Description of the beam data created by B5

1 Usage: B5

Used in the following publications:


2 Data format

xlsx

3 Size of data

- crack width data: 5 × 3 columns, 1580 to 7163 rows
- wire breakage times: 2 × 6 columns, 1 to 20 rows

4 Description

Six prestressed concrete beams:

- SB01 with 200 N/mm²
- SB02 with 100 N/mm²
- SB03 with 60 N/mm²
- SB04 with 80 N/mm²
- SB05 with 80 N/mm²
- SB06 with 50 N/mm²
4.1 Crack width data

For the beams SB01-SB05. Columns:

- Schwingspiele [N]: number of load cycles
- Mittel [mm]: Mean crack width in mm
- $\Delta w$: increase of mean crack width in mm

4.2 Wire breakage times

For every beam (SB01-SB06) one column each with the number of load cycles after which a tension wire broke in the rows (from 1 breakage for SB06 to 20 for SB04).
For beams SB02-SB05 one column each with the date and time of the wire breakages in the rows.

5 Source

The experiments have been conducted by Guido Heeke, Jens Heinrich and Reinhard Maurer from project B5 in the second period of SFB 823.