S-PAD™

Steel Member Design and Optimization Tool

S-PAD is a stand-alone steel member design and optimization application that lets you quickly code-check a member's capacity (beam, column, or brace) without the need to build a complete detailed model.

- Features exactly the same superb output as S-STEEL as well as the same comprehensive set of design constraints giving the engineer full control of ALL design parameters.
- Quickly and easily input strength and stability design forces, effective lengths in compression and unsupported lengths in bending of a steel element (beam, column or brace) and run a quick code check or even an auto-design to help identify an optimum section.
- Least weight, cost, depth and surface area design criteria.
- Input can be copied in from external spreadsheet programs.
- Support for AISC 360-10 & 360-05 LRFD/ASD, AISC ASD 89, AISC LRFD 94, CSA-S16-2001 & 2009 & 2014, CSA-S16.1-M94, EC3:2005, EC3:2005 Singapore Annex, BS 5950:1990 & 2000, AS 4100-1998, NZS 3404:1997, Hong Kong Structural Use of Steel 2005, 2011.
- Support for American, Canadian, British, European and other international section sizes.
- Code relaxation available for more conservative designs.
- Uses a simple, intuitive spreadsheet layout which allows up to 20 design cases to be evaluated simultaneously.
- Input files can be saved and can contain multiple worksheets each with up to 20 design cases.
- Detailed design calculations can be viewed for all section shapes.
- For auto-design an automatically sorted list of adequate sections is produced to easily identify optimum sections and detailed design calculations can be viewed for all sections.
- Code check or automatic redesign options for steel member strength.
- Material listing for weight, surface area and costs.
- User defined constraints for accurate design criteria.
- Unparalleled informational quality of printed results – complete breakdown of code results for members that pass or fail.
- Flexible design to customize your output reports.
- Online help system.

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