CONCLUSIONS

1. The work carried out experimental research on high-impact composite titanium plate termotsyklovanoho.

2. Phase composition is determined depending on thermal cycling modes.

3. Dysylitsyd titanium $TiSi_2$ can form two types of crystal lattice: bazotsentrovana orthorhombic C 49, which is formed in the temperature range 450 - 650 C and face centered orthorhombic lattice C 54, which is formed at temperatures higher than 650 C.

4. Thus, and X-ray analysis, and temperature range of hot plastic deformation, which was implemented for the sample, ie 1050 - 950 C confirms that titanium dysylitsyd C 54 $TiSi_2$ of orthorhombic face-centered lattice formed in the flow of hot plastic deformation, and not , for example, as a result of crystallization from the melt.

5. When high-impact alloy plate for the last crack formed.

6. Thus according to a local X-ray analysis in the cracks observed occurrence of the following phases: β-Those crystal lattice is dissolved Sn, Si, Al; SiC (Ti, Sn, Al); Fe as iron oxide. $TiSi_2$ is part of phase alloy, SiC has got a crack in the preparation grindin as abrasive particles, and Fe and Pb - as components of high impact.

7. The calculated estimated cost of the planned work on the basis of costs of all resources, reasonable economic feasibility of the implementation of this work.

8. Analysis of dangerous and harmful factors also developed the means to address them and ensure safety in the event of an emergency.