The history of conversational programming

To understand the history of conversational, you need to know a little bit about the history of Hurco because the company founders invented conversational programming.

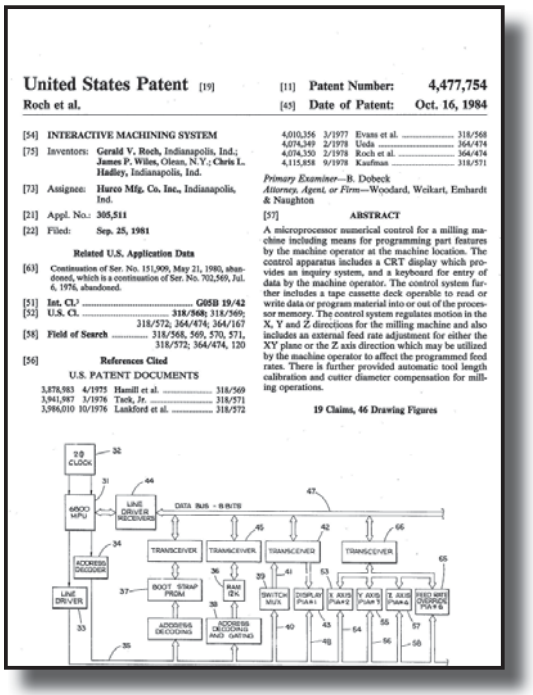
More than 40 years ago, Gerry Roch and Edward Humston formed a company they called Hurco (a creative blending of their last names). Roch was the idea guy and Humston was the business guy.

Gerry Roch grew up around his grandfather's tool and die shop where he discovered his passion for building things. After graduating from Purdue University, he returned to his grandad's shop and realized his fascination with identifying ways to simplify work could be put to practical use. These two talents, combined with the emergence of computers, would lead Mr. Roch to start Hurco.

While his foresight to realize that computer technology could be used to make manufacturing more efficient might not seem particularly cutting edge in today's world of computer proliferation, it was revolutionary in the 1960s. To put it in historical perspective, the computers of the 1960s were expensive; owned exclusively by institutions, such as government agencies, universities, and large corporations; and huge— one computer could consume an entire room. Even though creating a computer for machining parts seemed far-fetched, Humston believed in Gerry Roch's vision and they set out to make computers work for the working man.

Mr. Roch is the definition of an innovator. He is curious. He asks questions. He never accepts the status quo. His fascination with efficiency, combined with his background at the family tool and die shop, his drive to solve problems, and his collaborative personality, are just a few of the reasons why he has more than 60 patents. His patents for interactive control technology, which we call conversational programming, are considered the most significant. Machine tool builders throughout the world must obtain a license from Hurco to implement interactive control technology in their products because the company's founder, Gerald Roch, invented it.

Even with numerous patents and inventions, Mr. Roch is extremely humble, saying, "I've never really been an expert in any area. I know relatively little about software and electronics, but I've been fortunate enough that I conceptually understand how things should work. Then it's a matter of hiring capable engineers to make it happen."



United States Patent [19]
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[54] INTERACTIVE MACHINING SYSTEM

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[73] Assignee: Hurco Mfg. Co. Inc., Indianapolis, Ind.

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Related U.S. Application Data

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[52] U.S. Cl. 318/568; 318/569; 318/572; 364/474; 364/167
[58] Field of Search 318/568, 569, 570, 571, 318/572; 364/474, 120

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[57] ABSTRACT

A microprocessor numerical control for a milling machine including means for programming part features by the machine operator at the machine location. The control apparatus includes a CRT display which provides an inquiry system, and a keyboard for entry of data by the machine operator. The control system further includes a tape cassette deck operable to read or write data or program material into or out of the processor memory. The control system regulates motion in the X, Y and Z directions for the milling machine and also includes an external feed rate adjustment for either the XY plane or the Z axis direction which may be utilized by the machine operator to affect the programmed feed rates. There is further provided automatic tool length calibration and cutter diameter compensation for milling operations.

19 Claims, 46 Drawing Figures

The connection between technology and people is the core of our culture at Hurco. At the end of the day, machine tools aren't about iron, and technology isn't about software codes. They're about people…people like Gerald Roch and people like you who work everyday to identify ways to continually improve their processes, their business, and the parts they manufacture. True to our founder, Gerald Roch, we strive each day to develop technology and build machine tools that simplify work to make you and your business more successful.