**UDC 621.43.013**

**Voropaev E.P. Modelling of an external high-speed characteristic of an engine of sportbike SUZUKI GSX-R750 //** **Internal combustion engines. – 2008. – №1. – P. 47-52.**

**The article deals with 3D flow-dynamic model of 4-**

**stroke piston internal combustion engine. The model includes 4**

**separate pistons and full-dimensional inlet and outlet systems.**

**The approbation object is high-speed (12000 rpm) sportbike**

**SUZUKI GSX-R750 motor with high specific power (127**

**kW/l). The article presents the results of the calculations of the**

**12 full-load curve modes, the description of the grid model,**

**grounds of the initial data choice. The results of model approbation**

**on different speeds and loads are presented. The average**

**discrepancy between the measured and calculated power is: for**

**the curve sector 2000 – 7000 rpm – 5.8 %; 7000 – 13000 rpm –**

**2.9 %. Tаblе. 1. Il. 8. Bibliogr. 4 names.**