可控活化热氛围燃烧器温度场的模拟

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摘要　在试验的基础上,利用仿真计算的方法对可控活化热氛围燃烧器的温度场进行了研究,探讨了中央射流、中央射流速度、协流温度及协流速度对燃烧器温度场的影响，找出了此燃烧器温度场的稳定区域，该结果对试验的设计具有一定指导意义。

关键词　动力机械工程　活化热氛围　燃烧器　温度场　模拟

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Numerical simulation of temperature field in controllable active thermo atmosphere combustor

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Abstract Based on the available experimental results, a simulation study on the temperature field of a controllable active thermo-atmosphere combustor was presented with a non-reacting central jet issuing into a vitiated co-flow. The influences of the co-flow velocity, the co-flow temperature, and the jet issuing velocity on the thermal atmosphere have been evaluated. The results are useful for the optimization of experimental scheme design.

Key words power machinery engineering　active thermo atmosphere　combustor　temperature field　simulation

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