

**Title:** Study on Test Method of Energy-saving Performance for Coal additives in Slime

**Abstract:** Adding coal additives in civil water heating coal furnace can effectively reduce coal consumption and has great economic benefits, but there is no standard method for testing energy-saving performance of coal additives in slime. Referring to GB/T 16155-2018 "Test Method for Performance of Civil Water Heating Coal Furnace", this paper developed a measuring device for energy-saving performance of coal additives, and proposes a detection method based on the temperature of effluent and backwater as a measuring scale for heating capacity of slime combustion. The experimental results show that the energy-saving effect of coal additives on clean briquette is not obvious when it is sprayed on clean briquette and burned by dry clean briquette, while in wet mixed combustion, the cumulative heat of slime with coal additives increases by up to 50% compared with that of ordinary slime.