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**Spring
Product Guide**

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Products**

Techno  **CNC** Systems
Educational

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EDUCATIONAL


**3 ROCKS
TECH.**



Aeronautics/ Aviation

Wright Brothers Design Challenge™ with PowerPole™



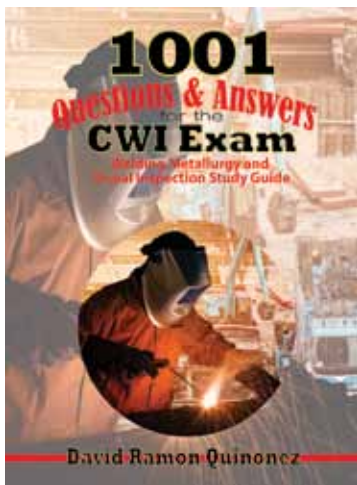
Using KELVIN®'s Wright Brothers Design Challenge with PowerPole (#851507), students turn a foam tray, toy motor, and propeller into a model airplane! Students in middle school and up can learn about aeronautics and problem solving with KELVIN®'s unique PowerPole™ Challenge. Compete to build the lightest and the most innovative planes! See our website for our full line of plastic supplies and equipment.

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Books

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1,001 Questions & Answers for the CWI Exam offers an expansive collection of preparatory exam questions and answers for welders, inspectors, students, or anyone interested in the welding metallurgical field. Appendices include tables, formulas, lists of organizations and major corporations employing welders and inspectors. An affiliated website boasts even more Q&A, dynamic welding tables, information on several different types of arc welding, and NDT inspection testing.



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203.956.5593

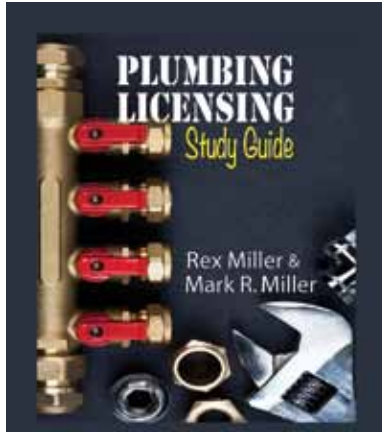
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Books

Perfect for Anyone Taking the Plumbing Licensing Exam

This accessible source includes:

- Valuable tips and illustrations of the various tools and equipment used in the trade.
- Hundreds of practice questions and answers included at the end of each chapter.
- Exam studying suggestions, licensing requirements, and tips for instructors who are preparing lesson plans and curricula for teaching plumbing certification.
- Practical advice for using this invaluable information on the job.



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Books

Groundbreaking Revision Provides an Improved User Experience

For two decades, Blueprint Reading Basics has been revered for its ease of understanding and giving students opportunities to practice what they learned. With this historic revision, new author Charles Gillis has updated the entire package, replacing figures with CAD-generated artwork, adding new illustrations, representing metric drawing practices alongside English, and including content from various drawing standards. An Instructor's Resource Kit (sold separately) contains over 600 presentation slides for classroom use.

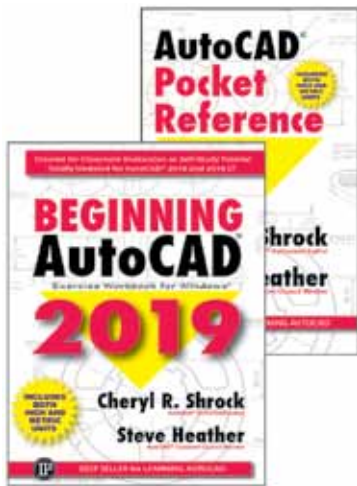


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Books

Learn AutoCAD Quickly and Easily



Coming Soon... Beginning AutoCAD 2019 Exercise Workbook and AutoCAD Pocket Reference, 8th Edition. Both include new “CAD Tips” throughout, providing shortcuts and suggestions from our expert author. The Beginning Workbook introduces two new features in AutoCAD 2019, “Drawing Compare” and “Shared Views,” making working with clients and 3rd parties infinitely easier. The Pocket Reference provides a refresher on everyday information needed by AutoCAD users, including inside tips, and fundamental commands.

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CAD/CAM

Validate Students' Skills with Mastercam Certification™

Mastercam®

Mastercam Certification™ is a quick and easy way to validate a person's skills, benefiting both employers seeking qualified recruits, and individuals seeking to advance their careers. Enabling students to achieve a certification in the world's most widely used CAM software helps to ensure their success once they leave the program. Certifying students in Mastercam not only validates their skills but also your program.

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CNC

MDX-540 CNC Milling Machine

Providing rapid prototyping on a convenient 12" × 12" table size, the MDX-540 is one of the fastest and most accurate rapid prototype machines on the market. With a price tag that's less than half the cost of most additive systems, it offers high performance in a simplified machine that anyone can use. The MDX-540 also includes easy-to-use SRP Player CAM software to support 3D scaling and simulation of finished 3D parts. Optional machine additions include a rotary axis for unattended milling and a contact-scanning unit for reverse engineering. Enhanced MDX-540A and MDX-540SA models are also available.

Roland DGA
www.rolanddga.com/education
800-542-2307



The **techdirections Product Guide** is published in April and October.

If you would like to see your products in this guide, please contact Matt, **techdirections** Advertising Dept., 800-530-9673 x302, matt@techdirections.com.

CNC

Industrial Skills Training Solutions

Techno CNC Systems Educational Sector (www.techedcnc.com) offers high-speed, affordable industrial-quality CNC

routers, plasmas, and laser machines



in a wide range of sizes with work areas available from 12" x 12" to 5' x 10'. All Techno machines are perfect for classrooms and offer endless STEM opportunities.

Techno CNC's routers, plasmas cutters, and laser equipment make it easy and exciting for educators to prepare students for the technical manufacturing jobs of tomorrow. Students meet modern manufacturing challenges face to face, turning design concepts into reality on Techno's latest industrial equipment.

Our webpage "Success in Schools" features a photo of President Barack Obama visiting a school showcasing multiple Techno CNC routers in a Fab Lab. A fine example of how Techno CNC equipment is leading the way in educational training! Check out Techno's educational website, which showcases 30 years of educational success stories in many areas of interest: (www.techedcnc.com/schools.htm)

- Fab Lab
- STEM
- Maker Space
- Pre-Engineering
- CO2 Car Curriculum
- Design/Rapid Prototyping
- Manufacturing
- Architectural Design



Every Techno CNC machine is installed and supported by local Techno representatives to ensure a successful startup. Techno CNC Systems provides superior technical support FREE for the life of our equipment. Call today to get your CNC machining program off to the right start!

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CNC

Cost-Effective CNC Routers



The FabBot Series of routers are very cost effective. The 4x4 CNC router is only \$9,999, the 4x8 is only \$10,999, and tabletops start at \$4,999. These are turn-key packages with computer, CAD/CAM, and training. Other models are available, see www.forestscientific.com.

Forest Scientific Corp.

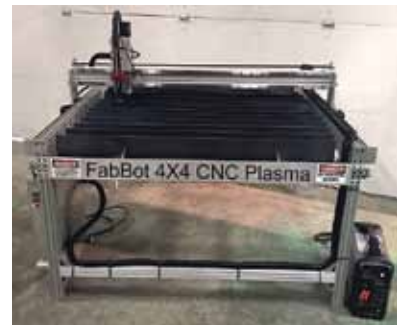
800-956-4056; Fax 814-463-0292

www.forestscientific.com

sales@forestscientific.com

CNC

Cost-Effective CNC Plasma Cutters



The FabBot Series of CNC plasma cutters are very cost effective. The 4x2 CNC router is only \$9,999, the 4x4 is only \$10,999, and the 4x8 is only \$12,999. These are turn-key packages with Hypertherm Powermax 45 machine torch, computer, CAD/CAM, and training. Other models are available, see www.forestscientific.com.

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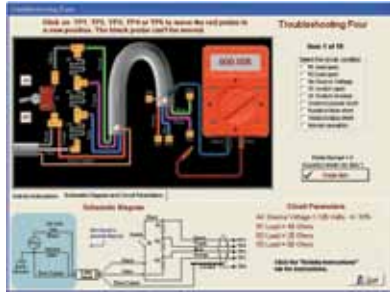
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Electricity/Electronics

Electronics Learning Activities

Do you teach electronics, electricity, HVAC, or automotive technology? Still using old methods to teach modern technology? Interactive software makes learning exciting. Topics from Ohm's law to op amps and digital troubleshooting are covered. Use your current textbooks and curriculum. Activities provide immediate feedback and grading. Learning activities are constructed using random variables to assure varied experiences. Use on computers/networks on campus or students can use it at home. \$229 for unlimited site licenses! Funding often available through Carl Perkins, your media center, or library. Software is excellent for retention, individualization, and remediation. Download trial software programs from our website.



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Heat Treating

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 800-378-0095

Laser

CRP Clean Room Metal Torch



Very cost effective, compared to a \$600K laser, and cuts steel faster than a WaterJet with lower operational cost. This machine is an effective alternative starting under 30K, providing near-laser-quality fine cutting up to 1/4" steel. It can cut up to 5/8" steel. Low-resolution metal marking. This fully enclosed machine can be used in a clean room and can cut steel, aluminum, copper, and brass.

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Manufacturing

Turnkey FMS

Complete turnkey FMS system in one safe, fully enclosed work envelope. Choose either a four-axis mill or a wood lathe. Can be integrated with other modules via a conveyor system. Your students will learn: CNC programming, G-codes, CAD/CAM, robotics, flexible manufacturing, PLC programming, material properties, pneumatics, and interfacing.

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Manufacturing

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Manufacturing

CRP Clean Room Metal Torch

Very cost effective, compared to a \$600K laser, and cuts steel faster than a WaterJet with lower operational cost. This machine is an effective alternative starting under 30K, providing near-laser-quality fine cutting up



to ¼" steel. It can cut up to 5/8" steel. Low-resolution metal marking.

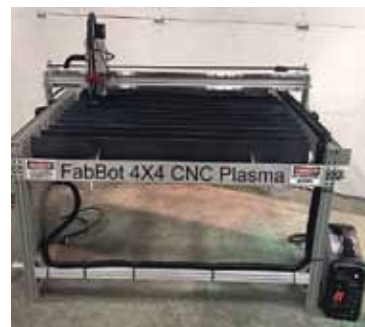
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Manufacturing

Cost-Effective CNC Plasma Cutters

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Mechatronics

Entry-Level Mechatronics Training System

Mini Mechatronics Training System, MMT-95519 is an ideal tool for entry-level users to be familiar with PLC programming and industrial maintenance. Students learn skills to troubleshoot, maintain, and program automation systems.



Features:

1. The most compact industrial-grade mechatronics training system.
2. Fits any lab; the comprehensive mechatronics training curriculums are included.
3. A flexible learning system for students to practice not only basic PLC programming but also advanced automation logic control concepts.
4. Six basic labs for students to be familiar with the system components.
5. Six advanced labs for students to practice logics, sorting, and automation programming.
6. Most affordable and innovative mechatronics system for high school CTE programs.
7. Training contents include DC motor control, sensor applications, pneumatic cylinder control, screw mechanism control, and troubleshooting.



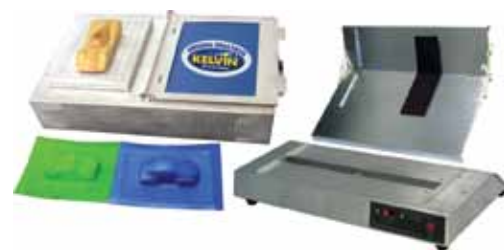
8. Fundamental Allen Bradley PLC instructions practice curriculums included.

8. Fundamental Allen Bradley PLC instructions practice curriculums included.

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Plastics

Plastics Manufacturing Equipment



KELVIN® has a complete line of Plastics Manufacturing equipment for your classroom. The EZee™ Plastic Vacuum Former (#841970) is a fun way to create student-designed vehicles and more! The Hot Line Acrylic Bender (#841999) warms acrylic strips so they can be shaped on the Angle Jig (#841998). See our website for our full line of plastic supplies and equipment.

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Robotics

KELVIN® Kre8® Red Robot

KELVIN®'s Kre8® Red Robot (#283707) is an easy to make and easy to customize autonomous robot that can be controlled with the Genie PCB418 Board (#842211, kit or #842210, assembled).



Comes with free software Genie download. Covers steering, balance, speed, friction, circuit wiring, movement, gears, and motors. Visit our website for our full line of Kre8® easy-to-make projects!

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STEM Educational Catalog



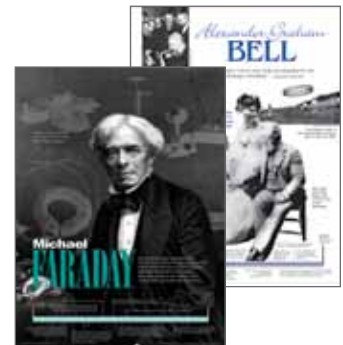
Our latest catalog for Science, Technology, Engineering, and Mathematics as well as Electronics is available online. Visit our website for more information.

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Welding

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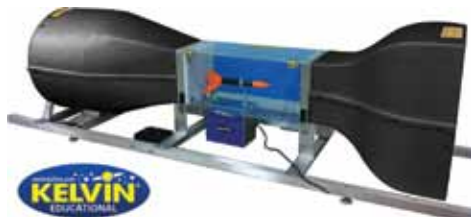
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Wind Tunnels

Wind Tunnel II™

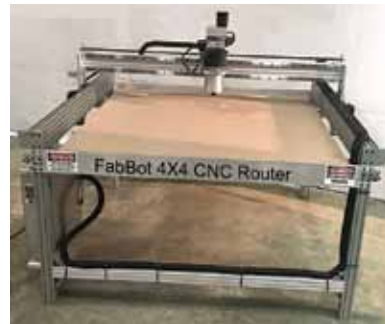
The sleek design of KELVIN®'s Wind Tunnel II™ (#840614) features smooth laminar air flow, variable speed, and variable angle of attack. Students can measure lift and drag to accurately evaluate their designs of wing sections, rockets, cars, and dragsters. Also use it to test mini wind turbines. View results on your computer screen. See our website for more information.

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Welding

Cost-Effective CNC Routers

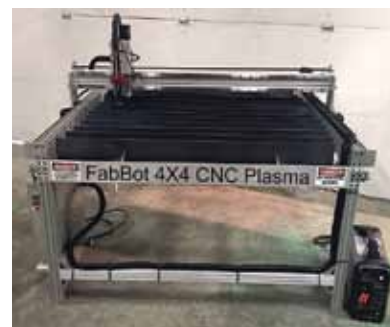


The FabBot Series of routers are very cost effective. The 4x4 CNC router is only \$9,999, the 4x8 is only \$10,999, and tabletops start at \$4,999. These are turn-key packages with computer, CAD/CAM, and training. Other models are available, see www.forestsscientific.com.

Forest Scientific Corp.
800-956-4056; Fax 814-463-0292
www.forestsscientific.com
sales@forestsscientific.com

Woodworking

Cost-Effective CNC Plasma Cutters



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Woodworking

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