

QUEST

Family of Engravers

WHAT SEPARATES THE QUEST ENGRAVER FROM THE REST!

The Quest Engraver is a revolutionary engraver that has been designed from the ground up. All possible features that have been absent on rotary engravers or only on a select few have been implemented. The design team, made up of engineers and master engravers, have utilized sound engineering components proven in fields, far more demanding than the engraving industry. The envelope has been expanded and the result is the finest engraver available. Below are only a few of the many features that make the Quest Engraver stand head-and-shoulders above the rest. We pride ourselves with the fact that we went the extra distance on every item on the engraver. Not a single item was selected as being just adequate. Look it over and you be the judge... or ask for a user reference list. We'd like you to be, next on this list.

The Quest uses a 15mm precision ground ballscrew versus a leadscrew.

- The 15mm (.59") ballscrew is far superior in accuracy, stiffness, mechanical efficiency and overall life. Expected life 30 plus years. Thrust bearing mount stabilizes an already rigid ballscrew. Mechanical efficiency is 90-95%.
- Others use a .5" diameter leadscrew which are less accurate, noisier, lower efficiency (30-60%), easy bent if abruptly stopped and will wear more unevenly.



The Quest Engraver can be outfitted with the Braille-Raster Pen (manual Positioning or Pneumatic) making Braille Signage a breeze.

- Most others have no capability to attach a second spindle and far fewer can make it run automatically; drill holes and automatically insert the beads.
- Most others force you to change spindle, very time consuming.



The Quest Engraver uses a micro-stepped high performance stepper motor.

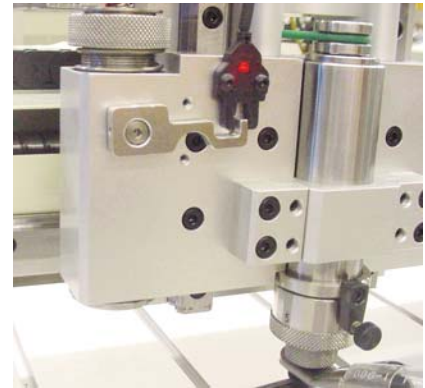
- The stepper motor is what turns the ballscrew, using a mid-range amperage motor with higher torque rating has proved very functional and reliable. We dare to put our unit to the test, even against servo systems. Re-run the same job over and over again and expect the same positioning time after time.
- Others use a lower amperage motor to avoid the high cost of the drivers. This sacrifices engraving torque and repeatability.



QUEST Family of Engravers

The Quest Engraver uses a Z axis sensor with many possible options.

- Manual, Semi-Auto Z set or Full-AutoRun are simple and easy to use. Indicator to confirm actuation.
- Others offer only a manual mode, a poorly functional Material Sense, hard-to-use manual control or limited configurations.



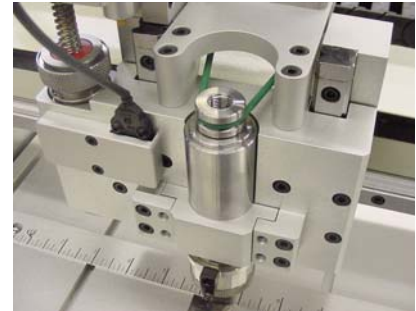
The Quest Engraver uses a belt drive between the stepper motor and leadscrew.

- The leadscrew is subjected to lateral forces that can effect the stepper motor efficiency, stepper motors are truly designed to only apply a rotational force.
- This also allows the Quest to avoid stepper motors hanging out which decreases engraver footprint.
- Others use a stepper coupling. These couplings are often mis-aligned and transmit lateral forces.



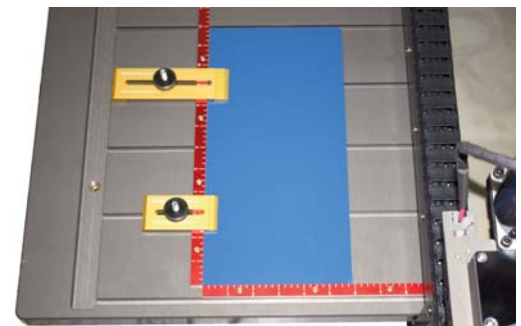
The Quest Engraver uses a Dual LM Rail and bearings for the Z axis.

- A linear slide assembly is a high accuracy, precision rail and bearing, and when used in a pair become very rigid, offer long life and effective strength in all directions.
- Others use a single slide which can become very sloppy.



The Quest Engraver comes with an over-sized "Cast" aluminum table. Over 1" left & right. The top has an additional 7", bottom 1" to allow for easy clamping.

- Others have the table size exactly the size of the engraving area, no scales, no room for outer clamps or other holding methods, no t-slots and no trough for drainage. You'll get a plain plate or optional layer of prefab extruded aluminum t-slot material.
- No other table is made from Cast aluminum which is a very dead material, allowing machining without warpage.
- No other table is double disk ground to achieve best flatness.
- No other engraver goes to the extreme to hard anodize, radius and chamfer the table. Only the Quest goes this extra mile.



The Quest Engraver comes with thin T-slots grooves throughout the table.

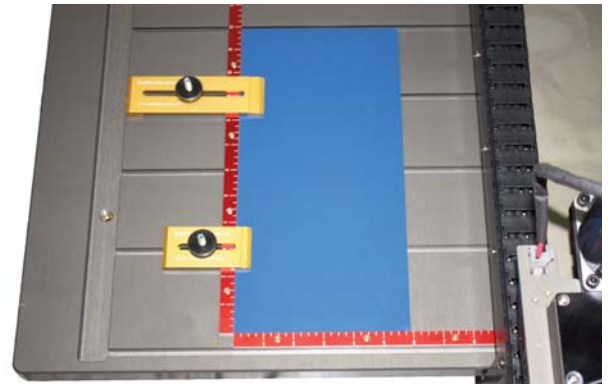
- These slots are only 1/4" wide to allow proper holding but not be so wide that it effects your engraving material support.
- Others give you a limited number of slots, too many slots and/or slots that are too wide.



QUEST Family of Engravers

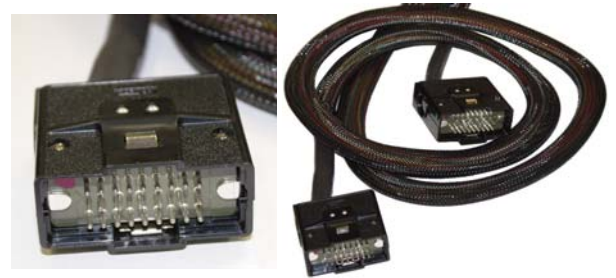
The Quest Engraver comes with a 24" scale across the X & Y axis.

- Others may give you a marked end stop or nothing at all.
- The Quest scales are a very handy reference to position your product to engrave correctly. If not necessary, scales easily slide off or back out of the way.



The Quest Engraver uses a heavy duty interconnect cable with a very positive latch.

- Others use a cable suitable for a printer or small electronic component, but not designed for the possible riggers of today's engraving applications. Our wires for stepper motors is 18 ga, others use 20 ga to as small as 24 ga.



The Quest Engraver uses LM Rails on X, Y & Z axis yielding 360° support.

- This results in smooth movement and long life. Expected life 30 plus years with no adjustments required.
- The X axis carriage has the LM rails 90° rotated to even more support the possible heavy Z demand.
- Others use a .5" diameter open style bearing which has support in only 270°. These will also require adjustment after 5-10 years of use.



The Quest Engraver has maximum travel limit switches on the X & Y Axis.

- No other engraver has this feature. Move head to the extreme and the table will shut down. Great for peace of mind when letting a job run all night.
- Other engravers will allow the engraver to slam into the extremes and grind away until job has ceased.

The Quest Engraver uses a heavy duty 36vdc spindle motor.

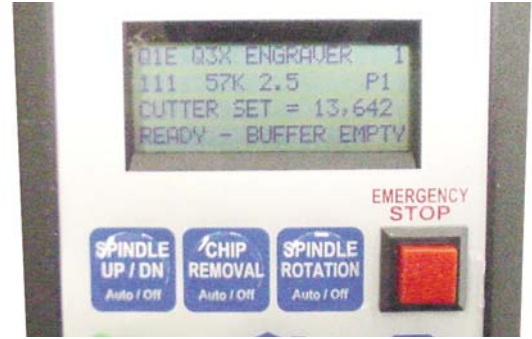
- This motor is very quiet, long lasting and has exceptional torque characteristics. All this with very modest replacement cost.



QUEST Family of Engravers

The Quest pendant with a 4x20 digital readout.

- This results is the ability to control virtually all of the engraver functions within a handheld control.
- Others use a pendant with only switches, while others incorporate the pendant into a much larger box, which must now occupy valuable desk space.
- Most others use a scale of totally meaningless values. In some cases these numbers do not correspond to any linear scale or are in reverse of the action expected.



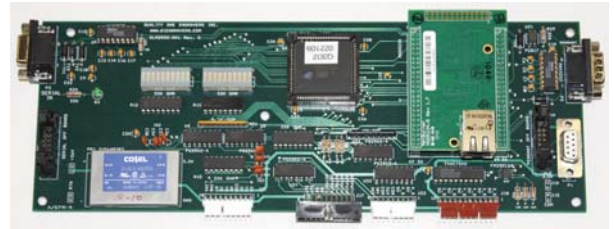
The Quest Engraver uses the new Q3D Controller.

- After years of prototyping and reliable performance the Q3D Controller is an evolution in progress. Firmware releases are done at a rate of 1 per month. We add features, enhancements and custom menus from customer requests. Update via ethernet in seconds.
- Other manufacturers firmware may never be updated.



The Quest Engraver uses a single controller board in the Engraver Control Box. It is a very simple assembly with a minimum of proprietary parts.

- This means easy replacement or trouble shooting.
- Others use as many as 3 boards or worse yet, put the stepper drive circuit on the CPU board.



The Quest Spindle uses a long threaded micrometer with .360" of securely fastened adjustment. Easy to read engraved markings and 25 flats at .001" increments.

- Others use a spring with detent which can vibrate loose and only have .125" or less of secured travel.



Theirs Ours

The Quest Engraver uses a spindle with a 30 mm quill.

- This results is a larger bearing is utilized to improve the spindle operation, both strength and noise level. Four large 26 mm OD angular contact bearings are utilized. Our spindle is a minimum 25 times the bearing load capability to others.
- Others use .75" diameter bearings, which are very noisy and have low mechanical strength capabilities.



Theirs Ours



Other very important features:

- User friendly pendant instructions.
- No hidden fasteners.
- Basic hand tools to work on.
- Small footprint compared to engraving area.
- Braille Raster Adapter to insert beads.
- Easy to replace spindle belts.
- Easy to lubricate.
- Minimum of loose wires cables.
- Ability to make any corner the Home.

QUEST Family of Engravers

SOFTWARE

An engraver is only as powerful as the software to run it. The Quest Q3X Controller currently runs from many software programs. It is our continuing effort to expand this list to any software that will make our engraver better. Available is a very simple engraving program with all the features necessary and for the more discriminating users full featured programs are available.

So far:

CADlink; EngraveLab *(recommended)*

Scanvec Amiable; FlexiEngrave - EnRoute - CASmate

Vision Numeric; Type3 - 2D

PlotAll - Windows Print Driver

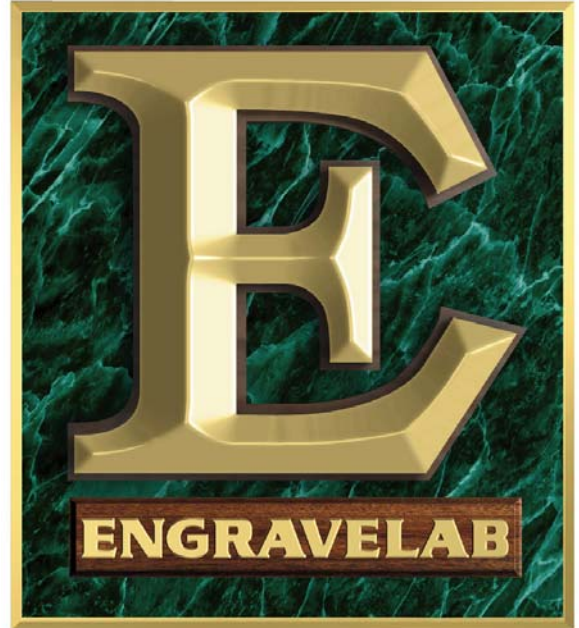
CorelDRAW via PlotAll or EngraveLab

GravoStyle v8 & v9

Quality One Engravers; ME3-PC engraving software



SCANVEC
AMIABLE



WHY BUY FROM QUALITY ONE ENGRAVERS?

We at Quality One Engravers do not claim to be the largest, and, of course, we are far from it. But we can claim to give the best customer support in the industry. I have heard the talk that what will happen if the owner dies going on now for over 20 years. Most other manufacturers have gone thru bankruptcy, buy outs, and wholesale change over of personnel. Over this same period, Quality One has remained solid, and run circles around all manufacturers, even repairing equipment these other have made and forgotten about. Often we repair the engraver better than the OEM and we always apply in-house reverse engineering to correct a chronic problem. We have a highly trained staff that will continue to bring you the service and support you have come to expect from us.

And on top of that, We answer our phone with a real person!