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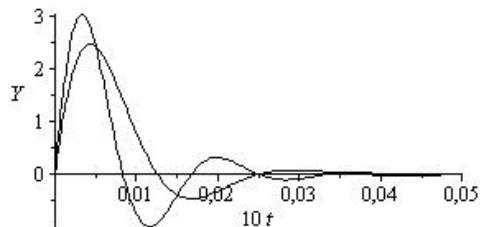
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### **MACHINING MEAT DEFORMATION**

The massaging and salting meat processes have been considered in this paper. The massaging and salting meat process have been realized by periodic deformation of the shot, short compression or stretching. To intensify the meat massaging process the massager drum using was effective as one. Because they work in spacing mode between long deformation and stand. The elastic wave deformation type experimental research that occurs in the impact meat is as follows (**Fig. 1**)



**Fig.1.** The kinetic deformation meat curve by impact

To describe the deformation curve is possible with the next equation  $Y(t) = Pe^{kt} \sin(\omega t)$ ,

$Y(t)$  — deformation;  $P$  — index of the curve's amplitude;  $k$  — characteristic, which determines the decline curve rate;  $\omega$  — frequency of oscillations. The indexes « $\omega$ ;  $P$ ;  $k$ » make it possible to find out the fracture of patterns meat — its degree of softening in the massaging period.

The curve deformation study (elastic deformation wave), that occurs in meat during rapid deformation, such as impact, shows that the deformation process lasts about  $3.5 \cdot 10^{-3}$  seconds.

This makes it possible to conclude that during the period of impact the rapid pores compression and capillaries comes up with subsequent relaxation, during which we have the filtering saturation of piece of meat with brine. The liquid is sucked and pushed through pores and capillaries. During the distribution it divides by diffusion due to concentration differences. The mathematical models to optimize the process of salting meat have been determined, the massaging mode method which is based on the energy characteristics in the deformation process has been proposed.

**KEY WORDS:** meat massager, deformation