressed oxygen, gunned tuyere, one of its inlets is connected to the source of compressed air and the other one – to the outlet of the feeder, system of pipelines with adjusting armature and control-measuring devices. In the line of mix for welding deposition displacement generator of weak pulse magnetic field is installed. The method to make mix for ceramic welding deposition is in milling its components, sieving, dosing and mixing and packing, at that the mix before or after operation of packing undergoes effect of weak pulse magnetic field. Those inventions promote more complete burning of fuel components of the mix, decrease of porosity of the built by welding deposition layer and increase of its strength.