

PULP AND PAPER

Looking for Environmentally Sound but Effective Pulping Technologies

How to protect forests from acid rain caused by sulphur and nitrogen oxides is one of the major environmental problems faced by developed nations in the Northern hemisphere. The sources of this type of pollution are hidden away in furnaces fired by natural fuels, and in some basic technical processes.

Sulphur and chlorine, the two most harmful reactants in the chemical pulping process, should be used in sharply reduced quantities or entirely eliminated. Only in this way is it currently possible to lower the toxicity of both pulping effluent and atmospheric emissions, thereby improving environmental conditions and eliminating the terrible stench associated with pulp and paper industry towns.

Application of oxygen-alkali pulping helps reduce pollution. Today more than 50% of all oxygen-alkali facilities are located in Europe (mainly in Switzerland) and 40% in North America and Japan. Utilization of these facilities over many years has shown that the oxygen pulping process uses less power and helps reduce dirt and resin content and yellowing in bleached pulp.

Acting upon an All-Union Scientific Production Association of the Pulp and Paper Industry (VNPObumprom) recommendation, the industry is planning to build an experimental-production shop for unbleached oxygen-alkali pulp at the Syas' Combine. This plant will be rated at 35,000 tonnes per year and will be equipped with "Ekotsell" (Ecologically