### DATA FILES

**Theoretical studies and applications of an upper-bound stability analysis method based on the failure mode of inclined slices**

By Zuyu Chen et al.

# Introduction

This handout illustrates the data files contained in this repository implemented by the computer programs EMU and Bearing-IWHR respectively. EMU is a commercial program which can be made available by contacting the authors. Bearing-IWHR is an Excel-based spread sheet which is open and downloadable at this web.

# Examples in Section 3.3

## Solutions by EMU

1. Examples in Section 3.3 performed by EMU

|  |  |  |
| --- | --- | --- |
| Examples | Data file | Remarks |
| Example 1 | ex1\_emu.dat | Input |
| ex1\_emu.out | Output |
| ex1\_excel.dat | By closed-form solution |
| Example 2 | Ex2\_emu.dat | Input |
| Ex2\_emu.out | Output |
| Ex2\_excel.dat | By closed-form solution |
| Example 3 | Ex3\_emu.dat | Input |
| Ex3\_emu.out | Output |
| Ex3\_excel.dat | By closed-form solution |
| Example 4 | Ex4\_excel.dat | Input |
| Ex4\_emu.out | Output |

1. Examples in Section 3.3 performed by Bearing-IWHR

|  |  |  |
| --- | --- | --- |
| Examples | Data file | Remarks |
| Example 2 | Ex2\_B.xls | Recalculate against Ex2\_emu.dat |
| Example 3 | Ex3\_B.xlsm | Recalculate against Ex3\_emu.dat |

# Examples in Section 4.2

|  |  |  |  |
| --- | --- | --- | --- |
| *c* (kPa) | *φ* | *q（*×9.8 kPa*）* | File |
| 7 | 5 | 50.479 | Bearing-IWHR 7-5.xls |
| 15 | 103.717 | Bearing-IWHR 7-15.xls |
| 20 | 159.581 | Bearing-IWHR 7-20.xls |
| 10 | 5 | 70.732 | Bearing-IWHR 10-5.xls |
| 15 | 139.588 | Bearing-IWHR 10-15.xls |
| 20 | 209.695 | Bearing-IWHR 10-20.xls |
| 15 | 5 | 102.918 | Bearing-IWHR 15-5.xls |
| 15 | 199.388 | Bearing-IWHR 15-15.xls |
| 20 | 292.502 | Bearing-IWHR 15-20.xls |
| 20 | 5 | 136.078 | Bearing-IWHR 20-15.xls |
| 15 | 253.207 | Bearing-IWHR 20-15.xls |
| 20 | 373.635 | Bearing-IWHR 20-20.xls |