New drives and PLC’s from ABB provide MATC students with the latest automation control technology, for use in renovated electronic automation lab

Access to such technology makes the transition from theory and laboratory to actual industrial application more effective.

NEW BERLIN, WI, December, 2011 – Delivery and set up of 15 new motor drives and PLC (Programmable Logic Controller) interface systems has been completed at MATC’s Industrial Automation Laboratory. MATC (Milwaukee Area Technical College) is a leading educational institution, providing associate degree and technical diploma programs for students pursuing positions in a technical discipline.

Aaron Aleithe, Sr. vice president and general manager of Low-Voltage Drives, PLC’s and Drive Services, stated that “this is giving back, and an investment in a shared vision of the critical importance of educating power electronics engineers able to help lead companies like ABB into ever-brighter technological frontiers.”

ABB representatives and MATC staff gathered for the official presentation of the equipment. The lab, located in the Technology Building, Room T339, downtown Milwaukee, has undergone extensive renovation and refurbishment in recent months. This lab will serve students in the EET program with live industrial automation control experience, using the latest control technology. The lab, with (15) workstations in all, will be completely wired and commissioned by students in the second-year automation courses. In addition, the entire laboratory will communicate with MATC’s internet network, providing a example of how industrial control interfaces with all facets of manufacturing – from floor-level control to data acquisition.

Invest in the Present – Solid Grounding Into the Future

Terese Dressel, Interim Associate Dean, School of Technology and Applied Science, stresses, “This donation is the result of an exceptional partnership between the college and ABB. Strong partnerships with business and industry, and donations like this help the college offer training on state-of-the art equipment, ensuring that our graduates have the skills necessary for today’s workplace.”

“ABB has provided MATC’s Electronic Technology department an opportunity to advance its automation program with state-of-the-art technology that will provide students an educational platform most representative of current industry standards,” indicated Mark Porubsky, Electronic Technology Department Chair.

Tom Heraly, Electronics Instructor for Automation, states, “The donation helps our students work on interfacing motors, VFD’s and PLC’s, using both discrete and digital interfacing methods. Our students have always interfaced the VFD’s and PLC’s using discrete wire methods. The changing automation market now requires our students to be able to interface using digital communications methods such as Ethernet/IP and Modbus/TCP.”

Associated apprenticeship programs also benefit from the donation

In addition to MATC’s automation lab, separate PLC’s and motor controls will be an integral part of the Joint Apprenticeship program campus equipment. These controls will provide continuing education opportunities for current students or those entering re-training programs, focusing on re-tooling skills to match today’s current workforce requirements.

Adjustable Speed Drives (ASDs) are used in any application in which there is mechanical equipment powered by motors;
the drives provide extremely precise electrical motor control, so that motor speeds can be ramped up and down, and maintained, at speeds required; doing so utilizes only the energy required, rather than having a motor run at constant (fixed) speed and utilizing an excess of energy. These benefits help motor users realize 25 – 70 percent energy savings, according to ABB experts.

Milwaukee Area Technical College is a key driver of southeastern Wisconsin’s economy and has provided innovative education in the region since 1912. Approximately 50,000 students per year attend the college’s four campuses and community-based sites or learn online. MATC offers affordable and accessible education and training opportunities that empower and transform lives in the community. The college offers 200 academic programs; nearly 400 transfer options leading to bachelor’s degrees; and a Pre-College Education division that assists people to complete high school, prepare for college or enter the workforce. Overwhelmingly, MATC graduates build careers and businesses in southeastern Wisconsin. The college is accredited through the Higher Learning Commission, the national standard for academics and student services.

ABB Inc., Automation Technologies, Automation Products, Low-Voltage Drives, is the world’s largest manufacturer of electric motors and drives. In the USA, an integrated channel of sales representatives, distributors, and system integrators allow ABB, New Berlin, Wis., to supply a complete line of energy-efficient electric drives, motors and engineered drive systems to a wide range of industrial and commercial customers. Products manufactured include AC and DC variable speed drives for electric motors from 1/8th through 135,000 HP, and application-specific drive system solutions to meet diverse customer needs.

ABB (www.abb.com) is a leader in power and automation technologies that enable utility and industrial customers to improve performance while lowering environmental impact. The ABB Group of companies operates in around 100 countries and employs about 130,000 people.
MATC Automation Instructor, Tom Heraly, indicates ACS355 programming requirements to a student.

MATC students perform all wiring and programming of VFDs and PLCs in the Automation Laboratory.