

[1]任晓虎,霍静思,曾翔,等.一种采用可控复合技术的新型升温炉[J].自然灾害学报,2012,03:230-235.

REN Xiaohu,HUO Jingsi,ZENG Xiang,et al.A new type of heating furnace adopting controllable hybrid technique [J].,2012,03:230-235.

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一种采用可控复合技术的新型升温炉(PDF)

《自然灾害学报》[ISSN:/CN:23-1324/X] 期数: 2012年03期 页码: 230-235 栏目: 出版
日期: 2012-06-30

Title: A new type of heating furnace adopting controllable hybrid technique

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关键词: [抗火试验](#); [电炉](#); [液化燃烧器](#); [复合升温](#)

Keywords: [fire resistance test](#); [electric furnace](#); [liquefied gas burner](#); [hybrid heating method](#)

分类号: TM924.7

DOI: -

文献标识码: -

摘要: 在普通电加热炉的基础上,通过配备液化燃烧器加热装置,开发了一种可同时实施自动控制电加热和燃气加热复合升温的新型装配式试验炉。试验测试表明,该新型复合式升温方法能够很好地模拟ISO-834标准升(降)温曲线,同时具有电炉安全可靠、测控精度高、操作简便、无污染,以及液化气火焰升温快、容易控制并可真实模拟火灾的优点,因而具有良好的试验效果和经济效果,是一种实用的结构抗火试验设施。

Abstract: Based on a common electrical furnace, and equipped with liquefied gas burners, a new built-up fire furnace that can either heat through automatically electric control or through bowing liquefied gas fire into the furnace is developed. Fire test results indicate that the hybrid heating furnace can heat the test specimens closely following the ISO-834 standard fire curve, and it is of excellent convenience and cost-effectiveness because it combines the merits of electrical heating, such as safe, reliable,

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highly precise, convenient to control, operational and pollution-proof, with the merits of liquefied gas fire heating, such as heating rapidly, simple to control, and can simulate fire reality. It is proved to be practical fire-resistant heating equipment.

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