S-STEEL R10.0

New & Updated Design Codes

- Eurocode EC3 2005 UK Annex. Comprehensive coverage of the new European EC3 code using the UK Annex and including support for class 4 (slender) sections (see table below).

KEY	
Supported	
Beyond Scope	
Not Applicable	

S-STEEL support for EUROCODE EC3 2005 UK Annex

		SHAPE	I Section		Channel		Angle		Double Angle		Tee		Hollow					
													Circular		Square		Rectangular	
		Classification	1~3	4	1~3	4	1~3	4	1~3	4	1~3	4	1~3	4	1~3	4	1~3	4
LOAD CONDITION	AXIAL Only: Tension or Compression																	
	SHEAR and [Combined Shear+Axial]																	
	BENDING and [Combined Bending + Axial]	Laterally Supported																
		Laterally Unsupported (LTB)																

- Canadian CSA-S16-2009. Includes expanded code coverage (see table below) as well as new and changed clauses, for example; the new method for calculating the coefficient of increased moment resistance ω_2 and new Cl.13.3.3 for single angle members in compression.

S-STEEL support for Canadian CSA S16-2009

		SHAPE	I Section		Channel		Angle		Double Angle		Tee		Hollow					
													Circular		Square		Rectangular	
		Section Classification	1~3	4	1~3	4	1~3	4	1~3	4	1~3	4	1~3	4	1~3	4	1~3	4
LOAD CONDITION	AXIAL Only: Tension or Compression																	
	SHEAR and [Combined Shear+Axial]																	
	BENDING and [Combined Bending + Axial]	Laterally Supported																
		Laterally Unsupported (LTB)																

Improved Output

- Eurocode EC3 2005 UK Annex; expanded code check details. A new feature optionally shows fuller working and equations. These can be collapsed and expanded and will prove especially useful for those familiarizing themselves with the fine details of new code.
- All supported design codes; in addition to custom I-beams, rectangular hollow sections, square hollow sections and circular hollow sections, the '.TBL' file now supports custom single angles, tees and channel definitions.

Enhanced Design Code Coverage

- Canadian CSA-S16-2001; for class 4 (slender) sections axial compression is now supported for all section types.
- Canadian CSA-S16-2001; For class 4 (slender) sections unsupported bending (lateral torsional buckling) is now supported for following section types; I-sections, Channels, Rectangular Hollow Sections.

S-STEEL support for Canadian CSA S16-2001

		SHAPE	I Section		Channel		Angle		Double Angle		Tee		Hollow					
													Circular		Square		Rectangular	
		Classification	1~3	4	1~3	4	1~3	4	1~3	4	1~3	4	1~3	4	1~3	4	1~3	4
LOAD CONDITION	AXIAL Only: Tension or Compression																	
	SHEAR and [Combined Shear+Axial]																	
	BENDING and [Combined Bending + Axial]	Laterally Supported																
		Laterally Unsupported (LTB)																

- American AISC 360-05; Class 4 (slender) sections are now assessed for all load conditions (see table below)
- American AISC 360-05; Unsupported bending (lateral torsional buckling) check is now supported for; Tees, Rectangular Hollow Sections, Double Angles, Channels.

S-STEEL support for USA AISC 360-2005 LRFD & ASD

		SHAPE	I Section		Channel		Angle		Double Angle		Tee		Hollow					
													Circular		Square		Rectangular	
		Classification	1~3	4	1~3	4	1~3	4	1~3	4	1~3	4	1~3	4	1~3	4	1~3	4
LOAD CONDITION	AXIAL Only: Tension or Compression																	
	SHEAR and [Combined Shear+Axial]																	
	BENDING and [Combined Bending + Axial]	Laterally Supported																
		Laterally Unsupported (LTB)																