

从表 4 可以看出:在煤基燃料含水量和恢复成浆浓度相同的情况下,与只添加粗煤粉相比,掺入粗细配比为 6:4 的干煤粉时恢复浆体的表观粘度较低,流动性较好,恢复成浆的最高浓度要高一些。

比较表 3 和表 4 可以发现:制备粒(粉)状煤基燃料时,掺入干煤粉中含有分散剂时,在相同含水量条件下,煤基燃料的恢复成浆浓度比不加分散剂要高 2% 左右,有利于得到高浓度的水煤浆。

4 结果与讨论

(1) 商丘煤泥的成浆性较高,可制备出浓度高达 73% 粘度为 1066 mPa·s 的水煤浆。

(2) 在制备好普通水煤浆的基础上掺入已磨制好的干煤粉可制出含水量为 11%~18% 的粒(粉)煤基燃料。粒(粉)煤基燃料含水量越高,其恢复成浆最高浓度就越高。

(3) 制备煤基燃料时,掺入干煤粉中含有少量分散剂的恢复成浆浓度比不含分散剂要高 2% 左

右。掺入干煤粉中粗细煤粉配比不同时,其恢复成浆的最高浓度也不相同。干煤粉中不含分散剂时,只含粗煤粉时的恢复成浆浓度较高;干煤粉中含分散剂,粗细煤粉配比按 6:4 掺入时其恢复成浆浓度较高。

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Preparation of a new type of coal-based fuel

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Abstract: Coal water slurry is a kind of fluidized coal-based fuel, which can't be stored for a long time. The high transportation cost, lax security and instability issues of common coal water slurry can be solved by making raw coal into granular coal-based fuel which contains lower moisture. The results show that the slurry formation property of Shangqiu slime is better. It can be made into coal water slurry whose mass fraction is 73%, viscosity is 1066 mPa·s. Adding dry pulverized coal into prepared common coal water slurry can prepare granular coal-based fuel whose moisture is from 11 percent to 18 percent. The higher the moisture of coal-based fuel, the easier to restore slurry formation. The concentration of coal-based fuel when the dry pulverized coal is added a small amount of dispersant is 2 percent higher than that which is not added dispersant. Different additive amount of pulverized coal leads to the different highest concentration of coal-based fuel.

Key words: slime; coal water slurry; coal-based fuel

洁净煤科技发展明确五大方向

洁净煤科技发展“十二五”重点专项实施方案咨询论证会日前召开。会议确定了煤基清洁燃料、清洁发电、污染物减排、二氧化碳捕集利用封存和工业洁净利用五大方向。

会议指出,洁净煤科技重点专项目的是实现洁净煤技术产业化跨越发展,抢占世界洁净煤技术竞争制高点。

会议指出,该科技专项力争实现材料装备、关键技术和系统集成技术 3 项突破,开发出一批具有国际领先水平的新工艺、新技术,实现重大系统技术集成,为煤电、煤转化等重点示范工程和建设洁净煤技术战略性新兴产业提供技术支持,达到世界领先水平。