steelproducts

Detailing Software (web links in this PDF are active)

Company	Products Offered	Product Descriptions
AceCad Software, Inc. http://www.strucad.com 610.280.2840	**StruCad**	A structural steel detailing system that puts an array of powerful modeling and detailing tools in the hands of drafting professionals, providing a productive solution for steelwork detailing.
	StruM.I.S	An MRP that brings the steel fabrication industry up-to-date with the latest processing, tracking, and reporting facilities and streamlines the fabrication process by providing seamless interaction between departments, suppliers, and clients.
	StruNest	A plate nesting system that allows users to optimize their steel stock by planning cutting schedules to calculate minimum wastage.
ASVIC Engineering & Software http://www.asvic.com 61.7.5594.4488	**MST02—Structural Detailing Pro**	Mech-Q structural detailing for AutoCAD, AutoCAD LT, and IntelliCAD. Steel shapes with weighted auto-BOM. Includes stairs, ladder, connections, frames, beam design, and symbols. Free demo available.
AutoSD, Inc. http://www.autosd.com 601.679.5800	**AutoSD Steel Detailing**	Create shop fabrication drawings of beams, columns, bracing, stairs, rails, ladders, embeds, and door and roof frames. Beam-to-beam and beam-to-column connection matching. Extract CNC data.
CadVantage, Inc. http://www.steeldetails.com 704.344.9644	**CVSpro8**	Combines piece-by-piece and grid-navigator input styles. Click icons representing framing conditions and enter other basic information found on a framing plan: the rest is automatic. Applies connections automatically or from a library.
	CVSpro ToolBox	AutoCAD-based programs for detailing miscellaneous steel like stairs and handrails, embeds, etc. Based on the popular SSDCP programs.
Computer Detailing Systems, Inc. http://www.asteel.com 888.263.5892	**Asteel 2.0**	A flexible detailing solution with drawing presentation. Produces details, CNC and production control data, mill orders, connection calcs, gather sheets, and more. User friendly. Easily configurable.
	Asteel 3D	A complete detailing solution. Produces details, anchor bolt plans, e-sheets, field bolt lists, mill orders, CNC data, production control data, connection calcs, and more. Easy to use, with minimal training required.
Computer Detailing Corp. http://www.steellogic.com 215.355.6003	**SteelLOGIC**	Detailing software for structural steel and miscellaneous metal using the AutoCAD engine. Creates customizable shop details and plans with complete ordering, cutting, and shipping lists.
	OCP	An Optimal Cutting Program (linear nesting) that utilizes on hand stock and minimizes material to order. Interfaces with SteelLOGIC and other detailing programs that export to KISS format.
	Material Management	A management system for structural shapes. Can be used for advance bills, inventory management, or project cutting lists. Includes weights, surface area, and material cost. Unique rapid input system.
Coutts Design, Inc. http://www.zipcad.com 617.868.2940	**ZiPCAD|Pro**	A full-featured CAD program for Palm OS handhelds. DXF drawings may be imported/exported to a PC of SD card. Verify or modify drawings in the field, create as-builts from scratch, e-mail DXF drawings to and from your handheld.
	ZiPCADPlans	Sketch floor plans and CAD drawings fast and accurately with this handy tool. Design and alter drawings right on your handheld. Powerful wall, door, and window tools make it great for drafting existing conditions.
	ZiPCAD|View	Drawings in the palm of your hand. Turn on/off layers, pan, zoom, window, lift measurements, and calculate areas. Store complete drawing archives on your SD Card. Imports the DXF file format
Design Data http://www.sds2.com 800.443.0782	**SDS/2**	Ties detailing, connection design, building design, CNC data, and detail review into one product. Provides updated information to engineers, shops, detailers, fabricators, and field personnel. SDS/2 can save time, reduce errors, eliminate redundancies, and build strong relationships with steel partners.
DetailCAD http://www.detailcad.com 406.862.7906	**DetailCAD**	A software program used to detail structural steel. Put all info into a framing plan and have the software generate details, or generate details by a peice-by-peice method. A free 45-day "try before you buy" option is available.
	DetailCAD Genie	Properties and dimensions of various shapes are just a click away. Bracing, camber, trigonometry, stairs, circle, metric conversion, as well as many other functions, are also included. Download a trial version from the web site.
	DetailCAD Plan Generator	A software program used to generate anchor setting and framing plans automatically. The user enters information into dialog boxes, then plans are generated in AutoCAD automatically. Download a free trial version from the web site
Digital Canal Corporation http://www.digitalcanal.com 800.449.5033	**StrucPro**	An affordable way for AutoCAD users to increase their productivity. A simple 2D AutoCAD plug-in that reduces drawing time by creating common steel details, concrete details, and line-work automatically.
Graitec http://www.graitec.com 800.470.4566	**Advance Steel Suite**	A powerful and user-friendly, flexible AutoCAD-based steel detailing and fabrication package. Easily produces general arrangement drawings, detailing, bills of material, and NC files. Works in all Autodesk supported versions of AutoCAD, including Architectural Desktop.
John Williams Detailing, Inc. http://www.williams-detailing.com 260.492.2327	**AutoStructural**	Structural steel detailing package. Details steel columns and beams, brg. plates, and all structural shapes. Easy to learn and use. Has all structural steel shapes database built in for autoback-offs, copes and blocks, beam depths etc. for auto detailing of columns and beams.
	AutoStair	Draws stair stringers and dimension them with a special fraction font standard to the steel industry.
MacroSoft http://www.4macrosoft.com 909.863.9169	**Detail for Windows**	Detail is a fully automated 3D steel detailing system. The model is built visually using a new GMI interface, connections are applied globally, and the shop and erection drawings are automatically generated.

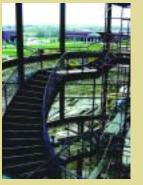| Company	Products Offered	Product Descriptions
MultiSUITE Software http://www.multisuite.com 800.500.4563 or 713.807.1005	**MultiSTEEL**	Structural steel design software for AutoCAD in 2D and 3D steel. Wide range of automated features. Full design links. Specialized modules for platforms, stairs, rigs, and offshore.
	MultiREBAR	Reinforced concrete detailing software for AutoCAD. Draws bars as easily as lines. Integrated bar detailing, schedules, materials lists, and international libraries.
	MultiDRAFT	A general detailing environment for AutoCAD. Includes key drafting tools. Ensures drawings are consistent in terms of layering, annotation style, and presentation.
	MultiINTEGRATOR	A family of translators to enable the exchange of MultiSUITE application data between the main industry applications for further analysis and design.
Omnitech Associates http://www.desconplus.com 510.658.8328	**DesconWin–ASD 4.0**	A steel connection design software per ASD method, including seismic provisions. Beam-to-column and beam-to-beam shear and moment connections, column, and beam splices are designed using DesconWin-ASD.
	DesconWin–LRFD 5.0	Designs shear and moment connections and splices per LRFD method, including seismic provisions. FEMA-350 connections have been implemented in Version 5.0. Detailed calculation reports and design drawings are produced.
	Descon Brace–ASD and LRFD 4.0	Designs connections of vertical bracing systems including chevron braces, knee-braces, and braces connected to a column base and beam-column joints, producing detailed design calculations and drawings.
Soft Steel Inc. http://www.softsteelinc.com 909.863.9191	**GMI—Graphical Modeling Interface**	A new 3D-modeling interface that allows the user to model steel structures visually inside Autocad and apply connections. GMI can be used together with Detail by MacroSoft.
	Softscan—Bill Of Material Scanner	Softscan is a stand-alone program that will read virtually any DWG or DXF file, and create export files for FabTrol, Steel 2000, EJE, Romac, Structural Software, Excel, and stand-alone reports based on the BOM.
SoftDraft, LLC http://www.softdraft.com 901.753.6500	**SteelPLUS Structural VR2006**	Consists of five parametric program modules including Structural Shapes, Steel Floor & Roof Deck, Bolts/Nuts/Washers, Joist & Girder Series, and Welding Symbols. Steel databases include CISC, US Metric, AISC LRFD3 Design/Detail Dimensions, and AISC Historical Shapes Design Dimensions.
SSDCP, Inc. http://www.ssdcp.com 704.370.0840	**SSDCP**	AutoCAD-based software for detailing structural and misc. steel- beams, columns, bracing, stairs, handrails, trusses, embeds, ladders, plate work, e-plans/sections, anchor bolt plans, elevations, etc. Follows AISC standards. Works in imperial or metric dimensions and shapes.
SteelCad Consulting Corp. http://www.steelcad.com 800.456.7875	**SteelCAD**	Automated steel detailing and fabrication software. Complies with AISC and CISC standards. Produces erection drawings and generates design calculations. Shop-ready drawings. Details most structural beams, columns, vertical and horizontal bracing, stairs, and ladders. Any member can be made from almost any structural shape.
StrucSoft Solutions http://www.strucsoftsolutions.com 514.341.2028	**StrucSoft Solutions**	A total structural solution for construction projects. From architectural modeling to engineering, detailing, fabrication, and erection, the range of software and support offered can help improve production and ease of project completion.
Tekla http://www.tekla.com 877.TEKLA.OK	**Tekla Structures–Steel Detailing**	The evolution of Xsteel. Structural and miscellaneous steel detailing solution that maximizes the accuracy and productivity of 3-D modeling, while automatically creating shop/erection drawings, material reports, and CNC files for fabrication.
	Tekla Structures–Full Detailing	Multi-material construction, single platform with the ability to create production models and fabrication/detail drawings for structural steel, pre-cast concrete, and CIP-reinforced concrete elements.
	Tekla Structures–Project Management	Manages the information model. Provides the ability to apply and automatically extract critical management attributes in all Tekla Structures-based models and access to this information without the need to manipulate construction geometry.

Product Case Study

SDS/2 by Design Data

Design Data's new 41,000 sq. ft corporate headquarters, located in Lincoln, NE, demonstrates the broad capabilities of steel and showcases SDS/2, the company's 3D computer modeling software product, specifically designed for the structural steel industry.

"The project was designed and detailed in roughly four months using SDS/2. After the project was sent to AISC-member **Midwest Steel Works, Inc.** and the material ordering process was completed, an SDS/2 download created the shop drawings and the connection design calculations. Elevations and framing plans were exported in DXF format and sent to Sinclair Hille Architects, along with an Autocad plan with correct column and beam sizes.

The overall project required 227 tons of structural and miscellaneous steel, along with 63 tons of steel joists and 47,200 sq. ft of steel deck.

When visitors enter the building today, they view a seemingly floating steel spiral staircase that rises up three stories through the building's atrium. The stairs were fabricated in four sections. Temporary columns were used to hold the sections in place during the erection process, while temporary bracing between the stringers prevented twisting. Once the stringer joints were field welded, the temporary columns and braces were removed. The result was a free-standing spiral staircase with no center supports.

The staircase encircles a two-story sculpture of a wide-flange column with full-sized sculpted bronze ironworkers. Created by internationally renowned artist Fred Hoppe, the sculpture serves as a tribute to those who work in the steel industry. ★

Based on an article by Joanne Morgan, a Design Data associate. Photos courtesy Design Data.