



提高生物法净化NO_x废气性能的实验探索

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Test study on enhancing capability for biopurifying NO_x waste gas

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全文: PDF (1004 KB) HTML (1 KB) 输出: BibTeX | EndNote (RIS) 背景资料

摘要 采用生物膜填料塔实验装置,从添加pH缓冲剂、CO₂气体、有机酸、金属离子催化剂以及好氧/厌氧、中性/酸性操作条件等方面,对提高生物法净化低浓度NO_x废气(以NO为主要成分)性能进行了实验探索.结果表明,以NaHCO₃作为缓冲剂、添加少量冰醋酸以及在好氧及中性条件下操作,能够显著提高生物膜填料塔对废气中NO的净化性能.对于在好氧及酸性条件下,添加少量金属离子催化剂同样可以明显提高生物膜填料塔对废气中NO的净化性能.

关键词: NO_x废气 生物法净化 提高性能

Abstract: By means of the test systems of biofilm-packing tower,a test study on enhancing capability for biopurifying NO_x(NO as a basis) waste gas was performed,in which the effects of adding pH buffer,CO₂ gas,organic acid,metal ions catalyst and operating the test tower under the aerobic/anaerobic condition,the neutral/acidic condition on the purification capability of NO waste gas were studied.The results showed that by adding NaHCO₃ as a pH buffer,a little glacial acetic acid and operating the tower under the aerobic/neutral condition,the capability of the biofilm-packing tower for biopurifying NOcould be enhanced markedly.Under the aerobic/acidic condition,by adding a little metal ions catalyst,the capability for biopurifying NO could be improved obviously as well.

Key words:

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