

METHOD AND DEVICE FOR PRODUCING DIMETHYL ETHER FROM METHANOL

ABSTRACT

In a method for producing dimethyl ether (DME) from methanol (MeOH) by converting raw MeOH obtained through MeOH synthesis to DME in a reactor, separating water in the process, the raw MeOH and a process-internally obtained return flow formed from unused MeOH and reaction water are evaporated together and the vaporous MeOH is fed to a reactor. In order to obtain as low a consumption of operating resources as possible and to improve the installed heat transfer capacity, according to the invention the reaction mixture taken out of the reactor is separated into a bottom product comprised substantially of water and a distillate comprised substantially of DME and MeOH and uncondensable gases, and the distillate is separated into a distillate comprised substantially of DME and uncondensable gases released overhead and into a low-water MeOH formed bottom product.

Fig. 1