

# Why Choose Guardian?

For more than 70 years,
Guardian has been designing
and manufacturing world-class
couplings and other power
transmission components.
Utilizing advanced manufacturing
technologies and processes,
Guardian provides highly-reliable
coupling and component
solutions to meet the most
challenging industrial application
requirements.

Guardian provides a wide range of standard and custom products including flywheel couplings, hydraulic pump mounts, bearing supported stub shafts, flexible shaft-to-shaft couplings, motion control couplings as well as compression pipe couplings.

Durable Guardian products are utilized in key industries including mobile hydraulics, farm & ag, tree care, concrete, food & beverage, material handling, automation, power generation, and oil & gas on applications such as skid steers, aerial lifts, harvesters, wood chippers, concrete pumps, dewatering pumps, baggage handlers, conveyors, robotics, compressors, and generator sets.



# **GUARDIAN** FLYWHEEL COUPLINGS & PUMP MOUNTS



# **Engine Housing Pump Mounts**

Guardian's engine housings are designed for both gas and diesel engine applications including, but not limited to, generators, compressors, small gear boxes, and bearing supports.

- Allow a direct connection to the hydraulic pump
- Castings are manufactured from aluminum, gray iron and ductile iron
- Castings are precision machined to strict tolerances on state of the art CNC equipment
- Provide an accurate alignment between the engine and the pump
- Reduce premature failure of the drive coupling
- Can be used on engines such as: Cummins, Deutz, Ford, FPT, GM, Hatz, Hyundai, Isuzu, JCB, Kubota, Lombardini, Nissan, Perkins, Wisconsin, and Yanmar



# **Bearing Supported Stub Shafts**

Guardian offers a full line of bearing supported stub shafts. These set-ups can minimize the side load generated by the pulley belt, and transferred back into the engine.

- Can be fitted with one of Guardian's pump mounting plates or engine housings to connect to a variety of engine housings and back plates
- Selection of output shafts include straight, threaded, tapered, and splined
- Can be customized for special lengths and diameters if required by the application
- Various shafting and stub shafts can be produced if no side loads are present



# Pump Mounting Plates, Spacers & Adaptors

The pump mounting plates are designed to mount SAE and metric pumps, but they can also be customized to fit a variety of other mounting requirements. All pump mounting plates come standard with a rust protective coating and are available in a variety of thicknesses.

- Manufactured from steel
- SAE sizes 1 thru 6 from stock
- SAE 0 & 00 available upon request

Guardian also offers SAE housing spacers and adaptors. With Guardian's in house machining capabilities, we can also produce an assortment of customized adaptors to suit a wide variety of mounting requirements.

- Manufactured in steel & aluminum
- SAE 0 thru 6 available
- Standard SAE spacers, single step adaptors, and double step adaptors are offered



### **FLD**

The FLD coupling enables a hydraulic pump to be driven from the pulley side of the engine.

- Features a retractable sleeve for easy belt replacement which allows you to service the equipment without removing the pump
- Fully customizable to suit a variety of engine manufacturers and designs



**FBA** 

The FBA coupling is a one piece, all steel drive coupling intended to be used with spline shafts only in hydraulic pump applications.

- Elastomeric grommets provide a steady dampening effect to normal engine vibrations, helping to minimize any side loading to the pump shaft
- Easy installation, no positioning of hubs
- Once the hydraulic pump is plugged into one of our mounting plates or housings, the pump assembly can be blind fitted into the coupling hub
- · Pump spline lubrication is required
- Fits standard and non-standard SAE flywheel designs
- Can be used on applications up to 450HP



The FL is a two-piece flywheel coupling used on off-highway construction equipment such as skid steer loaders, aerial lifts, excavators, and many other mobile hydraulic applications. Not only is the FL our oldest product line, it is

FL

our most economical design with decades of proven success in the field.

- Consists of a glass reinforced nylon flywheel flange that will fit both SAE and metric flywheels
- Mating hub is produced from sintered steel and can be used on both splined and straight shafts
- Considered a torsionally stiff design and does not require lubrication
- Interchangeable to other popular coupling brands



# **DELTA Series**

The DELTA Series flexible coupling line is designed for use on diesel-driven hydrostatic machinery and construction equipment for demanding applications on the latest tier engines.

- Cost effective, single-piece design incorporates a splined and hardened steel hub pre-assembled into glass-fiber reinforced flange
- Elastomeric grommets provide a steady dampening effect to normal engine vibrations
- Design allows equipment with low inertia to operate below the critical speed range
- Suited for accurately aligned drives that minimize misalignments
- Accommodates small angular, parallel, and axial misalignments typical to piloted flange connections
- Can achieve torque capacities of up to 6,130 IN-LBS nominally



**NV Series** 

The NV Series flexible coupling line is for use on diesel-driven and hydrostatic machinery to provide maximum vibration dampening from a torsionally soft coupling.

- Single-piece design incorporates a cast iron hub and a steel back plate with molded rubber
- Acts as a mechanical fuse, providing protection and dampening for lower driven inertias
- Works specifically with the Kubota Super Mini Series and 05 Series engines, but also accommodates standard SAE size flywheels from SAE 6.5 through SAE 10
- Accommodates small angular, parallel, and axial misalignments typical to piloted flange connections
- Suited for accurately aligned drives that minimize misalignments
- Can achieve torque capacities of up to 1,524 IN-LBS nominally



# **Guard-Flex**

The Guard-Flex is a torsionally soft, vibration dampening coupling with an in shear design that will offer protection to both our engine and driven equipment when higher inertias are present. Ideal applications include rotary screw compressors, centrifugal pumps, blowers, generators, and hydraulic pumps

- Acts as a mechanical fuse in the event of an overload condition
- Designed to fail through the rubber and shear
- Three elastomers are available from stock to provide the proper dampening and stiffness
- The Guard-Flex rubber is offered in 45, 55, and 65 shore A durometers
- Incorporates axial, radial, and angular misalignment to help reduce forces to the driven equipment
- Fits applications with a SAE 7.5 through SAE 11.5 flywheel, and is rated up to 82 HP



FH

The FH is a coupling with progressive characteristics where the dynamic torsional stiffness is enhanced with increasing coupling load. This type of coupling gives a distinct advantage in installations where a wide speed range is required, and where the torque increases with speed.

- Relatively low torsional stiffness that places the critical speed below the operational speed of the system
- Intended for higher inertia loads such as a compressor, centrifugal pump, blower, and generator
- Fit all SAE flywheels from SAE 7.5 through
- Variable durometer inserts can provide torque capacities up to 88,500 IN-LBS

# **Altra Industrial Motion**

All Customer Service phone numbers shown in bold

### **Belted Drives and Sheaves**

### **TB Wood's**

Belted Drives

Chambersburg, PA - USA 1-888-829-6637 – Press #5

For application assistance: 1-888-829-6637 — Press #7

### Couplings

### **Ameridrives Couplings**

Mill Spindles, Ameriflex, Ameridisc

Erie, PA - USA 1-814-480-5000

Gear Couplings

San Marcos, TX - USA 1-800-458-0887

### Ameridrives Power Transmission

Universal Joints, Drive Shafts, Mill Gear Couplings

Green Bay, WI - USA 1-920-593-2444

# **Bibby Turboflex**

Disc, Gear, Grid Couplings, Overload Clutches

Dewsbury, England +44 (0) 1924 460801

Boksburg, South Africa +27(0) 11 918 4270

# **Guardian Couplings**

Engineered Flywheel Couplings, Engine Housings and Pump Mounts, Flexible Shaft Couplings

Michigan City, IN - USA 1-219-874-5248

### **Huco Dynatork**

Precision Couplings and Air Motors

Hertford, England +44 (0) 1992 501900

Chambersburg, PA - USA 1-888-829-6637

### **Couplings Cont.**

# **Lamiflex Couplings**

Flexible Couplings, Bearing Isolators, and Coupling Guards Cotia, SP - Brasil +55 (11) 4615-6300

#### TB Wood's

Elastomeric Couplings Chambersburg, PA - USA 1-888-829-6637—Press #5

For application assistance: 1-888-829-6637 — Press #7

General Purpose Disc Couplings

San Marcos, TX - USA 1-888-449-9439

Electromagnetic Clutches and Brakes

### **Inertia Dynamics**

Spring Set Brakes; Power On and Wrap Spring Clutch/Brakes New Hartford, CT - USA 1-800-800-6445

### Matrix International

Electromagnetic Clutches and Brakes, Pressure Operated Clutches and Brakes

Brechin, Scotland +44 (0) 1356 602000

New Hartford, CT - USA 1-800-825-6544

# **Warner Electric**

Electromagnetic Clutches and Brakes

New Hartford, CT - USA 1-800-825-6544

For application assistance: 1-800-825-9050

Saint Barthélémy d'Anjou, France +33 (0)2 41 21 24 24

Precision Electric Coils and Electromagnetic Clutches and Prakes

Columbia City, IN - USA 1-260-244-6183

# Engineered Bearing Assemblies

#### **Kilian Manufacturing**

Engineered Bearing Assemblies

Syracuse, NY - USA 1-315-432-0700

### Gearing

### **Bauer Gear Motor**

Geared Motors
Esslingen, Germany
+49 (711) 3518-0

Somerset, NJ - USA 1-732-469-8770

### **Boston Gear**

Enclosed and Open Gearing, Electrical and Mechanical P.T. Components

Charlotte, NC - USA 1-800-825-6544

For application assistance: 1-800-816-5608

### Nuttall Gear and Delroyd Worm Gear

Worm Gear and Helical Speed Reducers Niagara Falls, NY - USA 1-716-298-4100

#### Heavy Duty Clutches and Brakes

## **Industrial Clutch**

Pneumatic and Oil Immersed Clutches and Brakes Waukesha, WI - USA 1-262-547-3357

# Svendborg Brakes

Industrial Brakes and Brake Systems

Vejstrup, Denmark +45 63 255 255

# Twiflex Limited

Caliper Brakes and Thrusters
Wichita Falls, TX - USA
1-844-723-3483
Twickenham, England
+44 (0) 20 8894 1161

#### Heavy Duty Clutches and Brakes Cont

#### Wichita Clutch

Pneumatic Clutches and Brakes

Wichita Falls, TX - USA 1-800-964-3262 Bedford, England +44 (0) 1234 350311

### **Linear Products**

### Warner Linear

Linear Actuators Belvidere, IL - USA 1-800-825-6544

For application assistance: 1-800-825-9050

Saint Barthélémy d'Anjou, France +33 (0)2 41 21 24 24

### **Overrunning Clutches**

### **Formsprag Clutch**

Overrunning Clutches and Holdbacks

Warren, MI - USA 1-800-348-0881- Press #1

For application assistance: 1-800-348-0881 — Press #2

# **Marland Clutch**

Roller Ramp and Sprag Type Overrunning Clutches and Backstops

South Beloit, IL - USA 1-800-216-3515

# Stieber Clutch

Overrunning Clutches and Holdbacks

Heidelberg, Germany +49 (0) 6221-30470

For information concerning our sales offices in Asia Pacific check our website www.altramotion.com.cn

While Guardian Industries makes every effort to ensure the accuracy of the information provided, we make no warranty as to the accuracy or completeness of said information.



# www.guardiancouplings.com