

MECH-Q Product Information





ASVIC Engineering & Software

ASVIC develops and distributes CAD-based software products for a wide range of engineering fields ranging from Mechanical, Piping, HVAC and Structural Steel Detailing. Our clients are involved in commercial, food and beverage, petrochemical, biotechnology, heavy industry, marine, mining, military, pharmaceutical, pulp and paper, energy generation and various other markets.

ASVIC's main product Mech-Q is currently being used by more than 16 000 engineering and drafting professionals, world-wide.

ASVIC's product developers are totally committed to continue improving Mech-Q to meet the needs and expectations of our customers. At ASVIC we endeavour to look at each individual customer as equally important. Our mission is to provide prime and prompt service and support to all customers, irrelevant of size.

Company History

ASVIC Engineering and Software has been involved in CAD software development since 1994. Mech-Q Mechanical and Mech-Q Structural Steel Detailing were first released in early 1995 for AutoCAD r12. In 1995 ASVIC released Mech-Q Piping followed by Mech-Q HVAC Ducting. Mech-Q P&ID was introduced in March 2000.

In 1998 Mech-Q for IntelliCAD was made available only one month after the release of IntelliCAD 98 in USA. As OEM partners with drcauto (providers of the lisp enabler LT Toolkit), ASVIC developed and released MECH-Q for AutoCAD LT.

ASVIC have been active members of the Autodesk Development Network (ADN) since March 2000.

In less than 14 years since the first release of Mech-Q version 1.0 in Australia – Mech-Q has helped more than 16 000 CAD professionals in more than 55 countries spread across five continents.

Welcome to MECH-Q CAD Solutions

The engineering and drafting design for:

► AutoCAD	AutoCAD LT
CADian	ZWCAD

MECH-Q CAD Solutions are available both in module form or as a package. Each module can be added at any time with ease. MECH-Q is a parametric software and uses data libraries to draw the selected objects. This software allows you to customize the data libraries to enhance the application range.

These powerful modules will not only draw with ease and accuracy but also keep track of the parts drawn and some modules are equipped with auto-Bill Of Materials functions.

MECH-Q is available for both English (imperial) and metric (SI) units. Most utilities are equipped for drawing both in 3-D solids or 2-D.

The package includes a customizing routine which allows you to draw objects according to your preferred layer and text style system. No need to change your drawing standard. If you prepare drawings for customers with different requirements - you can save a MECH-Q configuration for each of your customers. This lets you change over from one configuration to another with great ease.

Fully compatible with: AutoCAD, AutoCAD LT and IntelliCAD.

MECH-Q works like you do - only faster

This means that you do not need to learn any new techniques. MECH-Q has been designed to let you work like you always have, but it provides the tools to do it faster, accurately and with ease. MECH-Q lets you draw to your office standard, no need to change the way your office works. The items that you use continuously are supplied with the product. You do not need to look up tables for bolts, steel shapes, pipe fittings... anymore. This saves you valuable time and eliminates possible errors. You save time - therefore money.

MECH-Q is affordable

Our products are developed by a small dedicated team of engineers and programmers. The product is sold primarily direct to you and through a small group of authorized dealers. This allows us to keep the cost as low as possible and pass the savings to you. MECH-Q is available in modules - so you only need to buy what you need.



- Bricscad
- ▶ IntelliCAD... and more

MECH-Q is designed for you

The developers of MECH-Q have worked with people like you and have made every effort to design the product as you want.

We listen to our customers - this is how MECH-Q has grown and developed over the years. But we will not stop here and we are dedicated to continue to improve MECH-Q.

Why not try MECH-Q for yourself?

There is no need to take any risks - we let you try before you buy. If you have not received our fully functional demonstration disk - just send us an email or give us a call and we will send you a copy of MECH-Q to evaluate for 21 days.

There is no obligation to buy and once you have finished testing it is simple to uninstall.

MECH - Q... Making CAD Easy

Ţ	I	
Convert English > Me	tric $\[Tee]$	Match
elect Section Spec/Size:		<u>B</u> .O.M.
AISC (e) V16x4	0 •	List
and a state of the		
Options Draw 3D Zero fillet Add Centroid Repeat Draw Use golylines	US AISC/ASTM W-Shape Section Depth = Section Width = Flange Thick. = Web Thickness Unit mass = 40.0	7.00 in 3.51 in = 0.31 in
Options □ Draw 3D □ Zero fillet □ Add Centroid □ Repeat Draw	US AISC/ASTM W-Shape Section Depth = Section Width = Flange Thick.es Web Thickness	7.00 in 3.51 in = 0.31 in
Options ☐ Draw 3D ☐ Zero fillet ☑ Add Centroid ☐ Bepeat Draw ☑ Use golylines ☐ Annotate	US AISC/ASTM W-Shape Section Depth = Section Width = Flange Thick. = (Web Thickness Unit mass = 40.0	7.00 in 3.51 in = 0.31 in 0 Lb/It

	Shape <u>R</u> ectang C Re	un <u>d</u> C Flat <u>o</u> val
	Insulation	one Thk: 1.0
	End Connection End 1: Flange (Ang	IP mode
Size	End 2: Flange (Ang Interm: Male/Fema	
w/id/Diam 24.0 Ht 15.0 Wall Tk	0.031 Connections CFG	Bend CFG
Draw View Options	List/Edit Symb	ols Sa <u>v</u> eAs
Run (Size H) _ Layers	Match Develop	ment <u>G</u> etCFG

		0			\mathcal{D}	\mathbf{D}
$\langle \sim \rangle$	$\left. \right\rangle$	\triangle				\mathbb{M}
PIPE		D = 6.625inch) = 6.065inch •	Size NB:	6	inch (Iraw Single Line Double Line
		TEEL (CS) 💌	<u>R</u> ating	~		7 <u>3</u> D
Pipe Wall/Ra	ling:	0.280 SCH4		сн 💌	Layers	Draw <u>C</u> FG
BOM Remark	s: [m (Omit from	<none> BDM)</none>		•	Object	<u>Options</u>
¥iew/D	Iraw	BOM	List		Exit	Help

MECH-Q Structural

Main Modules include:

Steel Shapes Generator: supporting standards (AISC/ASTM and Metric: BHP (Australian), CISC (Canadian), DIN, RSA, JIS and IS). Equipped with weighted auto-BOM and listing utility for 2-D and 3-D.

Stairs Utility: Single flight, multiple flight stairs, front elevation and plan views. It is equipped with auto-dimensioning and a stringer fabrication detailer.

Ladder Utility: Step-thru and side-step ladders, fully customizable and with auto-dimensioning.

Beam-to-beam and beam-to-column connections: Equipped with auto-fabrication detailing.

Other Modules: Structural bracing module, hand railing, frames utility, purlins and girts, plates, welding symbols and many more.

Also Included: Beam designer: Design options include simply supported, cantilever, propped and build-in beams - multiple load cases. The utility also reports and plots stress and deflection diagrams, reactions and minimum allowable beam section.

MECH-Q HVAC Ducting

A comprehensive package for rectangular, round and flat oval ducting. Generate complex HVAC ducting layouts with ease and equipped with an auto-BOM utility, sheet material take-off and flat sheet development.

Add insulation as required and bends design is fully customizable.

Other Utilities: Duct transitions, tees and wyes (several shape options), branches, dampers, diffusers, flexible duct, grills and other accessories, build-in and customer defined symbols.

MECH-Q Piping Pro

Pipe and Pipe Fittings: Pipe, 45 and 90 degree elbows, tees, reducers, flanges, valves, 180 degree bends, weldolet...

Size range: DN15 (1/2") to DN900 (36").

Drawing option: Single line, double line and 3-D solids. Fittings types: butt welded, socket welded, threaded and victaulic, cast iron, stainless, PVC, PVC-U and DWV, copper...

Equipped with auto-BOM, and full layers control. MECH-Q piping lets you draw complicated pipe layouts in hours not days.

Isometric Piping: A full range of isometric pipe and fittings. It includes a comprehensive set of standard symbols to the range. MECH-Q ISO piping includes an auto-BOM and BOM balloons utility and tools for easy isometric dimensioning is included.

Other Piping Utilities: Pipe schematics / P&ID, fabricated pipe, plumbing symbols pipe hangers, vessels, pumps and many other pipe drawing tools.



Mech-Q Bolts & Screws Utility 🛛 🕅		
Ē	å b	
骨		
View	Draw Layers	
• Eront	Bolt Head	Bolt Shank
	 Current 	Current
O Plan	O Hidden	() Hidden
Options		
Vut	☑ 3D	Simplify
Washer(B)	Repeat Draw	20년 - 11년 []
Washer(N)	Convert Eng	lish -> Metric
Select Size	120 💌	 Metric ○ English
<u>D</u> raw		<u>xit H</u> elp

MECH-Q Mechanical

Fasteners: A large collection of parametric utilities for drawing of bolts, nuts, washers, pins, bolt holes, slotted holes and more.

Material Handling: Conveyor rolls, suspended, sprockets, conveyor wheels, chain wheels, trajectory and valley angle calculator.

General Mechanical: Shafts design, chamfering utilities, bearings and bearing housings, keys and key ways, spur gears, clutches, cylindrical tolerance, mechanical symbols and many more.

General Drafting: This is a large collection of utilities, including detailing utility, autodimensioning utility, drawing symbols, section arrows, Quick-Draw utilities, layer manipulation functions, global text changing and many more.

Other MECH-Q Modules

Springs: Design and drawing utilities that include compression and extension springs.

BOM Utilities: Full bill of materials functions which include BOM balloons, BOM tables, exporting and importing from files. The utility is fully customizable for any BOM table design. It allows formula relationship between fields and supports BOM spanning of multiple drawings.

Electric motors, blocks manager, batch script and many others.

3-D Solids option not available for AutoCAD LT.



What Mech-Q Users Say

"...thank you for saving me so much time by using Mech-Q. My work is usually in the mining and heavy industrial... drawing idlers and trajectories at the push of a couple of buttons has taken days off my work on jobs..." Ian Pike, QLD Australia

"...since I started to use Mech-Q Piping software there has been a big increase in my output. I found Mech-Q Piping very easy to use and its a great product."

John Beavis, New Zealand

"We are very pleased with the outstanding performance of Mech-Q. I have used AutoCAD for 15 Years... this is the most functional toolbox for all engineering disciplines I have ever been privilege in using. Thank you for your wonderful product!" John Lovin, GA USA

"...Mech-Q works great. I cannot tell how much I appreciate the support you have given on this product. It has been well worth the money I spent on it."

Mike Crosby, TX USA

"Mech-Q is a great software package for use with AutoCAD. Big time saver." Harry Kubarek, USA

Current Customers Include:



"An excellent, excellent mechanical program! "Mech-Q takes the bulk of the drudgery out of drafting and leaves much more time for designing. It's been a real time-saver for me; easy, intuitive, and downright fun to use. I am impressing myself with the leap in quality of my work, because of the speed at which I can now draw..." **Ray Gardner, NY USA**

"...I am very, very happy with Mech-Q. I have been writing lisp and making my own menus since AutoCAD R10 was released and I can really appreciate the amount of work ASVIC have invested in Mech-Q and what impresses me even more..." Waldman Roland, Belgium

"I have been using Mech-Q for about seven years and when I had a problem (which has been very few times) ASVIC Support solved my problem immediately. Thanks for supporting your product. This is the best program that I have used and ASVIC keeps improving it." John Grooms, TN USA

"I enjoy using Mech-Q very much. It has helped me with the design and fabrication of piping systems. I can't believe I worked for so many years without software like this!" Greg Fry, CA USA

MECH - Q... Making CAD Easy

ASVIC Contact Details

QLD Australia

 Phone
 +61
 7
 5526
 6601

 Fax
 +61
 7
 3112
 5087

 4
 Montebello
 Crt,

 Robina
 QLD
 Australia
 4226

NSW Australia

 Phone
 +61 2 4915 8666

 Fax
 +61 2 8456 6011

 49A, Park Street,
 Cardiff NSW Australia 2298

Dubai UAE

 Phone
 +971
 4
 311
 6595

 Fax
 +971
 4
 332
 8810

 PO Box
 75671,
 508, The Fairmont, Dubai UAE

Web www.asvic.com Email info@asvic.com

