

Markets

- Elevator
- Farm
- Forklift
- Material handling
- Medical technology
- AeroDefense/Transport
- Printing/Packaging
- Tensioning
- Energy

Products

- Clutches & Brakes
 - Single disc
 - Multi-discs
 - Pneumatics
 - Hydraulics
 - Tooth
 - Electrically Released
 - Packaged units
 - Wrap Spring
 - Magnetic particle
- Linear Actuators
- Controls

Warner Electric Markets and Products

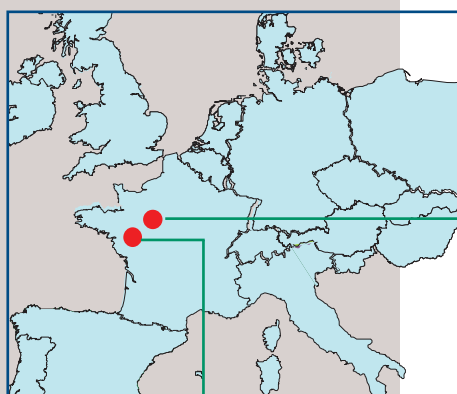


Altra is a leading multinational designer, producer and marketer of a wide range of mechanical power transmission products. We sell our products in over 70 countries throughout the world. Our products are frequently used in critical applications, such as spring applied brakes for elevators, wheelchairs and forklifts.

Altra also provides products for use in a wide variety of high-volume manufacturing processes, where the reliability and accuracy of our products are critical in both avoiding costly down time and enhancing the overall efficiency of manufacturing operations.



- ☐ 3300 full time employees
- ☐ 30 global production facilities
- ☐ Over 1000 direct OEM customers
- ☐ Over 3000 distributor outlets



ANGERS



LE MANS



Founded in 1927, **Warner Electric** is a company belonging to the "Industrial Power Transmission" group of the Altra Industrial Motion based in Quincy, Massachusetts USA.

Our clutches and brakes are developed and manufactured in our plants at Angers and Le Mans (France).

Certifications : ISO 9001 (V2000)
CE 95/16
TÜV
ATEX
UL / CSA approval

Elevator Market

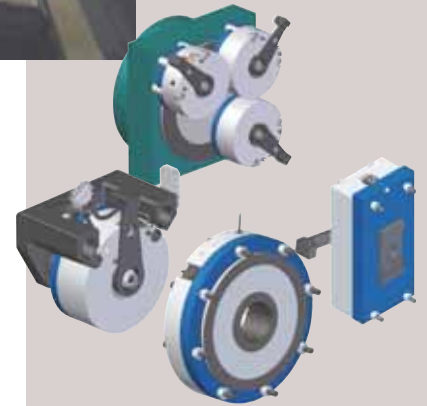


- Lifts for people in buildings
- Lifts for materials
- Elevator and escalators

Where quality, reliable, silent, and cost effective braking solutions are required. By very demanding customers among the most famous worldwide players in the elevator market.

Technology / Products : Single/double friction disc, spring applied and electrically released brakes.

Torque : 50 Nm to 6000 Nm



Forklift Market



Product to suit all types of electric forklifts including :

- Warehouse trucks
- Counterbalance trucks

Application of the brakes are where parking brake, normal braking and also dynamic emergency stop are required.

Technology / Products : spring applied, electrically released brakes but also patented self regulated electro-hydraulic brakes and linear actuators.

Torque : 10 Nm to 1000 Nm. Load : 240 N to 12500 N



Farm Market



- Forage harvesters
- Combines
- Tractors

Where strong, reliable, simple and cost effective braking and clutching solutions are required.

Technology / Products : multi-disc, hydraulically actuated, linear actuator or electrically released clutches and brakes.

Torque : 10 Nm to 2000 Nm. Load : 120 N to 12500 N

Material Handling Market



This wide market includes all types of equipments (except forklift trucks) helping people to raise, lift, move or handle any types of loads such as :

- Cranes, hoists, scissor lifts
- Conveyors

Like for elevators, most of our products are safety static brakes to hold a load or prevent it from falling down.

Technology / Products : Single friction, spring applied, electrically released brakes (clutches on driving side of conveyors can also be used).

Torque : 1 Nm to 12800 Nm

Medical Market



- ☐ Mobility scooters, medical beds
- ☐ X ray and other technology exams machines (MRI, scanners...)

Those applications mainly require static operating (and sometimes noise reduced) brakes to hold the moving systems at standstill.

Technology / Products : tooth clutches and brakes, spring applied single friction brakes.

Torque : 0,1 Nm to 150 Nm. Load : 120 N to 5400 N



Printing/Packaging Market



- ☐ Printing and copying machines for offices
- ☐ Automatic cash and vending machines

Where high frequency repetitive and accurate movement in small area is required and this at competitive price.

Technology / Products : Wrap springs & small single friction units.

Torque : 1 Nm to 100 Nm



Tensioning Market



- Unrolling /rerolling machines (paper, printing, textile industries)
- Unwinding/rewinding machines for wire and cable industries

Where efficient tension regulation, either in open or closed loop, is necessary to keep mechanical characteristics of the material safe.

Technology / Products : low friction systems, hysteresis and powder brakes.

Torque : 0,008 Nm to 500 Nm

AeroDefense/Transport Market



- Aerospace / Defence (Aircrafts, Tanks, Radars)
- Tramways

This niche market is very demanding in terms of quality assurance and product reliability. Warner Electric has been selected as first class supplier by major companies for providing power transmission equipments on military vehicles.

Technology / Products : Single friction, spring applied, electrically released or pneumatic released clutches

Torque : 10 Nm to 5000 Nm

New Energies Market



- Wind turbines (vertical or horizontal axis type)
- Solar panels

Nowadays restrictions of pollution makes green energies grow fast. Warner Electric can provide specific braking solutions for outdoor, low power consumption and long life requirements.

Technology / Products : Single disc , spring applied, pneumatically or electrically released brakes, linear actuators.

Torque : 2 Nm to 1000 Nm. Load : 1500 N to 12500 N



Altra's Established Brands

- Warner Electric
- TB Wood's
- Boston Gear
- Warner Linear
- Formsprag Clutch
- Stieber Clutch
- Marland Clutch
- Wichita Clutch
- Industrial Clutch
- Ameridrives Couplings
- Nuttall Gear
- Centric Clutch
- Delroyd Worm Gear
- Kilian Bearing
- Inertia Dynamics
- Matrix Engineering
- Bibby Transmissions
- Twiflex Limited
- Huco Dynatork
- Saftek Friction

Altra Industrial Motion

Warner Electric Europe

Electromagnetic Clutches and Brakes – Europe
St Barthelemy d'Anjou, France
+33 (0)2 41 21 24 24

Warner Electric

Electromagnetic Clutches and Brakes – USA
South Beloit, IL
+01 815-389-3771
Precision Electric Coils and Electromagnetic Clutches and Brakes – USA
Columbia City, IN
+01 260-244-6183

Inertia Dynamics

Spring Set Brakes; Power On and Wrap Spring Clutch/Brakes
New Hartford, CT
+01 860-482-4444

Matrix International

Electromagnetic Clutches and Brakes, Pressure Operated Clutches and Brakes
Brechin, Scotland
+44 (0) 1356 602000

Warner Linear

Linear Actuators and Guideways – USA
Belvidere, IL
+01 815-547-1106

TB Wood's

Belted Drives and Flexible Couplings
Chambersburg, PA
+01 717-264-7161

Wichita Clutch and Industrial Clutch

Pneumatic and Oil Immersed Clutches and Brakes – USA
Wichita Falls, TX940-723-3400
Pneumatic Clutches and Brakes – Europe
Bedford, England
+44 (0)1234 350311

Twiflex Limited

Caliper Brakes and Thrusters
Twickenham, England
+44 (0) 20 8894 1161

Formsprag Clutch

Overrunning Clutches and Holdbacks
Warren, MI
5+01 86-758-5000

Marland Clutch

Roller Ramp and Sprag Type Overrunning Clutches and Back-stops
Burr Ridge, IL
+01 630-455-1752

Stieber Clutch

Overrunning Clutches and Holdbacks
Heidelberg, Germany
+49 (0)6221 30 47 0

Boston Gear

Enclosed and Open Gearing, Electrical and Mechanical P.T. Components
Charlotte, NC
+01 704-688-7300

Huco Dynatork

Precision Couplings and Air Motors
Hertford, England
+44 (0) 1992 501900
U.S.
+01 800-825-6544

Ameridrives Couplings

Gear Couplings, Mill Spindles, Universal Joints
Erie, PA
+01 814-480-5000
Universal Joints, Drive Shafts, Mill Gear Couplings
Green Bay, WI
+01 920-593-2444

Bibby Transmissions

Disc, Gear, Grid Couplings, Overload Clutches
Dewsbury, England
+44 (0) 1924 460801

Nuttall Gear and Delroyd Worm Gear

Worm Gear and Helical Speed Reducers
Niagara Falls, NY
+01 716-298-4100

Saftek Friction

Non-asbestos Brake and Clutch Materials
Telford, England
+44 (0) 1952 581122

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