

Release Note Ver 1.1.0



SENECA SOFTWARE SOLUTIONS

23776 SOUTH POINTE DRIVE
LAGUNA HILLS, CA 92653

Tel: 9495958182

SK GHOSH ASSOCIATES INC

334 EAST COLFAX STREET, #E
PALATINE, IL-60067

Tel: 8479912700

<https://skghosh.com>

About PT Designer

PT Designer is a computer program for the design and analysis of linear post-tensioned concrete floor systems. The program is developed around the robust computational core of two popular programs – PTData.Net and PTPlus.Net, which many engineers have come to trust over the years for its accuracy and flexibility. PT Designer builds upon that by incorporating a user-friendly interface and attractive PDF outputs for a more efficient use of the program.

PT Designer is extremely easy to use and is intended for both occasional and regular designers of post-tensioned concrete floor systems.

- Fast and efficient design of post-tensioned beams, one-way and two-way slabs and mat foundations
- Supports up to 25 spans plus a cantilever at either or both ends
- Supports multiple segments with different cross-sections within a single span for beams, one-way, and two-way slabs
- Supports varying cross-sections from one span to another
- Automated column capital design for two-way slabs
- Very useful in evaluating output from complex finite element programs
- Numerous built-in warnings of overstresses or departures from standard practice to help mitigate errors or poorly proportioned designs
- Watch stresses and balanced loads change instantly on the same screen as you adjust profiles and forces
- Supports input files from PTData.Net and PTPlus.Net to facilitate continuity
- Displays graphical representation of the input structure to minimize errors
- Improved illustrations of tendon and reinforcement arrangement
- Attractive PDF output reports
- Designed by practicing licensed structural engineers for practicing engineers and instructors.



1

Multiple segments in Beams, One-Way and Two-Way Slabs

In addition to beams, users can now have multiple segments within a single span of one-way and two-way slabs as well. This feature can be used to model openings or holes in a slab.

Create Geometry

Member Name:

Structure Type:

No. of Spans:

Cantilevers
Left Right

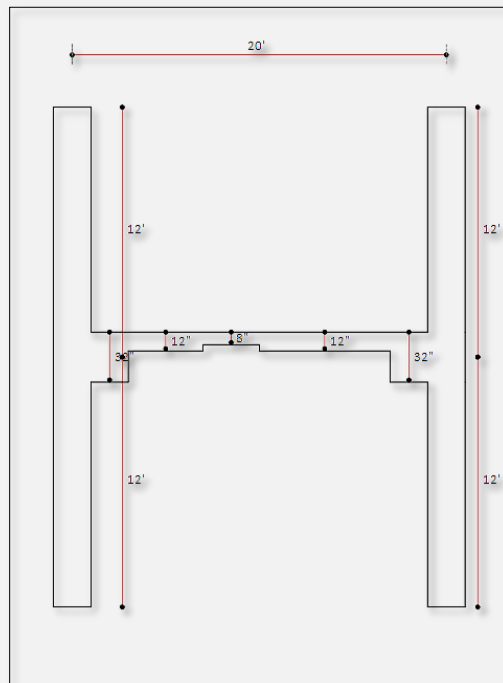
Live Load Arrangement
Skipped Uniform

Number of End Spans
Left Right

Span	Length (ft)	Left Support	BOTTOM COLUMN			TOP COLUMN			Right Support	BOTTOM COLUMN			TOP COLUMN		
			Lc (ft)	Section	Fix	Lc (ft)	Section	Fix		Lc (ft)	Section	Fix	Lc (ft)	Section	Fix
1	20.00	Column	12.00	Col	Fixed	12.00	Col	Fixed	Column	12.00	Col	Fixed	12.00	Col	Fixed

Span	Length(ft)	Left Cap	Right Cap	Segs	Seg-1	Section-1	Seg-2	Section2	Seg-3	Section3
1	20.00	Cap	Cap	3	7.00	Slab2	3.00	Slab	10.00	Slab2

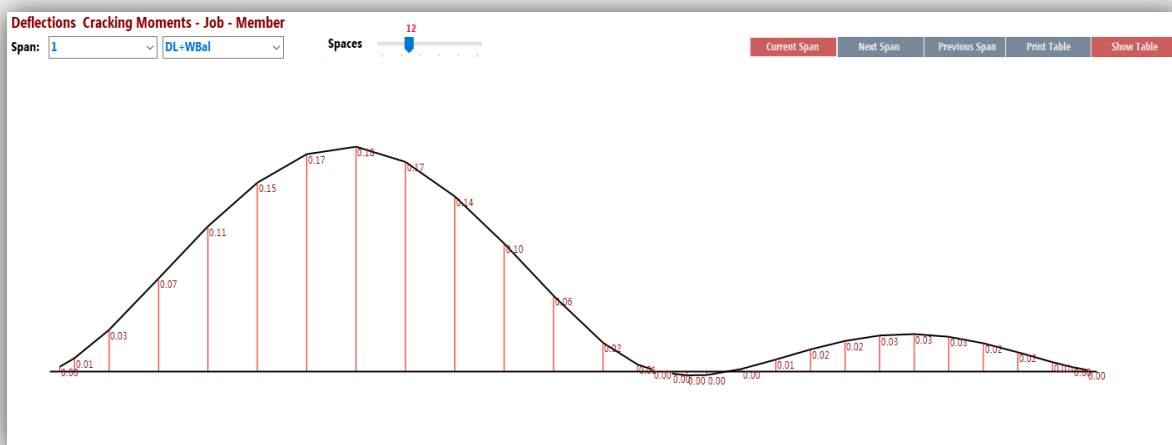
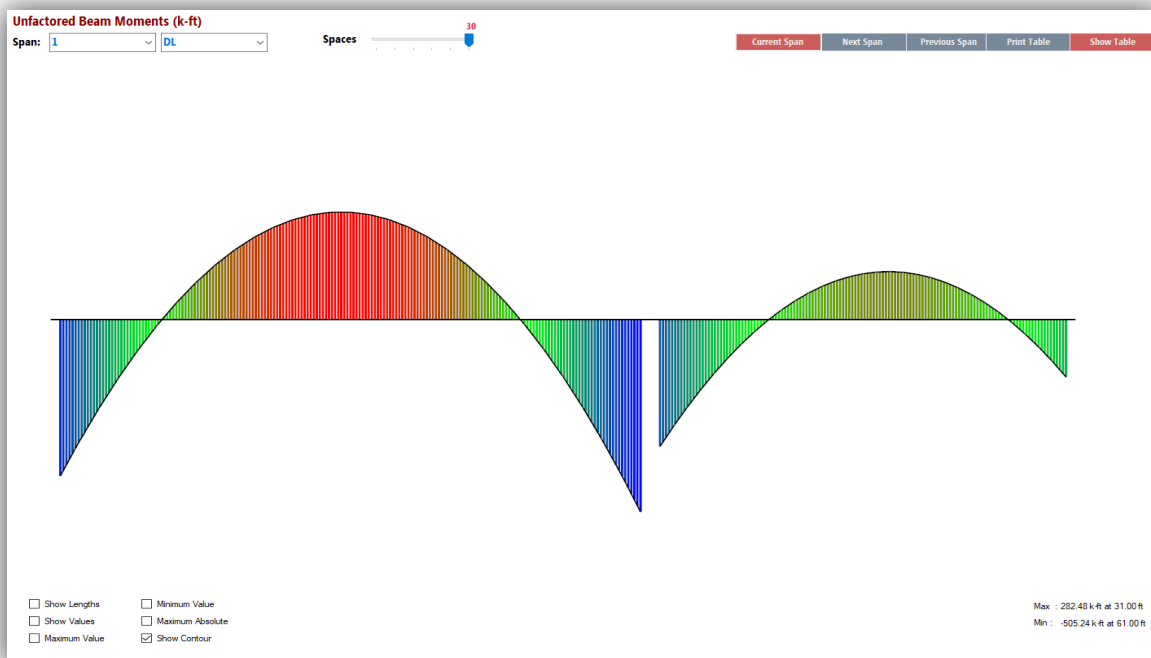
*All spans with segments are entered from left to right



2

Diagrams for bending moments, deflections, and stresses.

Now the results for bending moments, deflections and stresses are accompanied with their respective diagrams.



Also the number of design points can be adjusted right on the diagram, by adjusting the bar on the top. By adding more design points, the user will get results at more points and the diagram will look more refined as shown below.

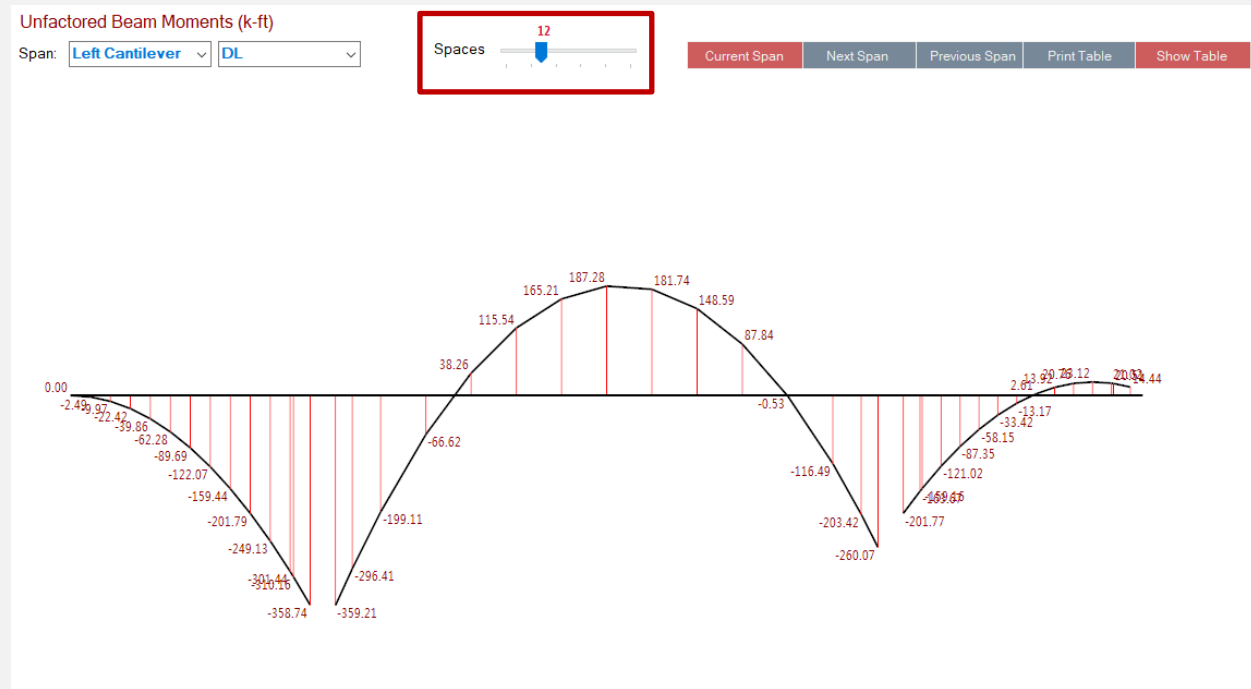


Diagram with 12 design points

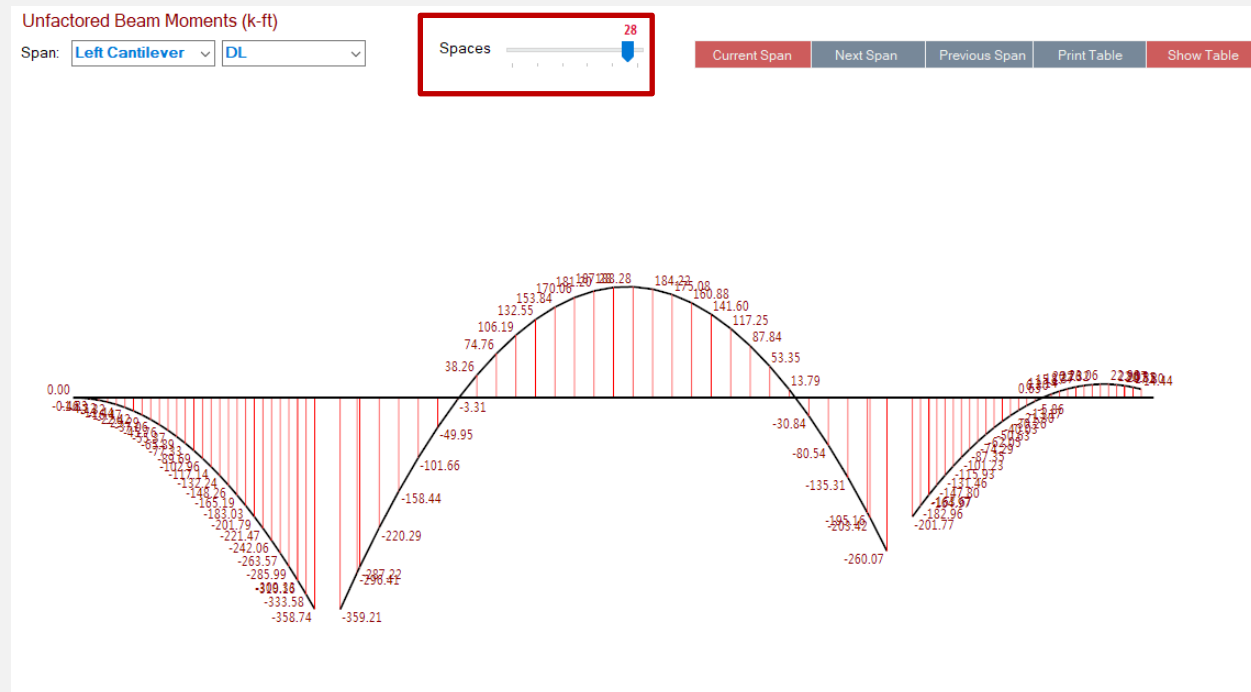


Diagram with 28 design points



3

Corrections were made to load factors under “Configurations”.

The load factors for ACI 318-14 and ACI 318-11 has been added and the user now has the flexibility to choose between different code versions:

Configuration
✕

Column Modeling Option

Top and Bottom Columns Always Present

Top Column Present for Superimposed Loads Only

Cracking Moment Calculations

Ignore Cracking Moment Calculations

Include Cracking Moment Calculations

Minimum Shear Cap Size

Disabled

Enabled

Non-Controlling Cantilever Iteration

Iterate Highpoint - Use Sag in Cantilever

No Iteration - Straight CantileverTendon

Load Factors

KDL

KLL

KW

KW2

KDW

KCOMB

KDL1

KLL1

Spaces

Column le/lgross

Fpu (ksi)

Effective Tendon Stress (ksi)

Low Relaxation

Normal Relaxation

Code

ACI 318-99

ACI 318-02 to 318-08

ACI 318-11 and 318-14

Set As Default

Restore Defaults

OK - Return To The Main Menu

Apart from these there have been numerous bug fixes and interface improvements.

