

F**ADAPT****-FELT**

For Friction, Elongation and Long-Term Stress Losses in Prestressing

For Buildings, Frames, Bridges and Special Structures

- Two and three dimensional tendon layout
- Use the program's library of tendon shapes or define your own tendon profile
- One- and two-end tendon stressing
- Anchorage seating loss (Draw-in)
- Elongation calculation for first and second pull
- Code check for maximum stresses
- Long-term stress losses for unbonded and bonded tendons
- Graphical display of tendon stress and shape
- Tabular listing of tendon heights

Program Description

ADAPT-FELT is the industry standard program for the calculation of elongations, friction loss, and long-term stress loss in prestressing tendons. It covers both bonded and unbonded tendons with regular or irregular geometries in two or three dimensions. In addition to a detailed tabular report, the program displays the geometry of tendon and the distribution of stress along the tendon. It is applicable to commercial and residential buildings, ground supported slabs, bridge structures, foundations and piles.

The report lists the position and value of the maximum stress along the tendon and the stress at the anchorages after the wedges are seated.

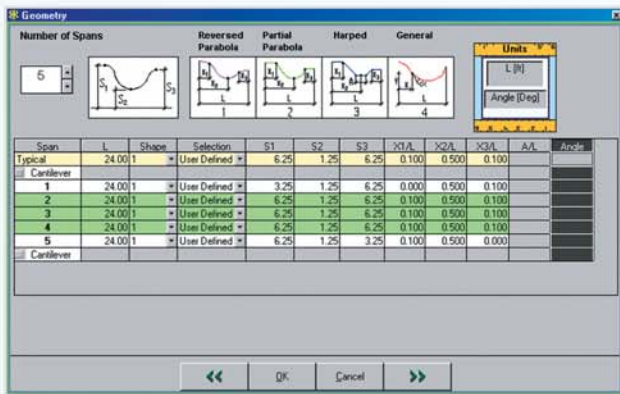
Long-term stress losses for both bonded and unbonded tendons are calculated according to the report published by ACI Committee 423.



ADAPT-FELT

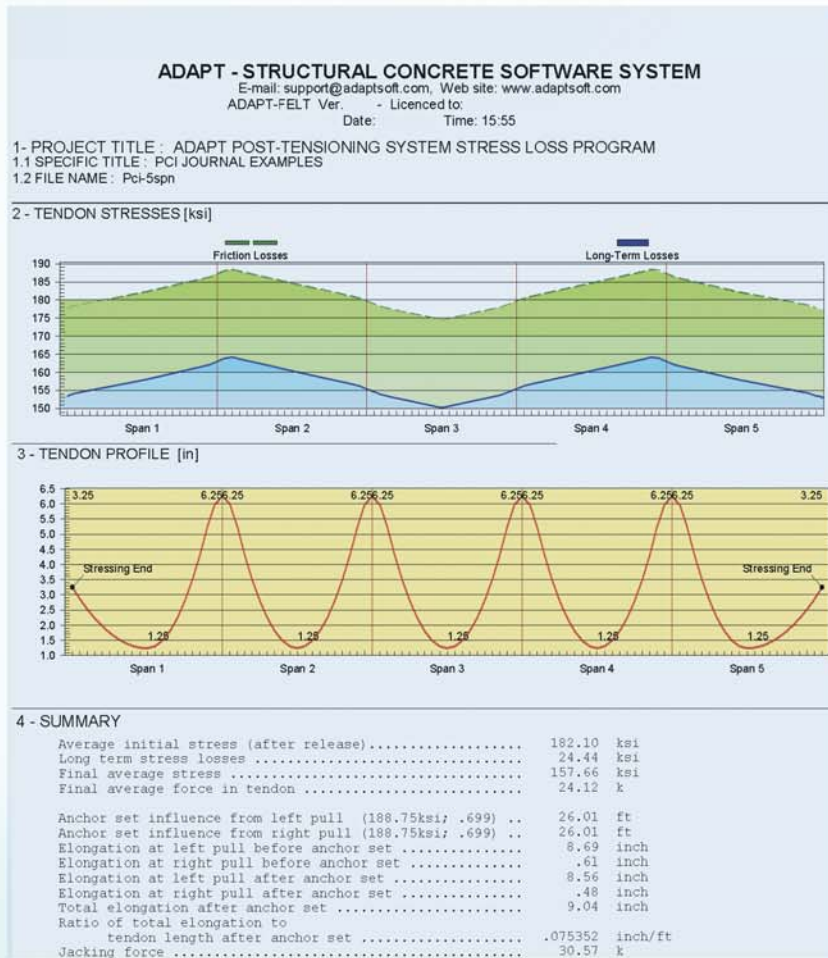
Friction, Elongation and Stress Losses in Post-Tensioning Tendons

- Regular and irregular tendon geometry
- Detailed documentation with a chapter on theory and verification
- Multiple examples with long-hand calculations



ACI Code Check

ADAPT-FELT determines the maximum stress ratio along the tendon as well as the stress ratio at both anchorages; it then compares these values with the permissible values given in ACI 318. In addition, it reports the extent of the stress distribution affected by the wedge seating loss.



Codes

The program comes in ACI, IBC (International Building Code), and a number of other building codes.

Technical Support and Training

Prompt and competent technical support is provided by ADAPT software developers and engineers who are engaged in the design of concrete structures on a daily basis. The support is either through ADAPT headquarters in California, or through regional representatives in Europe and Asia. Training is offered at ADAPT's Headquarters in the San Francisco Bay area, at the client's office or via scheduled seminars worldwide.

Hardware Requirements

PC compatible computer, Windows operating system, minimum of 128 MB RAM, 10 GB hard drive.

Units

- SI
- MKS
- American Customary

Authors

Many talented engineers and software developers have been involved in the creation of this software over the years. All have made significant contributions. The work was inspired and led by **Dr Bijan O. Aalami**, Professor Emeritus of San Francisco State University, a California Structural Engineer and a world leader and teacher in the design of concrete buildings, bridges, special structures and post-tensioning.

Warranty

No warranty, expressed or implied is made with respect to the sold software, either by the authors, or by the seller, either expressed or implied toward the merchantability of fitness to particular purpose, beyond replacing the original software medium and hardware in event of physical defects, for a period of six months from the date of first shipment of software.

ADAPT is now serving engineers in over 70 countries around the world



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