

It is proposed a method for chemical cleansing of heat power equipment using water solutions with inhibitors such as lower dicarboxylic acids obtained from dry waste products in the adipinic acid production process after removing copper and vanadium. The method can be used for removing inorganic deposits in boilers, condensers, heat exchangers, and air-cooling units in the chemical, food and other industries. The cleansing process is carried out by using washing solution with specified component content, the high temperature (100 °C) in cleansing process with recirculation of washing solution, and by using washing solution strengthened with dry dicarboxylic acids. The washing solution contains inhibitors for reducing corrosion of the equipment parts made of carbon steel or some nonferrous metals, which provide protection efficiency of 97.5-99.4 % for steel, and 71 % and 78 % for brass and copper, accordingly. The proposed method provides inhibiting protection of constructional materials in the event of cleansing for 24 hours or more. The method allows cleansing equipment parts made of chromium-nickel steel without using inhibitors in the washing solution.