

## 土工动力离心模型试验研究进展

陈正发<sup>1</sup>, 于玉贞<sup>2</sup>

(1. 山东理工大学 建筑工程学院, 山东 淄博 255049; 2. 清华大学 水沙科学与水利水电工程国家重点实验室, 北京 100084)

收稿日期 2005-12-29 修回日期 2006-4-28 网络版发布日期 2007-1-31 接受日期 2005-12-29

**摘要** 由于土工动力离心模型试验的优越性, 欧美、日本等一些国家相继发展不同种类的土工离心机振动台系统。土工动力离心模型试验研究的不断深入, 推动与之相关的振动台模型箱的发展。介绍各种土工离心机振动台系统的特点和工作原理; 对比国内研制的土工离心机振动台系统的主要技术指标, 介绍各种模型箱的特点和适用范围。从土工动力离心模型试验的研究范围、研究内容和研究深度等方面概述自离心机振动台应用于岩土工程以来, 世界范围内土工动力离心模型试验的研究进展。

**关键词** [土力学](#); [离心机](#); [振动台](#); [离心模型试验](#)

分类号

## A REVIEW ON DEVELOPMENT OF GEOTECHNICAL DYNAMIC CENTRIFUGAL MODEL TEST

CHEN Zhengfa<sup>1</sup>, YU Yuzhen<sup>2</sup>

(1. School of Construction Engineering, Shandong University of Technology, Zibo, Shandong 255049, China; 2. State Key Laboratory of Hydroscience and Engineering, Tsinghua University, Beijing 100084, China)

### Abstract

Since 1980s, geotechnical dynamic centrifugal model test has been gradually developed all over the world. Because of the virtues of geotechnical dynamic centrifugal model test, a variety of shaking table systems for geotechnical centrifuge were invented in Europe, America, Japan and other countries. With the development of the geotechnical dynamic centrifugal model test, different kinds of shaking table containers were also created at the same time. The development of the shaking table systems for geotechnical centrifuge, the parameters of the shaking tables for centrifuge in China, and the characteristics and application of shaking table containers were mainly described. Simultaneously, the development of the geotechnical dynamic centrifugal model test was introduced including its study range, depth and content.

**Key words** [soil mechannics](#); [centrifuge](#); [shaking table](#); [centrifugal model test](#)

DOI:

通讯作者

### 扩展功能

#### 本文信息

▶ [Supporting info](#)

▶ [PDF\(271KB\)](#)

▶ [\[HTML全文\]\(0KB\)](#)

▶ [参考文献](#)

#### 服务与反馈

▶ [把本文推荐给朋友](#)

▶ [加入我的书架](#)

▶ [加入引用管理器](#)

▶ [复制索引](#)

▶ [Email Alert](#)

▶ [文章反馈](#)

▶ [浏览反馈信息](#)

#### 相关信息

▶ [本刊中 包含 “土力学; 离心机; 振动台; 离心模型试验” 的相关文章](#)

▶ [本文作者相关文章](#)

· [陈正发](#)

· [于玉贞](#)