

Version 18.0

Build	Module	Description	ID
06.06.18	User interface	The handling of the program has been improved.	12664
06.06.18	Analyses	The creep deformations in the analysis of the lateral buckling stability were possibly wrong, if the deformations according to Krüger-Mertzsch were calculated with user-defined creep and shrinkage coefficients.	12651
06.06.18	Calculation	A calculation with the material ComBAR is possible again. However, it can only be used for the bending and shear bearing capacity.	12579
04.05.18		<p>FERMO is a completely new developed program application for the calculation and design of prestressed concrete girders in building construction and for bridge construction and is the successor of RTfermo and FETT. FETT provides compact input and output options, respectively, result graphs and RTfermo enhances the application by a non-linear calculation technology, extended possibilities in the prestressing and analyses for bridge construction.</p> <p>Now, system changes due to construction states, such as a subsequently added in-situ concrete slab, can be considered just as influences form creep, shrinkage and relaxation. Different girder types such as beams with parallel chords, double-pitch and single-pitch roof girders, with notches and recesses as well as prestressing effects in the support, final or composite state can be edited quickly and efficiently.</p> <p>All necessary functions are offered in a consistent user interface. The program application concurrently combines a non-linear FEM technology for the system calculation, the processing and determination of a time-dependent stress redistribution and the graphic-interactive editing of the tendon run with direct visual control. The new program environment is particularly characterized by the following innovations:</p> <ul style="list-style-type: none"> • adjustable program environment • intuitive user guidance • enhancement of the functionality • configurable result output <p>Additionally, the following functionality improvements are available:</p> <ul style="list-style-type: none"> • modern interface with ribbon bar, quick access bar, tree view and property grid as well as 2D and 3D graphics • efficient quick input • new possibility to work with templates • well-arranged program control and configuration with an independent language setting (DE, EN and CZ) for the input and output • typified symmetric and non-symmetric cross-section runs in longitudinal direction • varying statically determinate construction states for factory support, transport support, assembly support, auxiliary support and final support with a maximum of 8 analysis moments along the timeline • stressing bed prestressing as well as post-tensioning • tabular load input with versatile load types and generation possibilities • automatic load transfer and user-defined transfer from other positions • continuous application and complete reinforced and prestressed concrete design in the ULS, SLS and FLS in building and bridge construction • integrated biaxial analysis of the lateral buckling stability as geometrically and physically non-linear bearing load calculation at the deformed system • non-linear combination generation (user-defined or automatic) for up to 4 different points in time and all relevant support systems • integrated design for small and large recesses • integrated design for notches • bearing capacity analysis for refurbishment with utilization levels for a specified longitudinal and shear reinforcement • result output with masks for the pre-design, short, long and detailed list as well as user-defined configuration and filter options • export of a formwork drawing to CAD including the plan view and view of the girder, cable plan (cleat list) as well as to scale sections <p>The module concept of FERMO corresponds to that of FETT in the broadest sense, whereby the use of high-strength concrete and the fire protection analysis have been included in the basic module.</p> <p>With FERMO you are using a structural member design application, which distinguishes itself both in the day-to-day routine and in the solution of complex problems.</p>	12499