



Creative Highlights By

Serena Bales

www.designsbysserena.com

Employment at

**WARNER ELECTRIC/
ALTRA INDUSTRIAL MOTION**

Serena
2011

SENIOR GRAPHIC DESIGNER

Madison, WI ▪ June 2002 – November 2006

- Created, designed, updated, and finalized product catalogs, 400 product user guides/manuals, and marketing collateral that adhered to Altra Industrial Motion's brand specifications for over 10-15 company brands.
- Worked directly with employees through multiple channels to translate their general concepts and ideas to creating high-quality engaging marketing pieces.
- Lead Designer and Administrator for the company's eLearning modules. These consisted of Paper Base Training (PBT) manuals and Web Base Training (WBT) courses. This project consists of extensive graphic conversion and course set-up within a vendors (Technomedia) courseware software using HTML. <http://apps.altramotion.com/elms/login.asp>
- Directed a freelance illustrator, freelance graphic designer, and a production assistant.

Results: 65% increase in employee and distributor training from the eLearning courses.

Teamed with: copywriter, outside illustrator, production assistant, product engineer, developer, executives, vendors, in-house printer, vendors, photographer, and clients.

Clients: Altra Industrial Motion's corporate in house Advertising Department located at Warner Electric LLC. Work with all of Altra Industrial Motion's divisions that included Boston Gear, Formsprag Clutch

SKILLS

PC and MAC platforms

Software Used

Quark

Adobe

- InDesign
- Photoshop
- Illustrator
- Acrobat

Microsoft

- Word
- PowerPoint
- Excel
- Outlook

Job Duties

Design

- Pre-press
- Layout
- Color correction

Art Direction

- Project/team lead
- Photo direction
- Vendor coordination
- Budgeting
- Scheduling and timelines

Illustration

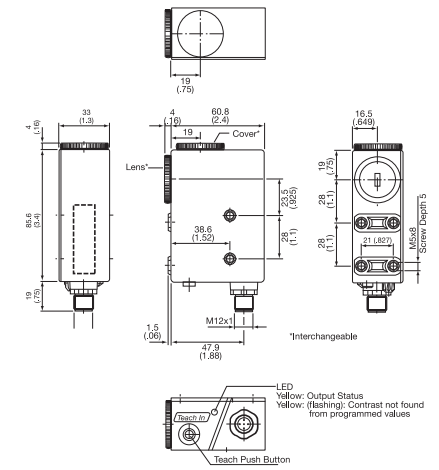
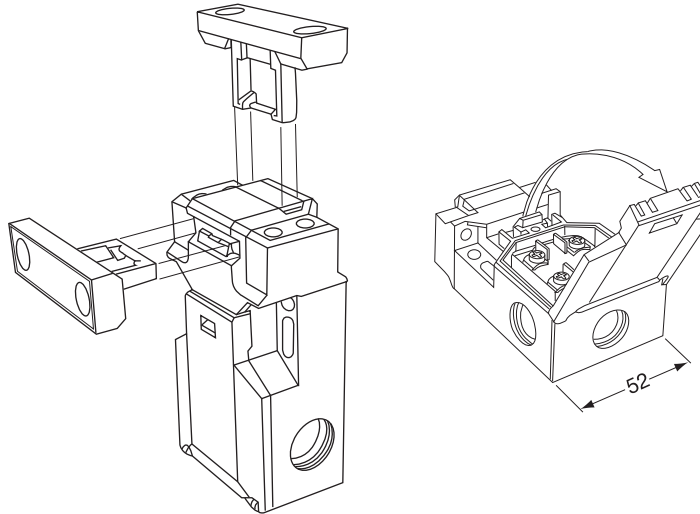
- Concept sketching
- Technical and realistic
- Digital and traditional
- 2D & 3D

Additional

- Brand development & management
- Marketing and project related research
- HTML and CSS

PRODUCT MANUALS

For Warner Electric I created product brochures, manuals, and catalogs. The client used each of these for clients, distributors, and potential clients in the manufacturing industry. The product manuals were printed in-house and shipped to the different plants nationally and internationally. The brochures and catalogs were professionally printed in full color and distributed when requested by the customers and distributors.



BULLETIN 2106-B

Installation Instructions

Overrunning Internal Backstop Clutches

Models FS 50 1A thru 13

Formsprag
Clutch

CB Series and Super CB Series Sizes 4, 5, 6 and 8

Installation Instructions

Warner Electric

Autogap Installation for Sizes 825-1525 Basic Brakes & Clutches

Installation Instructions

Warner Electric

Extra Pulley Groove Notice

Installation Instructions

Warner Electric

BULLETIN BC-1088A

Installation Instructions

Type BC-Series "MA" Backstop

Marland Clutch

MCS-638-3 and MCS-638-4 Series

Installation & Operating Instructions

Features:

- Teach mode teach without wire automatic
- Search mode for target and non-automatic search mode for the background
- Remote search input allows setup to be programmed remotely
- Clear zero position
- Automatic selection of base color light source (Red, Blue)
- Light Operate (Normally Open / Dark Operate (Normally Closed) Operate Mode)
- Quick Disconnect (2 Meter Cable included with Sensor)
- LED Indication of Output status
- Output: Push-Pull (NPN/PTN)

Typical Application

Blade Brake Clutch Application Guide

Application Guide

Warner Electric

VI. Performing Maintenance on the Blade Brake Clutch

VII. Troubleshooting the Warner Electric BSC

Quick Review Check List for BSC Applications

Warrenty

Warner Electric

Delivering Performance Parts

CBC Power Transmission

Now Available From CBC

Pneumatic Clutches and Brakes

The Power of Brakes

Key Features:

- High torque capacity
- High torque density
- High torque to weight ratio
- High torque to volume ratio
- High torque to cost ratio
- High torque to life ratio
- High torque to maintenance ratio
- High torque to efficiency ratio
- High torque to safety ratio
- High torque to reliability ratio
- High torque to performance ratio
- High torque to quality ratio
- High torque to service ratio
- High torque to support ratio
- High torque to training ratio
- High torque to documentation ratio
- High torque to communication ratio
- High torque to collaboration ratio
- High torque to innovation ratio
- High torque to sustainability ratio
- High torque to social responsibility ratio
- High torque to ethical ratio
- High torque to legal ratio
- High torque to regulatory ratio
- High torque to industry ratio
- High torque to customer ratio
- High torque to partner ratio
- High torque to supplier ratio
- High torque to distributor ratio
- High torque to agent ratio
- High torque to dealer ratio
- High torque to wholesaler ratio
- High torque to retailer ratio
- High torque to end user ratio

Wichita Clutch **Industrial Clutch**

Safety Hinge Switch

Warner Electric is now offering a new line of Safety Switches. These Safety Switches are load bearing hinges with Safety Switches concealed in them. They are designed to facilitate mounting onto various mounting surfaces and steel or plastic doors. Their slim profile allows the hinge to be readily mounted where space is constrained. Traditional safety switches with separate actuator keys are often subject to mechanical abuse, particularly when mounted on the leading edge of equipment where accumulated tolerances can cause misalignment. The SHS removes this problem with a safety contact mounted internally, inaccessible to the user and therefore providing excellent torque protection. One or more switches may be used dependent on the category of safety protection required.

Reliable: The hinge switch operating point may be set anywhere from 0 to 180° AC/DC to 250 Vdc or 60 V DC with no arcing.

Easy of Wiring: A built-in 2-wire terminal block allows the SHS to be connected to a 2-wire safety circuit.

For Application Assistance Call 1-800-429-7279 or Fax 1-615-385-6676

Warner Electric

Warner Electric

Warner Electric Packaged Clutch/Brake Performance Data

Heat Dissipation Curves

Dynamic Torque Curves

Maximum Speed 3000 RPM
Maximum Speed 1500 RPM
Maximum Speed 1000 RPM
Maximum Speed 750 RPM

Maximum Torque 1000 ft-lb
Maximum Torque 500 ft-lb
Maximum Torque 250 ft-lb
Maximum Torque 125 ft-lb

Speed (RPM)

Pneumatic Clutches and Brakes

Power Take-Off Clutches

Water Cool

Low Inertia and High Torque: High torque capacity, high torque density, high torque to weight ratio, high torque to volume ratio, high torque to cost ratio, high torque to life ratio, high torque to maintenance ratio, high torque to efficiency ratio, high torque to safety ratio, high torque to reliability ratio, high torque to performance ratio, high torque to quality ratio, high torque to service ratio, high torque to support ratio, high torque to training ratio, high torque to documentation ratio, high torque to communication ratio, high torque to collaboration ratio, high torque to innovation ratio, high torque to sustainability ratio, high torque to social responsibility ratio, high torque to ethical ratio, high torque to legal ratio, high torque to regulatory ratio, high torque to industry ratio, high torque to customer ratio, high torque to partner ratio, high torque to supplier ratio, high torque to distributor ratio, high torque to agent ratio, high torque to dealer ratio, high torque to wholesaler ratio, high torque to retailer ratio, high torque to end user ratio.

Wichita Clutch **Industrial Clutch**

ModEvo Pneumatic Tension Brakes

Optimized air-cooled performance

Warner Electric has introduced a new line of ModEvo Pneumatic Tension Brakes. These brakes are designed for high torque capacity, high torque density, high torque to weight ratio, high torque to volume ratio, high torque to cost ratio, high torque to life ratio, high torque to maintenance ratio, high torque to efficiency ratio, high torque to safety ratio, high torque to reliability ratio, high torque to performance ratio, high torque to quality ratio, high torque to service ratio, high torque to support ratio, high torque to training ratio, high torque to documentation ratio, high torque to communication ratio, high torque to collaboration ratio, high torque to innovation ratio, high torque to sustainability ratio, high torque to social responsibility ratio, high torque to ethical ratio, high torque to legal ratio, high torque to regulatory ratio, high torque to industry ratio, high torque to customer ratio, high torque to partner ratio, high torque to supplier ratio, high torque to distributor ratio, high torque to agent ratio, high torque to dealer ratio, high torque to wholesaler ratio, high torque to retailer ratio, high torque to end user ratio.

Wichita Clutch

Clutch/Brake Modules

UnModules — pre-assembled and furnished for easy installation

NEMA Frame Selection

Frame Size	Max. Torque (ft-lb)	Max. Speed (RPM)	Max. Torque (Nm)	Max. Speed (RPM)
1/2	100	3000	13.6	3000
3/4	200	3000	27.1	3000
1	400	3000	54.2	3000
1 1/2	800	3000	108.4	3000
2	1600	3000	216.8	3000
3	2400	3000	325.2	3000
4	3200	3000	433.6	3000
5	4000	3000	542.0	3000
6	4800	3000	650.4	3000
7	5600	3000	758.8	3000
8	6400	3000	867.2	3000
9	7200	3000	975.6	3000
10	8000	3000	1084.0	3000

Warner Electric

Spanish

Problemas de procesamiento

ambientes de procesamiento

agresivos y corrosivos

Problemas de procesamiento en ambientes de procesamiento agresivos y corrosivos. Soluciones de procesamiento para ambientes de procesamiento agresivos y corrosivos.

Boston Gear

Heavy Duty Clutches and Brakes for Energy & Offshore Applications

Wichita Clutch

Power Transmission Products

Electromagnetic Clutches and Brakes

Enclosed Gear Drives

Altra Industrial Motion

Formspag Clutch y sus líneas de Productos Industriales

Formspag Clutch

Product Solutions for The Beverage, Pharmaceutical and Personal Care Industries

Washdown Applications

Capping Equipment

Warner Electric

Product Solutions for Aggressive Food Processing Environments

Washdown Applications

Washdown Solutions

Boston Gear

PRODUCT CATALOGS AND SELL SHEETS





**Modevo
Tension
Brake**






Sensors / SWITCHES

Sensors
Industrial Switches
and Safety
Technology Products


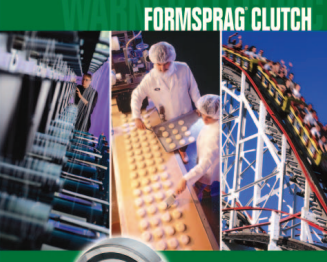
BEARINGS

Bearings,
Couplings
and Shaft
Accessories


CLUTCH / BRAKE

Permanent Magnet
and Magnetic
Particle Clutches
and Brakes

FORMSPRAG CLUTCH

CSK
One Way
Bearing
Clutches




Wrap Spring Product Range/Part Numbers

Part Numbers	Part Numbers
Size	Size
100	100
150	150
200	200
250	250
300	300
350	350
400	400
450	450
500	500
550	550
600	600
650	650
700	700
750	750
800	800
850	850
900	900
950	950
1000	1000


WARNER ELECTRIC
Wrap Spring Clutches and Brakes

Warner Electric offers a complete line of standard wrap spring clutches and brakes, available for immediate delivery through our nationwide network of power transmission distributors. As the industry leader in clutch/brake technology, you can count on Warner Electric for complete application assistance and after sale service.

Wrap Spring Order Desk
800-825-6544



Check Out
warnerelectric.com
warnerelectric.com now features our new interactive CATALOG making it faster and easier to find and spec the motion control products you need.

With the Warner Electric Interactive CATALOG, you can start your search for basic components, such as clutches or brakes, and then specify your search from features of clutches or brakes that meets your specific power transmission requirements. The I/O, application information and other tools, you can also download specifications and PDF papers or call us at 800-825-6544.


FORMSPRAG CLUTCH

Formsprag Clutch Retainer Assemblies

CONTROLLERS

ACE 10 Series
1/4 through 3 HP
Adjustable Frequency
AC Motor Controllers





ELECTRICAL PRODUCTS

AC & DC
Adjustable Speed
Controls and
Motors




800 SERIES RIGHT ANGLE HELICAL-WORM GEAR DRIVES

INTERCHANGE GUIDE



Warner Gear 800 Series Right Angle Helical-Worm Gear Drives are designed to be functionally interchangeable with Warner and many other manufacturers drives. This chart is intended to be a guide only. Please use appropriate manufacturer's catalogs for exact details regarding ratings and dimensions.

Manufacturer	Size	Series Number	Series Number	Output Power (HP)	Output Torque (lb-in)
Warner	400	400	400	1/2	100
Warner	500	500	500	3/4	150
Warner	600	600	600	1	200
Warner	700	700	700	1 1/2	300
Warner	800	800	800	2	400
Warner	900	900	900	3	600
Warner	1000	1000	1000	4	800
Warner	1100	1100	1100	5	1000
Warner	1200	1200	1200	6	1200
Warner	1300	1300	1300	8	1600
Warner	1400	1400	1400	10	2000
Warner	1500	1500	1500	15	3000
Warner	1600	1600	1600	20	4000
Warner	1700	1700	1700	25	5000
Warner	1800	1800	1800	30	6000
Warner	1900	1900	1900	40	8000
Warner	2000	2000	2000	50	10000
Warner	2100	2100	2100	60	12000
Warner	2200	2200	2200	75	15000
Warner	2300	2300	2300	100	20000
Warner	2400	2400	2400	125	25000
Warner	2500	2500	2500	150	30000
Warner	2600	2600	2600	200	40000
Warner	2700	2700	2700	250	50000
Warner	2800	2800	2800	300	60000
Warner	2900	2900	2900	400	80000
Warner	3000	3000	3000	500	100000
Warner	3100	3100	3100	600	120000
Warner	3200	3200	3200	750	150000
Warner	3300	3300	3300	1000	200000
Warner	3400	3400	3400	1250	250000
Warner	3500	3500	3500	1500	300000
Warner	3600	3600	3600	2000	400000
Warner	3700	3700	3700	2500	500000
Warner	3800	3800	3800	3000	600000
Warner	3900	3900	3900	4000	800000
Warner	4000	4000	4000	5000	1000000

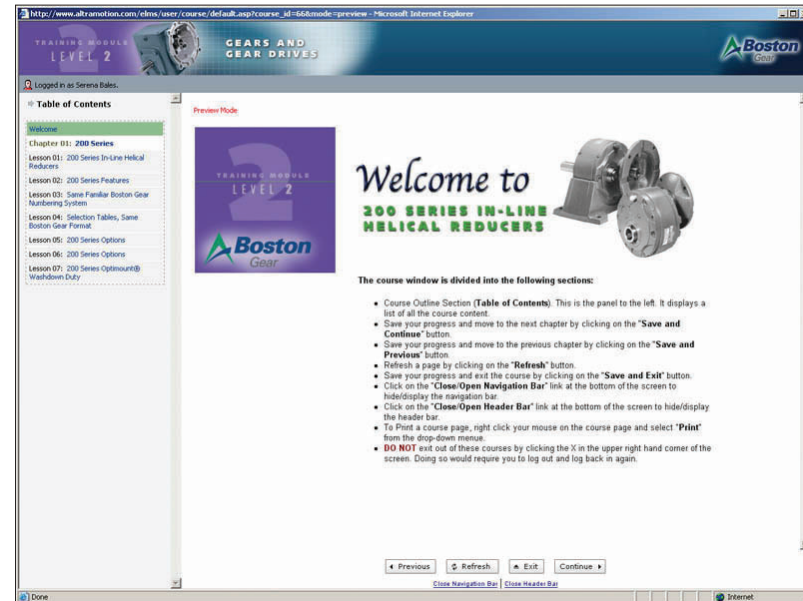
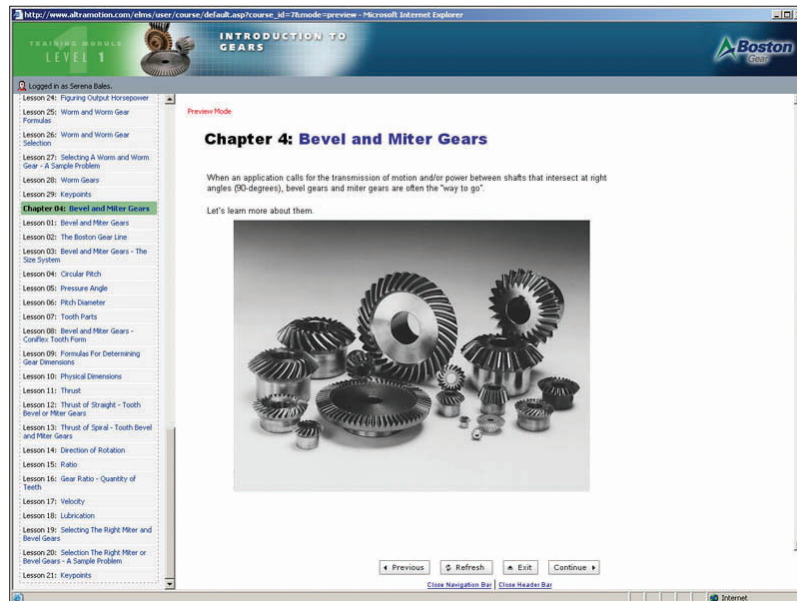


1-888-999-9988
1-888-999-9988

PAPER BASE (PBT) AND WEB BASE (WBT) TRAINING



This is Formspag and Boston Gear's Paper Based and Web Based training courses. When I was working for Warner I also designed for the other divisions within the parent company of Altra Industrial Motion. Altra wanted to provide paper based and web based training for their employees and customers. I started out by creating the paper base courses for Boston Gear, Formspag, and Warner Electric. Next I converted all the paper based courses into a web base Level 1 course. All of these were created in an HTML interactive program provided by Technomedia out of New Jersey. I also worked with two company Instructional Designers to create each course segment. After Level 1 was completed I went on to create Level 2 and 3. This web based training was able to keep a database of the progress of who took the courses and their progress. Not only did I create these course I was also the Administrator for them as well.





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