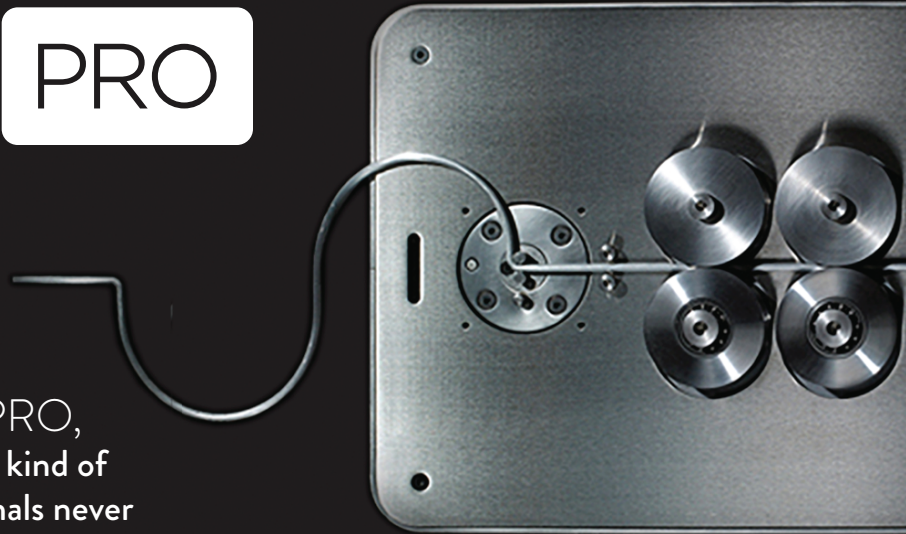


D.I.WIRE PRO

BY PENSALABS



INTRODUCING THE D.I.WIRE PRO, our newest CNC wire bender, offering the kind of power, speed, and precision that professionals never thought possible from a bench top machine.

WHAT CAN D.I.WIRE PRO DO FOR ME ?

D.I.Wire PRO bridges the gap between time-consuming hand-bending and expensive large-scale, mass production CNC wire bending.

- **INCREASE PRODUCTIVITY**
Achieve more throughput per person.
- **INCREASE ACCURACY AND REPEATABILITY.**
Eliminate operator fatigue, error.
- **REDUCE TRAINING TIME.**
New employees are productive right away.
- **SAVE MONEY AND TIME**
Run small jobs yourself instead of contracting.
- **PERFECT PROTOTYPE**
Before setting up a large production machine.

HOW IS IT BEING USED?

The D.I.Wire PRO creates smooth, tight radius curves for a range of wire from fine orthodontic wire to stainless steel rod for industries including, automotive, home appliances, furniture, robotics and more.



AEROSPACE



AUTOMOTIVE



DENTAL / ORTHO



MEDICAL



APPLIANCE & HOME GOODS



PROTOTYPING



SHORT RUN



FURNITURE & LIGHTING

AVAILABILITY

Order now, shipping begins spring 2017.

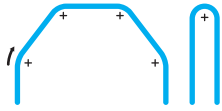
CONTACT

For more information or to place an order, please email sales@pensalabs.com

WHAT TYPE OF OUTPUT CAN I EXPECT?

D.I.Wire PRO offers a variety of ways to bend.

BUMP BENDS



Bump bend up to 180°. Use bump bending to create segmented bends and control bend points in Path Mode or Script Mode. The minimum radius relates to materials and mandrels -- order custom hardware to fit your needs.



SMOOTH CURVES

Use Script Mode to achieve smooth curves. Small radii are created by using very close bump bends, allowing for gentle, open curves or tighter shapes like circles.

ARCS



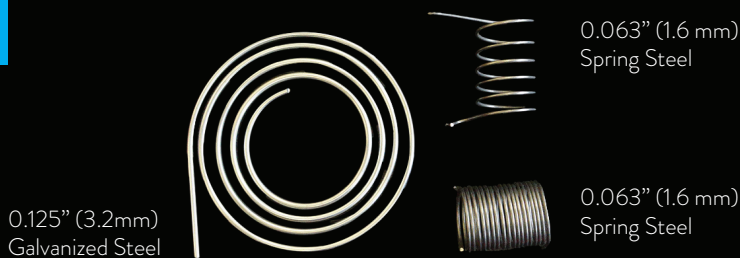
CONTINUOUS ROLL BEND

In Script Mode, use G-code to produce curves by feeding wire around the mandrel as it is bending. Known as a roll bend in the wire industry, this allows you to make sweeping curves and even coiled shapes like a helix or spring.

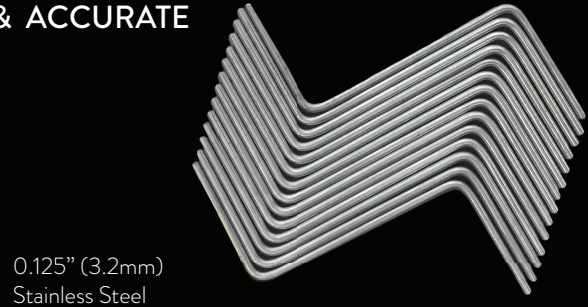
WHAT HAVE WE BENT?

D.I.Wire PRO is versatile, bending simple or intricate.

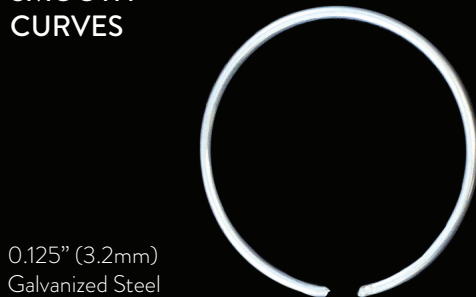
COILS



REPEATABLE & ACCURATE



SMOOTH CURVES



RANGE OF SIZES

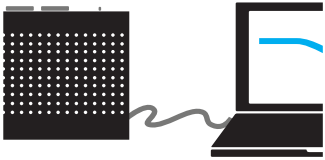


DIWIRE PRO

BY PENSALABS

HOW DOES IT WORK?

The workflow for D.I.Wire PRO is simple and straightforward.



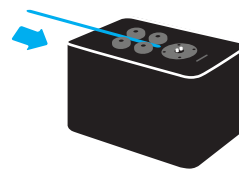
1 CONNECT & OPEN WIREWARE

Connect D.I.Wire PRO and computer via USB and open Wireware to start a new bend project or open saved bends.



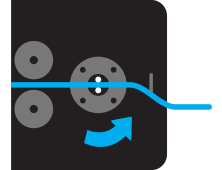
2 DRAW CURVE

Import your 2D vector file into Wireware or use Wireware to create a shape.



3 LOAD WIRE

Load your wire. DIWire PRO allows you to create custom material profiles that compensate for each material's properties.

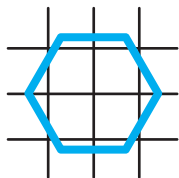


4 BEND

DIWire PRO makes highly accurate parts and Wireware allows you to tweak settings to get exactly what you need.

HOW DO I USE WIREWARE?

The software allows for direct control from a machine level up via a GUI or G-code, including custom calibrations and compensation controls.



PATH MODE

Import an SVG file. Manipulate points using an interactive interface to adjust scale, feed length, bend angles, and curve resolution.



SCRIPT MODE

Script mode lets you program shapes using our script commands in conjunction with your own material profile, or control the machine directly using G-code.



MATERIAL PROFILE MODE

Wireware lets you save custom material profiles that allow the machine to compensate for your materials' properties.



TECH SPECS

Capabilities & Requirements

WIRE CAPABILITIES

Wire diameters: choose from 0.028" to 0.188" (0.7-4.8mm).

MATERIALS

A range of materials, from stainless steel to high carbon steel, low carbon steel, copper, brass, and aluminum.

SOFTWARE

Software included: use SVG files, G-code, or script using Feed/Bend commands.

CUSTOM BEND PINS & FEED WHEELS

You specify tooling based on application and wire diameter.

POSITION ACCURACY

Feed: +/- 0.016" (0.4mm)

Bend Pin: +/- 1°

Feed rate: about an inch per second

MACHINE

Dimensions: 16.25" x 11.25" x 13" (41 x 29 x 33 cm)

Weight: 100 lbs (Shipping Weight: 125 lbs)

Operating Temperature: 15-30°C, 59-86°F

Power Req: 100-240 V, 1.8 A, 50/60 Hz

FAQ'S & COMPARISON

Common questions

ARE THERE PLANS TO ACCOMMODATE LARGER ROD OR SMALLER WIRE?

Yes. We continue to push the limits of our machine and it's likely that we can bend an even wider range of wire, cable, and tube than published. If you would like us to qualify your material, please email us: sales@pensalabs.com.

WHAT ABOUT ADDING ACCESSORIES OR AUTOMATION FEATURES?

Currently, we are using an after-market straightener in-house and are exploring an automated cutting function. Tell us more about your production needs.

CAN IT MAKE 3D PARTS?

Wireware allows for bending in 2.5D by adding pauses at programmable points, then rotating the wire manually before resuming the bend in another plane. Currently we do not support an automated third axis.

WILL IT BEND MY PART?

If the D.I.Wire Pro is within your budget and you are eager to see if it can bend your object, email sales@pensalabs.com with a file or picture of your shape and your wire specifications.

HOW IS THE D.I.WIRE PRO DIFFERENT FROM THE D.I.WIRE?

- More power: bend stainless steel up to 0.188".
- Greater precision and control to within +/- 1°.
- More shape capabilities: bend up to 180° with close parallel lines; smooth curves, sharper inside radii.
- More material options: customizable for wire sizes from 0.028" to 0.188", aluminum, brass, variety of steels, jacketed wire, and more.
- More shape options for material profiles: customizable bend pins, mandrels, and more; can work with round or rectangular wire, and strap or tube.

Learn more @ [PENSALABS.COM](https://www.pensalabs.com)