Mechanical properties of corrosion-resistant steel with double aging

© L.V. Tarasenko, M.V. Unchikova

Bauman Moscow State Technical University, Moscow, 105005, Russia

The mechanical properties of corrosion-resistant maraging steel 06X14H6D2MBT (ЭП817), which was designed for producing the force-measuring resilient member operating at atmospheric conditions, with single and double aging changes were studied. The mode of double aging was selected for providing the maximum degree of strengthening with bending tests and lesser degree of softening after exposure to cyclic loads.

Keywords: *mechanical properties of corrosion-resistant maraging steel, power elastic element, primary and secondary aging, bending strength, stability of the mechanical properties.*

Tarasenko L.V. graduated from Bauman Moscow Higher Technical School in 1962. Dr. Sci. (Eng.), Professor of the Material Sciences Department of Bauman Moscow State Technical University. Author of more than 200 publications and of 2 textbooks (as a co-author). Fields of research include investigations of the phase composition, structure and properties of heat-resistant steels and alloys for details for gas turbine engines, high-strength steels for aviation, of aluminum-lithium alloys. e-mail:tarasenko@bmstu.ru

Unchikova M.V. graduated from Bauman Moscow Higher Technical School in 1980. Ph.D., Assoc. Professor of the Material Sciences Department of Bauman Moscow State Technical University. Author of more than 40 publications in the field of thermal and chemical-thermal treatment of corrosion-resistant steels and heat-resistant nickel alloys. e-mail:unchikova_mv@mail.ru