

Selection of protective coatings for increasing operational life of small jet engine

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Summary:

The article deals with the selection of the protective coatings for increasing the performance and operational life of the small jet engine. It contains the structural and chemical analysis of the hot parts of the MPM-20 engine and their operational conditions. Then the appropriate protective coatings in terms of meeting requirements for the surface treatment are selected. Application of the selected coatings (metal and ceramics) on hot engine parts ensure enhancing of service life of the small jet engine and extend its period of operation without the reduction of the nominal power, or other more complex structural modifications.