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View**Points**

Effective Industry-Certified Training

With an aging workforce and production growth from reshoring, manufacturing needs more trained employees for CNC setup, programming and operation. Community and technical colleges are full of students retraining for a new career in manufacturing.

However, industry is not always pleased with the results. That's because, to be effective, students must learn critical skills on the industry's leading equipment and have sufficient repetition to ensure concepts and procedures are understood and committed to memory.

Our FANUC CNC Certified Education Training program is designed for students to graduate with the knowledge and real-world skills to be productive right out of the gate to run either a CNC mill or lathe.

The FANUC comprehensive curriculum teaches the critical aspects of CNC machine setup, operation and programming using industry-leading equipment and providing sufficient repetition to ensure effective learning. The curriculum's project-based activities are delivered with both workbook and online modules to serve multiple learning styles. The curriculum must be supported by a solid foundation of shop math, blueprint reading and sufficient CAD/CAM programming to understand how G-code is generated in industry.

NCGuide Academic packages are an ideal learning environment as they provide FANUC CNC software running on a PC. Everything works exactly as it does on the hardware control. The software can be provided at very low cost and made available 24/7—providing more opportunity for students to learn by doing. It supports the FANUC Series 0i-TD, 0i-MD and 31i-A/B milling and turning controls.

Students can use NCGuide in the classroom, on library computers or on their own PCs for exercises, homework, distance learning, experimentation or extra repetition time. Instructors can use it for projected demonstrations and on a network for interactive or distance learning sessions. They can record videos to enhance traditional teaching or to "flip-the-classroom" as today's students often prefer learning from videos or online interactive training rather than sitting in lectures or reading textbooks.

Schools face a challenge to provide sufficient workshop equipment to provide students adequate hands-on time. The Levil CNC certification cart brings the machine into the classroom, providing a real machine that is capable of machining real parts, using a real FANUC control and a tool changer—all at an affordable price. It runs on 110v and has a small footprint to fit through standard doorways. It is light and on wheels so it can be transported easily to any classroom at any location, including satellite campuses, industry shops and recruiting events.

Students write, edit and proof programs using 3D solid model animation in NCGuide and then perform setup and testing on the certification cart while still in the classroom. When they get to the workshop, students are already experienced in setup and operation, so equipment is utilized more effectively, reducing the number of machines required.

FANUC is working with domestic and international machine tool builders to provide milling and turning machines with the industry leading control to schools at affordable costs. Additionally, FANUC's ROBODRILL machines are also available at educational prices.

Certification requires passing both an academic and practical skills test to ensure competence. This is important because available funding is increasingly directed to certified programs. FANUC is aligning its program with other industry CNC certification programs such as NIMS (National Institute for Metalworking Skills) to avoid duplication.

FANUC is supporting the need for more qualified operators and programmers for the industry's leading control with the largest installed base by providing affordable and effective solutions to education.

Students graduate with a certificate that is proof of competence—a win for the student, the school and potential employers. **ME**