

The invention relates to chemical technology, in particular, to the production of nitric acid. A process for preparation of nitric acid comprises catalytic oxidation of ammonia, utilization of heat of formed nitrose gases, additional oxidation of nitrose gases, cooling of nitrose gases by air, end gases, cooling with water in two stages resulted in the obtaining of acidulous condensate, which is supplied to absorption stage together with cooled nitrose gases, resulted in the obtaining of acid solution, bleaching of acid solution with air and supply of gas obtained at bleaching, into absorption stage, heating of end gases with nitrose gases, catalytic purification of end gases from nitrogen oxides followed by recuperation of gas energy in gas turbine and heat-recovery boiler. A process has two variants of embodiment. A plant for preparation of nitric acid comprises the reactor of catalytic oxidation of ammonia with the mixer, heat-recovery boiler, oxidizer, heaters of end gases, refrigerating condensers, absorption column, bleaching column, which inlet is connected with a piping for air supply, at that all plant components are connected in series along the stream of nitrose gases. The outlet of the bleaching column is connected with the inlet into the absorption column. The inlet into the absorption column along the stream of end gases via heaters of end gas is connected with the reactor of catalytic purification, gas turbine plant for recuperation of gas energy and another heat-recovery boiler, connected in series to each other. The plant has four variants of embodiment.