ABSTRACT

Electrolytic production of chlorine, alkali and hydrogen. Using of sodium hydroxide in the manufacture of inorganic substances. Calculation of mercury electrolyzer type Matison E8 with current load of 30 kA with graphite anodes.

Bondar A. S. Kyiv: NTUU «KPI», ChTF, group ChE-51m

Course paper, 2015, pages – 44, tables – 7, pictures – 3, sources – 9.

The course paper is devoted to the study of chlorine, alkali and hydrogen production. Physical and chemical properties of chlorine and alkali, uses of them in industry and methods of receipt, are considered. A choice and descrip-tion of construction of electrolyzer are reasonable as Matison E8 and flowsheet of receipt of chlorine, alkali and hydrogen by a mercury method. Calculations are conducted mercury to the electrolyzer as Matison E8 current loading of 30 кА.

Balances of current,tension and energy, material and thermal balances and expense coefficients, are expected.

ELECTROLYSIS of CHLORINE AND ALKALI, HYDROGEN, MERCURY ELECTROLYZER, ELECTROLYZER AS MATISON E8, CURRENT BALANCE, VOLTAGE BALANCE, MATERIAL BALANCE, HEAT BALANCE, CONSUMED INDEX.