

## 滨海软土蠕变特性及蠕变模型

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**摘要** 如何合理地描述滨海软土的蠕变规律对软土地基工程是十分重要。三轴蠕变试验研究表明,滨海相沉积的软土具有非线性蠕变的特性,双曲线型更适合其应力-应变关系。修改了Singh-Mitchell模型的应力-应变关系,建议了滨海软土的应力-应变-时间关系。所提出的蠕变模型具有参数少、适用性较强的特点。

**关键词** [土力学](#),[滨海软土](#),[蠕变](#),[非线性](#),[蠕变模型](#)

分类号

## CREEP CHARACTERISTICS AND CREEP MODEL OF MARINE SOFT SOILS

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### Abstract

It is very important for marine soft ground projects how to describe the creep behavior of marine soft soil. The marine soft soil is of nonlinear creep characteristics on basis of triaxial creep tests of the three kinds of soft soils from Zhuhai, Shanghai and Yingkou in China. A hyperbola-typed stress-strain relation is stated to suitably describe the constitutive character of marine soft soils. The hyperbola-typed function is proposed for the stress-strain relation in Singh-Mitchell's creep model and a new stress-strain-time relation is suggested in this paper. There are only three parameters in the proposed creep model, and all the parameters are easy to be determined.

**Key words** [soil mechanics](#),[marine soft soil](#),[creep](#),[nonlinear](#),[creep model](#)

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