Mathematical modelling of forming processes of multycomponent polymeric composition materials by using of the directed physical and chemical modification.

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3. **Results**

The important is decided folk economic task, related to development of scientific bases of the directed application of physical modification as an ultrasonic action in technology of receipt of wide spectrum of wares from much component epoxy polymers, directed on the increase of efficiency and achievement of resourse and energy economies at their receipt.

Influence of parameters of ultrasonic modification is found out on operating properties of epoxy glue compositions (EGC) on the basis of plasticizer of DEG-1 and carboxyl rubbers. The parameters of ultrasonic modification (frequency, amplitude, intensity, temperature, mass of hinge-plate), which the most work-hardening of hardenings EKK is arrived at at, are found.

On the basis of the use of mathematical methods of planning of experiments adequate statistical models, which describe a weekend variables depending on entrance variables which are got at the decision of the followings tasks of optimization, are first created: composition of EGC, modified carboxylrubbers; prognostication of operating properties of repair EKK on the basis of plasticizer as DEG-1 and carboxyl rubbers, got with the use of uz-modifikation at atmospheric pressure. The got mathematical dependences allow to forecast properties, and also directionally to regulate composition of initial epoxy compositions (EC) during realization of BONDS of modification.

It is experimentally investigational, that by the size of bonds of cavity modification of EK it is possible to manage by the selection of certain betweennesss by voice and static pressure. It is first set that application of effective parameters of by volume influence low frequency and midfrequency ultrasonic on a liquid EC in presence both atmospheric and surplus, brings pressures over to the improvement of operating properties (durability, deformation at a break, temperature of glassing) of not gap-filling EP.

Due to the complex use of results of the executed scientific researches and offered methods the developed is improved technological principles and equipment for connection of polyethylene pipelines (PEP) with the use of EGC and shrouding flowed a ribbon. Technological principles and equipment are developed can be utillized for connection of PEP at implementation of repair gass and plumbings and other pipeline systems from PEP.

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