

Educational Choices: Teaching Tools

When you have a large group of knowledge hungry students, you have to give extra consideration as to the Tools you will utilize to deliver the knowledge.

When Milwaukee Area Technical College (MATC) required new Educational Tools they turned to Terry Iverson of Iverson & Company. Terry explains “MATC is one of the leading Technical Colleges in the country. We started working with MATC over 30 years ago way back in 1980. Back then, they were one of the first with a CNC program and have continued this tradition of utilizing cutting edge technology to this date. They have shown the foresight to continue to re-invent themselves as necessary to arm themselves with the best tools to train their students for modern Technology as the years have gone by.”

MATC not only serves high school students, but also the continued education and skills development of workers already in the workforce. MATC continues to be an excellent resource for Adults in need of retraining for new career opportunities.

Terry continues “Education is important to me, hence it was only natural that our relationship with MATC has developed over the years. As a result of this priority in my career, I have founded the organization Champion Now. (www.championnow.org) I will frequently make presentations to high school students at MATC to encourage them to consider Manufacturing as a career.” Champion Now is dedicated towards re-building the Manufacturing work force through knowledge based methods focusing on the technical foundation of our young people.



(MATC Shop Floor directly after Iverson & Co delivered 8 Clausing Machines equipped with Fagor 8055 MC Controls)

When it was determined MATC required new Educational CNC Tools, the choice for Clausing machines seemed natural. Clausing Machines are a well built high quality machine engineered to last for years, which can be challenging at times with Students operators. Terry states “We have been involved with Clausing for many years. Chip Manning, the Regional Manager for Clausing, has done a great job in presenting the Clausing machine in this territory. Chip understands the value of a good machine tool and knows how to convey this to the customer, while also sharing my care and understanding for the value of Education.

Chip states “To have the right CNC for this application was important. We chose the Fagor 8055 CNC based upon the flexibility of the CNC to work in multiple modes of operation easily. To switch from a Manual to full CNC mode is as simple as pressing a button. Similarly, the change between ICON Based Graphical Interface and ISO G-code operation is a simple two button command. This is critical for MATC when we consider the different possible levels of training required. From a practical standpoint, both manual and different levels of CNC Operation can be taught on the same machine. In addition, the CNC has 2 CNC Programming modes on-board. An ICON key based Conversational system is a faster and simpler method to introduce a student to CNC. In addition, the traditional ISO G-code programming system is on-board to expand the students knowledge base for traditional part programming. These 2 modes can be toggled from one to the other quickly and easily at any time.



(Fagor 8055 CNC)

Chip states another feature that made the Fagor 8055 CNC the right choice was the Remote Diagnostics. A simple Ethernet connection allows the customer to receive Instant service via the Net. The Fagor 8055 accessed to resolve both support of service and application questions. The Fagor WinDNC program is installed in the adjoining class room to for uploading and downloading of part programs by the standard Ethernet protocol. Fagor WinDNC also provides remote monitoring and a



CNC G-Code editor. Students quickly upload and download any assignments directly to the Fagor 8055 for simulation and execution or also via the USB port located directly on the keyboard. Simulation mode is complete with traditional tool path graphics, solid graphics with zoom and part rotation capabilities. The simple profile editor acts as a mini- CAD/CAM system. Students can quickly create complex profiles or import DXF files and insert that directly into the part program.

In today's competitive marketplace, our students need a diversified skill set to achieve success. Terry & Chip both agree, MATC is going to get a lot of students off to a good career start with the eight Clausing/Fagor mills.

