DLT - Continuous beam

The DLT software analyzes simple and continuous beams or slabs, with up to a maximum of 12 spans and the option of cantilever ends.

Beam Types

- Reinforced concrete slab.
- Reinforced concrete beam.
- Timber beam.
- Beam without reinforcement analysis.

Design

Stress analysis of concrete, and timber members given existing or required dimensions.

- Reinforced concrete calculation according to EN 1992-1-1:2004 with national annex of The Netherlands, Belgium or Czech Republic.
- Timber construction standards: ÖNorm EN 1995-1-1:2009 (other local NA will follow shortly)
- Crack and shrinkage design (reinforcement dimension analysis) and composite stress check.
- Service life and durability requirements.
- Evaluation of creep coefficient and shrinkage strain in serviceability limit state.
- Optimization of timber beam sections.
- Section Stiffness may be set as constant across the beam span or may vary as required.
- Joints are possible.
- Shear deformations can be optionally considered in timber beams.
- Analysis of shear joints for flat and T-slabs.
- Shear capacity check of support/connection points of T-slabs.
- Deflection calculation per condition II for reinforced concrete cross-sections
- Selection options concerning-the durability requirements

Openings

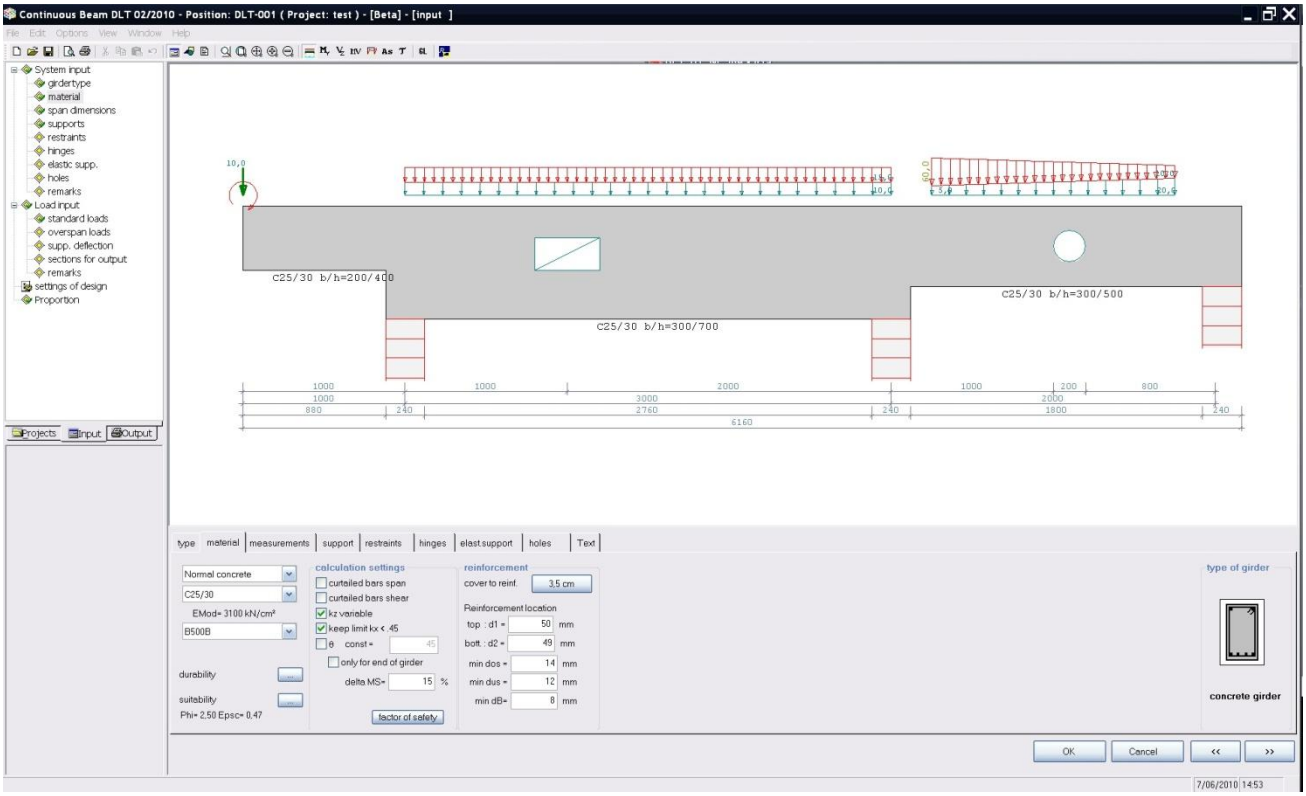
It is possible to determine the reinforcement requirements in order to incorporate rectangular or circular openings in beam webs.

Support reactions

Support reactions are calculated according to a user selectable FOS.

Interfaces

The loads can be shared with other optional modules such as Column analysis B5



Scia Group nv • Industrieweg 1007 • B-3540 Herk-de-Stad • Belgium • Tel.: +32 13 55 17 75 • info@scia-online.com
Scia Nederland • Postbus 30119 6803 AC Arnhem • Nederland • Tel.: +31 26 320 12 30 • info@scia.nl