MAGTROL INC

1953 2003

Celebrating 50 Years of Global Sales and Service

50 Years in Business and Still Growing



Magtrol Inc. is celebrating 50 Years of Global Sales and Service. The company has experienced continued growth since it was founded in 1953 by John E. Duncan. The original location of the business was a mere 1,000 square foot building, but today Magtrol's main office and manufacturing plant occupies a 34,000 square foot facility in West Seneca, New York. Magtrol also has a manufacturing facility and office in Fribourg, Switzerland along with subsidiaries in France, Germany, U.K. and a new sales office in Warsaw, Indiana.

Magtrol's products began with the simple principles of magnetic hysteresis. Using these principles, Magtrol developed the main staple of their product line; the Hysteresis Brake and Clutch. Since the first developments, this product line has grown to include matched brakes, permanent magnet brakes and clutches, and large bore brakes. These principles were quickly adapted to the motor testing industry, and utilized in the design of Magtrol's first dynamometers. Soon after the development of the hysteresis dynamometer, came a comprehensive line of supporting electronics for motor testing and data acquisition. Today, Magtrol offers complete PC-based motor test systems including single and three-phase power analyzers, high performance dynamometer controllers, readouts and motor test software.

In 2000, Magtrol strengthened their position as a leader in the motor testing industry with the acquisition of Vibro-Meter Instrumentation Division, currently known as Magtrol SA. The acquisition added Eddy-current and powder brake dynamometers, along with in-line torque transducers, to their already diverse motor test product offering. Magtrol also gained a new niche with the addition of a complete line of load-force-weight and displacement products including load pins and load monitoring units for load measurement and overload detection; displacement transducers for contactless measurement; and rotary transmitters for transducer signal transmission.



Magtrol's latest developments have revolved around their customized motor test systems. These PC-based, turnkey systems can be tailor-made for almost any motor test application. Magtrol's focus on convenience and versatility has led to the development of new dynamometer tables and mobile custom motor test systems that allow easy transport throughout the production floor while providing full performance testing.

The future brings a whole new set of goals to the forefront. Magtrol's experienced staff of engineers is currently working on dynamometers for the testing of small/micro motors and stepper motors along with increasing high-speed motor testing capabilities. Magtrol plans to continue being an innovator and provider of high quality products and intends to maintain their position as the leading manufacturer in the test and measurement industry.

MAGTROL INC

A Walk Through History

PAST

1950s

1953 — John E. Duncan founds Magtrol Inc. with the development of Hysteresis technology and the first Hysteresis Brakes and Clutches and Hysteresis Brake Dial Weight Dynamometer. The first location is a 1,000 square foot facility on River Road in the City of Tonawanda, New York.

1955 — Magtrol Inc. moves to a larger 4,000 square foot facility on Virginia Place in Buffalo, New York to accommodate its quick growth rate.

1956 — The Model 4600 Tachometer is developed.

1958 — Magtrol Inc. makes a jump up to a 15,000 square foot facility with a move to 240 Seneca Street in Buffalo, New York. The first Friction Brakes and Clutches are developed.

1960s

1962 — William A. Mulroy Jr. joins the company.

1963 — The Model 4636 Power Supply is developed.

1966 — The 4609 Speed Stabilized Dynamometer Controller is developed.

1967 — The 4602IC Solid State Tachometer and 4605 Torque Speed Readout are developed.

1968 — The 4611 Dial Weight Dynamometer Tachometer is developed.

1969 — Magtrol builds a new 21,000 square foot plant at 70 Gardenville Parkway in West Seneca, New York where the business still currently resides. Also, the first Digital Hysteresis Brake Dynamometers are developed.

1970s

1973 — Magtrol develops the FC-87-3326 for McDonnell Douglas and continues to manufacture until production ended in 1998.
The 4608 Single-Phase Power Analyzer is added to the product offering.

1974 — Magtrol develops the RRA-3 Retard Roll for Xerox and manufactures until the early 1980s.

1976 — The 4619 X-Y Dynamometer Controller is added to Magtrol's motor test product line.

1979 — Magtrol builds an addition to its current facility, increasing the size to 34,000 square feet.

1980s

1980 — The 4625 Torque-Speed-Power Analog Multiplier is developed.

1981 — The spindle is developed for disk drives for mainframe computers and generates a good portion of business for Magtrol until production on the product ended in 1994.

1982 — The first Magtrol Three-Phase Power Analyzer (4614) is developed along with the IEEE-488 Interface.

1984 — Magtrol's first Programmable Dynamometer Controller (4629) is developed.

1985 — Magtrol develops the HPMP-71-3641 for Raymond Engineering, which stayed in production until 1998.

1990s

1992 — John Duncan passes away at 72 years old leaving William A. Mulroy Jr. as President.

1993 — The 5240 Programmable Dynamometer Controller, 5200 Dynamometer Power Supply and 5210 Current Regulated Dynamometer Power Supply are added to the product offering.

MAGTROL INC

A Walk Through History

1990s *continued*

1994 The 5220 Speed Stabilized Dynamometer Controller, 5230 X-Y Dynamometer Controller and 5400 Tachometer are added to the product line.
The 5410 Torque Speed Readout and 5420 Torque Speed Power Readout are developed.

1995 The 5100 and 5300 Single and Three-Phase Power Analyzers are developed along with the first version of motor testing software, M-TEST 1.0.
William A. Mulroy Jr. retires passing the title of President to his son, William A. Mulroy III.
Magtrol's web site, www.magtrol.com, is launched.

1997 The DSP6000 Programmable Dynamometer Controller is developed along with the 6200 Open Loop Dynamometer Controller.

PRESENT

2000s

2000 Magtrol acquires Vibro-Meter Instrumentation Division of Fribourg, Switzerland, currently known as Magtrol SA. The acquisition adds a new line of diverse products to the company including In-Line Torque Transducers, Eddy-Current and Powder Brake Dynamometers, Rotary Transmitters, Displacement Sensors, Load Measuring Pins, Load-Force-Weight Sensors, Load Monitoring Units, Load Conditioners and Displays.

2001 The DSP6001 Programmable Dynamometer Controller, 6510e Single-Phase Power Analyzer, 6530 Three-Phase Power Analyzer and M-TEST 4.0 Motor Testing Software are released.

2003 New sales office opens in Warsaw, Indiana.
New Model 3400 Torque Display in final testing phase. Designed specifically for use with Magtrol's In-Line Torque Transducers, the new display powers the transducer and utilizes high speed digital signal processing to display torque, speed and mechanical power.

FUTURE

Future plans for new product development include dynamometers for testing high-speed motors, small/micro motors and stepper motors.

Founding Father



John E. Duncan (1920-1992)

John E. Duncan was the founder of Magtrol, Inc. and the pioneer of Magtrol's Hysteresis technology. For a man whose formal education did not go beyond high school, Mr. Duncan contributed greatly to industry through his many inventions and technical knowledge. Prior to forming Magtrol, Mr. Duncan made important contributions to the development of the helicopter while a member of Bell Aircraft Corp.'s research staff. He was instrumental in developing the synchronization of the throttle and collective pitch for which Bell was awarded the patent rights.

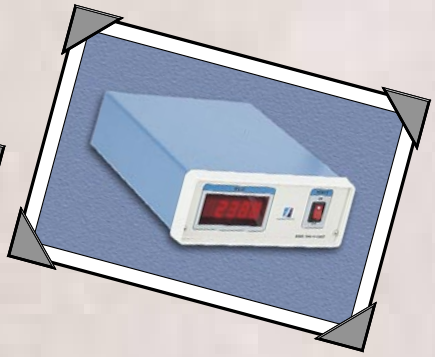
Mr. Duncan was the first to apply a horizontal stabilizer to a helicopter, which became an integral part of all helicopters. Following World War II, he designed and produced remote control helicopters and training devices for helicopter pilots.

MAGTROL INC

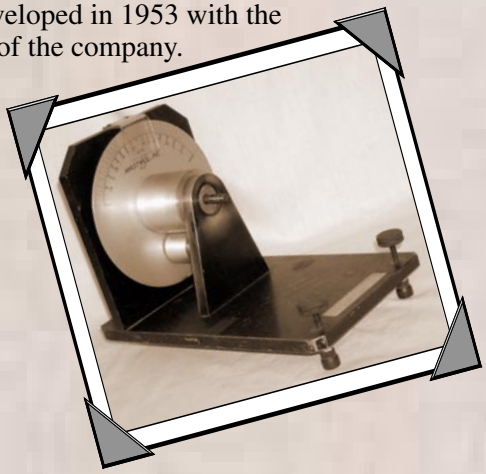
Then & Now

The first Tachometer, the Model 4600, was developed in 1956 and was utilized until 1994 when it was replaced by the 5400.





The Dial Weight Dynamometer was developed in 1953 with the advent of the company.

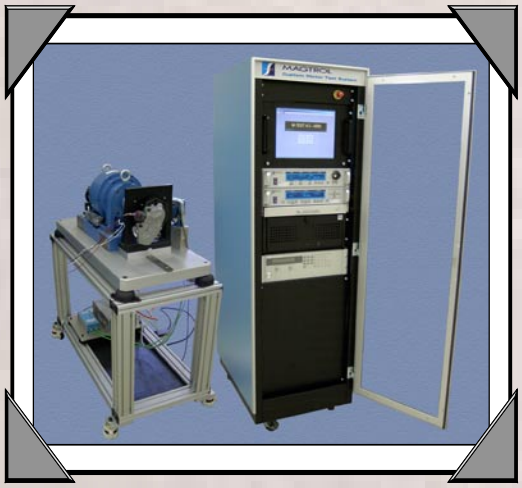




In 1969 the first Digital Hysteresis Brake Dynamometers were developed.

One of the first Custom Motor Test Systems was developed in the early 60s for high volume testing of motors and included a Hysteresis Dynamometer, Electronic Tachometer and indicator lights to accept/ reject motors, all of which was encased in a cabinet.





Today the CMTS can be tailor made for almost any motor test application.

Magtrol Inc
70 Gardenville Parkway ◆ Buffalo, NY 14224 USA
Phone: +1 716 668 5555 ◆ Fax: +1 716 668 8705
E-mail: magtrol@magtrol.com

Magtrol SA
Route de Moncor 4B ◆ 1701 Fribourg, Switzerland
Phone: +41 (0)26 407 3000 ◆ Fax: +41 (0)26 407 3001
E-mail: magtrol@magtrol.ch