

75-76% sulfuric acid is accumulated in the lower part of the towers, naturally, in a larger amount than it was spent on the preparation of nitrosa (after all, “newborn” sulfuric acid is added). Nitric oxide NO returns again to oxidation. Since a certain amount of NO is lost with the exhaust gases, it is necessary to add HNO_3 to the system, which serves as a source of nitrogen oxides.

The disadvantage of the tower method is that the resulting sulfuric acid has a concentration of only 75-76% (at a higher concentration, the hydrolysis of nitrosylseric acid is bad). The concentration of sulphuric acid by evaporation presents an additional difficulty.

The advantage of this method is that the impurities contained in SO_2 do not affect the process, so that the original SO_2 is sufficiently cleaned of dust, i.e. mechanical contaminants. Naturally, tower sulfuric acid is not clean enough, which limits its use.

TEST TASKS

1. Sulfur in nature is found in the form of:

- A) pyrite, barite, cinnabar;
- B) galena, ashurite, oil;
- C) covelin, phosphorite, coal;
- D) arinitis, apatite, shale;
- E) antimonite, fluorspar.

2. Raw materials for sulfuric acid production:

- A) ferrous gases, coke oven gases, gypsum;
- B) enrichment tails, pyrite, phosphorite, barite;
- C) pyrite, gypsum, native sulfur, kaolin;
- D) bauxite, native sulphur, sylvinitite, chrysocall;