

**Factory Automation**

**Worldwide Brands:**

- Dynapar™**
- Eagle Signal™**
- Harowe™**
- Hengstler™**
- NorthStar™**
- Veeder-Root™**

*Danaher Industrial Controls Group was formed through the merger of many premier brands, each widely respected within their product categories. Now integrated into the Danaher Business System, these brands provide what you need to control the performance and reliability of your designs...controls for your world.*

**The Danaher Business System**



**People**

**Process**



**Plan**

**Performance**

In the mid-1980s, a Danaher division faced with intensifying competition launched an improvement effort based on the then-new principles of lean manufacturing. The initiative succeeded beyond expectations – spawning the Danaher Business System (DBS). Since this modest beginning, DBS has evolved from a collection of manufacturing improvement tools into a philosophy, set of values, and series of management processes that collectively define who we are.

Fueled by Danaher's core values, the DBS engine drives the company through a never-ending cycle of change and improvement: exceptional people develop outstanding plans and execute them using world-class tools to construct sustainable processes, resulting in superior performance. Superior performance and high expectations attract additional exceptional people, who continue the cycle.

**DICG IS JUST ONE DIVISION OF A GLOBAL GROWING COMPANY**

**Danaher at a Glance**



**Operating Segments**

- Tools & Components
- Professional Instrumentation
- Industrial Technology

Every day Danaher products help to make life healthier, safer and more enjoyable for people around the world. Whether you're drinking a glass of water, working out at the gym, fixing your child's bike, getting a dental check-up, mailing a package or communicating over a network – chances are we've helped you do it. Some of our products carry high-profile brand names, while others are hidden inside complex systems. Either way, they're vital contributors to some of the most exciting sectors of global industry in today's economy.

**\*How to Reach Us**

**Industrial Sensors & Controls Group Companies of Danaher**

Industrial controls and sensing products track, sense, monitor and control production quality, manufacturing and related process and environmental applications to ensure optimum product quality and machine performance.

NEW Group Website.....[www.DanaherIndustrialControls.com](http://www.DanaherIndustrialControls.com)

**Factory Automation & Feedback Controls**

- Clark Controls.....[www.joslynclark.com](http://www.joslynclark.com)  
+1 803.286.8491
- Dolan-Jenner.....[www.dolan-jenner.com](http://www.dolan-jenner.com)  
+1 800.83.FIBER
- Dynapar.....[www.feedbackdevices.com](http://www.feedbackdevices.com)  
+1 800.873.8731
- Eagle-Signal (Timers).....[www.dancon.com](http://www.dancon.com)  
+1 800.873.8731
- Harowe.....[www.feedbackdevices.com](http://www.feedbackdevices.com)  
+1 800.873.8731
- Hengstler GmbH.....[www.hengstler.de](http://www.hengstler.de)  
+1 847.873.8731
- NorthStar.....[www.feedbackdevices.com](http://www.feedbackdevices.com)  
+1 800.873.8731
- Veeder-Root (Counters).....[www.dancon.com](http://www.dancon.com)  
+1 800.873.8731

**Process Automation & Measurement Controls**

- Gems Sensors.....[www.gemssensors.com](http://www.gemssensors.com)  
+1 800.378.1600
- Kistler-Morse.....[www.kistlermorse.com](http://www.kistlermorse.com)  
+1 800.426.9010
- Partlow.....[www.partlow.com](http://www.partlow.com)  
+1 800.390.6405
- PMA.....[www.pma-online.de](http://www.pma-online.de)  
+1 800.390.6405
- Setra Systems.....[www.setra.com](http://www.setra.com)  
+1 800.257.3872
- West Instruments.....[www.westinstruments.com](http://www.westinstruments.com)  
+1 800.390.6405

**Factory Automation & Motion Feedback Control... Made Simple**



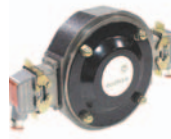
**DYNAPAR™ brand**  
**HENGSTLER™ brand**  
Industrial-Duty  
Absolute Encoders



**EAGLE SIGNAL™ brand**  
Electronic & Electromechanical  
Timers & Relays



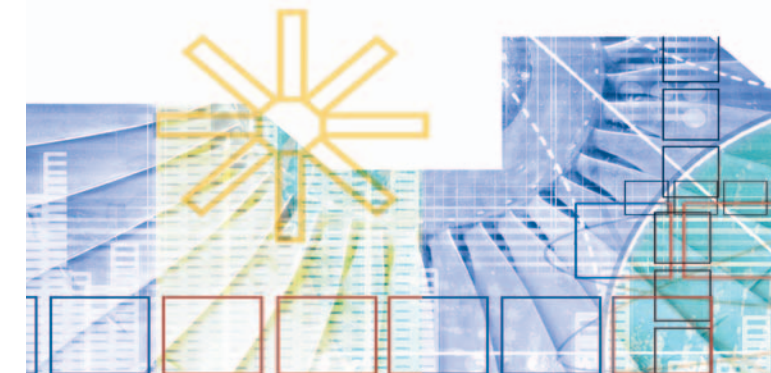
**HAROWE™ brand**  
Ultra-Performance  
Resolvers



**NORTHSTAR™ brand**  
Heavy-Duty Encoders



**VEEDER-ROOT™ brand**  
Electronic, Electromechanical &  
Mechanical Counters



For additional information or a full-line catalog, contact Danaher Industrial Controls at +1 800.873.8731 or visit our group Website [www.danaherindustrialcontrols.com](http://www.danaherindustrialcontrols.com)

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  - Europe:** United Kingdom, Italy, France, Germany, Spain, Slovakia
  - Latin America:** Brazil
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**+1 800.873.8731 • [www.feedbackdevices.com](http://www.feedbackdevices.com)**

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# SOLVE YOUR CONTROL CHALLENGES WITH THE MOST TRUSTED BRANDS IN FACTORY AUTOMATION

The best machine designs incorporate feedback controls from the leading brands of Danaher Industrial Controls Group (DICG)... encompassing **Dynapar™**, **Hengstler™** and **NorthStar™** encoders, **Harowe™** resolvers, **Veeder-Root™** counters and **Eagle Signal™** timers.

*Why? Because you get effective solutions built upon:*

## Broadest Line of Feedback Controls in the Industry

Choose from all popular sizes and types of feedback controls, including counters, timers, absolute encoders, commercial-duty to mill-duty incremental encoders and ultra-performance resolvers. With hundreds of product variations in our catalog, we are your single-source supplier for any application and budget.

## Fast Delivery & Exceptional Local Support from Around the Globe

We build to order using efficient "Just in Time" manufacturing. Standard lead times are three days for most models with 24-hour RUSH delivery available to meet special deadlines. What's more, with manufacturing offices on four continents and an expansive network of Authorized Resellers in over 30 countries – fast, friendly and knowledgeable local support and availability are always nearby to assist you 24-7-365 from anywhere around the globe. Call **+1.800.873.8731** today.

## Flexibility, Customization & Troubleshooting Assistance

A willingness to "customer-ize" our products is one of the many factors that differentiate us from the competition. In fact, many of our popular product features began as special customer requests. Because custom products are an exact fit for your design, they reduce installation cost and optimize machine performance. For prompt application help or trouble-shooting assistance, call **+1.800.234.8731**.

## Quality, Reliability & Value

**Dynapar™**, **Eagle Signal™**, **Harowe™**, **Hengstler™**, **NorthStar™** and **Veeder-Root™** are trusted brands with a combined 230-year history of quality and reliability that you can count on for your critical machine designs. With an installed base of 1 million encoders and a competitive 2-year warranty, our brands are the most respected in the industry.

## Monitor & Control Almost Anything...

### Industries

- Manufacturing/Production
- Food Processing
- Lumber
- Paper
- Textile
- Servo
- Machine Tool
- Robotics
- Steel
- Packaging
- Elevator
- Windmill
- Commercial Printing
- Medical

### Encoder/Resolver Applications

- Motor Speed/RPM Readout
- Linear Measurement
- Cut to Length
- Position Measurement/Display
- Pulse Marker/Registration Mark Timing
- Backstop Gauging
- Filling Applications
- Conveying Applications
- Web Speed/Tension Control

### Counter/Timer Applications

- Item/Piece/Batch Counting
- Liquid Flow/Fill Rate
- Ratio Calculation (Draw or Extension)
- Production Rate
- Linear Measurement/Cut to Length
- Position Measurement

## with DICG Factory Automation & Motion Feedback Controls

DICG Factory Automation Full Line... at a Glance	Dynapar™ and Hengstler™	NorthStar™	Harowe™	Eagle Signal™		Veeder-Root™		
	OPTICAL ENCODERS	MAGNETO-RESISTIVE ENCODERS	BRUSHLESS RESOLVERS	ELECTRIC TIMERS	ELECTRONIC TIMERS	MECHANICAL COUNTERS	ELECTRIC COUNTERS	ELECTRONIC COUNTERS
Types	Commercial Light-Duty, Industrial Duty (Optical) Incremental & Absolute Encoders	Magneto-Resistive Heavy-Duty and Mill-Duty Encoders	Heavy-Duty/ Mill-Duty Housed, Heavy-Duty/ High-Accuracy Frameless Resolvers	Time Totalizer, Preset/ Predetermining, Repeat Cycle, Sequencer	Time Totalizer, Preset/ Predetermining, Repeat Cycle	Hand-Held, Ratchet, Rotary or Pneumatic	Preset/ Predetermining, Totalizer, Hourmeter	Rate Meter, Position Indicator, Preset/ Predetermining Counter, Totalizer or Hourmeter
Sizes	.9" to 12.5"	4.5", 8.5" and 12.5"	1.1" to 5.5"	Std. Panel Cutout	All popular panel mount sizes incl. 1/32, 1/16 or 1/8 DIN	No DIN	All popular panel mount sizes 1/32, 1/16 or 1/8 DIN	All popular panel mount sizes
Mounting Base	Choice of Flange, Hub Shaft, Hollowshaft, BLDC Servo Motor Mount	Motor Mount (Face Mount), Foot Mount	Servo, Flange and Motor Mount	Front to Panel (FTP) and Surface Mount	Front to Panel (FTP) DIN Rail Mount	Surface, Front Panel Mount only; Base Mount available on select models	Front to Panel (FTP) or Surface Mount (e.g. wall)	Front to Panel (FTP) Mount only
Accuracy/Resolution	Moderate -High	Moderate -High	Moderate -High	Fixed	Adjustable	Fixed	Fixed	Adjustable
Features/Functionality	Low to High (based on model features)	Moderate-High	Moderate	Low - Moderate	Moderate-High	Very Minimal	Low - Moderate	Moderate-High
Modes	Position (single or multiturn), Tachometer	Position, Tachometer	Position, Tachometer	Time Totalize, Preset/ Predetermining, Repeat Cycle, Sequencer	Time Totalize, Preset/ Predetermining, Repeat Cycle	Totalize & Preset only	Totalize, Preset	Totalize, Rate and Position Indication, Preset
Ease of Use	Simple to Moderate	Simple to Moderate	Moderate to Complex	Simple to Moderate	Simple to Moderate	Very Simple	Simple to Moderate	Simple to Moderate
Key Features	Digital, fast, compact, choice of incremental or absolute	Very rugged; resists dust, grease, shock, vibration; long life, powerful digital pulse	Up to 220°C, resists shock, vibration, dust, grease	Easy to operate, economical	Easy to operate, economical	Simple, no power required	Easy to operate, economical	Easy to operate, economical
Cost	Low to High (based on model features)	Low to High (based on model features)	Low-Moderate	Low - Moderate	Moderate-High	Moderate-High	Low - Moderate	Low to High (based on model features)
Delivery	3 days	3 days	3 days	3 days	3 days	3 days most models	15 days	15 days

## Factory Automation & Feedback Controls

The ability to track and monitor critical production variables such as speed, direction, position and timing in factory automation and manufacturing is made possible with reputable DICG brand factory automation and feedback controls, including counters, timers, encoders and related specialty niche products, that keep you in control and ensure that your production machinery and operations run safely and smoothly.

## Entrust Your Feedback Control Challenges to Us



Speed

Direction



Position



Timing

