

The invention relates to the sphere of superconducting materials, particularly to the processes for oxygen saturation of smelted texturized ceramics on the basis of  $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$  (IT-YBCO) in conditions of isostatic pressure. A process foresees heating of ceramics, holding for oxygen saturation and cooling. According to the invention, a process is carried out in gas-state mechanism, in addition the preliminary heating to temperature of beginning of ortho-tetra passage of structure  $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$  (Y123) is carried out in the stream of rare gas at atmosphere pressure, after that the heating of ceramics is continued, in addition the inactive gas is gradually changed into oxygen. The cooling is carried out in two stages: on the first stage the ceramics is cooled to temperature of finishing the ortho-tetra passage (Y123) with simultaneous increase of oxygen pressure to values, by which the oxygen saturation is realized in conditions balanced for this temperature, and holding of ceramics is carried out at this temperature till its saturation by oxygen, but on the second stage heating is switched off and ceramics is cooled in gas-state mechanism to room temperature, after that the pressure is relieved. The invention provides the improvement of superconducting and mechanical properties of obtained ceramics.