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# Creating a high-speed and high-loaded autonomous liquid-friction bearing with cooling and lubrication circulation in the layer

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*The article considers a possibility of usage of bearings with autonomous lubrication instead of liquid-friction bearings with a circulating lubrication. It analyses a method of creating internal circulation of lubrication in the lubricating layer of autonomous high-speed bearings. The results of the hydrodynamic and thermal calculations of bearings are given. We substantiate the necessity and provide a method for creating a pumping effect in the lubricating layer of autonomous thrust bearing.*

**Keywords:** *high-speed bearings, autonomous bearing, liquid friction, internal circulation of lubrication, autonomous lubrication.*

## REFERENCES

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