



Metalworking

How Acu-Rite’s User-Friendly Innovations Make Machine Shops Run Smoother

James Langford | Aug 23, 2022

Metalworking equipment maker Acu-Rite prides itself on the breadth of its product lineup: digital readouts and CNC controls for virtually any job, from the basic to the sophisticated.

What they all have in common is the 60-plus-year-old company’s emphasis on user-friendly design and innovation, apparent in features such as die-cast casings, a uniform look and feel that makes it easier for customers to transition from one Acu-Rite product to another, and dynamic zoom, which can make displayed numbers larger and easier to read from a distance.

“We have solution packages for all types of applications,” says John Parker, business development machine tool and product manager for *Acu-Rite parent company Heidenhain Corp.* “Whether it be a milling, turning or grinding application, customers can take that machine and retrofit an Acu-Rite digital readout to it, or an Acu-Rite control.”

Machine shops looking for a cost-effective device that provides simple positional feedback may start with the *DRO100 series*, which offers single-, double- or triple-axis displays.

“We marry the feedback with those digital readouts,” Parker says, “so we have linear encoders that we provide that give the positional feedback of the movement of the machine tool or the calibration equipment that they’re using.”

Acu-Rite also offers bracket kits designed especially for mounting digital readouts to certain makes and models of machine tools, from Clausing’s Kondia mills, for example, to products from Sharp and Kent.

“One of the things Acu-Rite is well-known for is that we have these very focused bracket kits for very specific machine tools,” Parker says.

More Advanced Digital Readouts

Businesses seeking a midrange digital readout often opt for the DRO203, the workhorse of Acu-Rite’s product line.

“It focuses on some basic machine tool functions that machinists require,” Parker explains. “As an

example, in that readout, we have bolthole calculation capabilities that allow you to calculate the position of holes for a pattern.”

“One of the things I always tell students is that they’re getting the basics, the fundamentals of machining and the capabilities they have within that. If for some reason they decide at the end of the program that’s not ultimately what they want to do, they have this background now that they can take out into the world.”

John Parker
Acu-Rite

The *calculations* come with full- and partial-circle graphics as well as linear patterns, Acu-Rite says. The center calculation lets users determine workplace zero and midpoint.

The 203’s 7-inch display screen—like the DRO 100’s—includes dynamic zoom capability, in which the currently moving axis on a machine tool setup can be highlighted to display data at a maximum size that varies based on the number of digits.



200 Series DRO Kit. Photo courtesy of Acu-Rite.

The feature significantly improves legibility, particularly for workers who may have moved to a station some distance away from the readout and cutting-tool setup, Parker says.

Training the Workforce of the Future

At the high end of Acu-Rite’s readout portfolio is the *DRO 300 series*. Its 303 and 304 variants offer 3- and 4-axis displays, respectively. They also add programming functionality to the features included in

the entry- and mid-level products, Parker says.

The series includes full part program capability, 99 tool offsets, standard input and output capability and edfinder probe support, Acu-Rite says.

The company's entry-level CNC controller, sold under the **MILLPWR brand**, offers 2- and 3-axis options. It can be purchased with and integrated into a brand-new machine or retrofitted to an existing one, Parker says.

The entire lineup, he adds, is designed for a seamless workflow in busy shops and factories.

"There's a common look and feel and intuitiveness about the whole product line," Parker says. "From the basic DRO all the way up through the entry-level control, you can walk up to any of those products, and they have the same look and feel. The colors and displays are similar, and it's very easy to go from one product to the next."

In addition to selling readouts and controls, which are all made in the U.S., Acu-Rite works closely with **schools and colleges**, which are offered products at a discount to use in training, Parker says.

Parker himself has participated in some of the classes, using videoconference software to instruct students virtually in the use of Acu-Rite products.

"One of the things I always tell students is that they're getting the basics, the fundamentals of machining and the capabilities they have within that," he says. "But if for some reason they decide at the end of the program that's not ultimately what they want to do, they have this background now that they can take out into the world."

They can use the knowledge they've gleaned to build a career developing applications for a machine tool company, for instance, or servicing machines.

"It's not just that they're going through a program to learn how to run a machine," Parker explains. "It goes well beyond that because there are so many opportunities in the machine tool world they can take on."

How could retrofitting tools with state-of-the-art digital readouts help improve your business? Tell us in the comments below.

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