

CONCLUSIONS

During the thesis was mastered basic methods of research, namely making alloys $\text{MoSi}_2\text{-MoB}_2$, the study of the structure, phase composition and stress-strain state phase components and mastered research methodology hardness and fracture toughness.

Based on the literature review and the results were formulated conclusions and recommendations on the application.

1. Today there is a need for special-purpose materials for the manufacture of parts used in gas turbine construction.

2. It is shown that alloys of Mo-Si-B have good resistance to high temperatures, good wear resistance and ability to resist oxidation due to the protective oxide film borosilicate glass.

3. It is shown that after annealing the structure becomes more fine and at the same time improved mechanical properties - microhardness and fracture toughness by $\sim 20\%$.

4. Established that after annealing are balanced tension and stress compression phases inclusions moving in a stretched state. Residual stresses after annealing in the matrix phase MoSi_2 remaining stress reduction and decreased in ~ 2 times, and the phases were included MoB tensile stresses and increased by ~ 2 times.

Therefore, the basis of the thesis in the materials and technology requirements, can be recommended for use and more detailed study of refractory materials - alloys of $\text{MoSi}_2\text{-MoB}_2$.