Lovejoy® Product Fact Sheet

Commonly Asked Questions About:

Lovejoy® ROSTA® Motorbases

- *Self adjusting*
- *Compensates for belt stretch*
- *Overload proof - pivot mount handles heavy loads during start-up with ease*
- *Available for motors up to 125 horsepower (NEMA frame sizes 143T - 445T)*

Lovejoy ROSTA Motorbases Warranty

- *Lovejoy ROSTA Motorbases come with a ONE YEAR limited warranty on parts.*

Q: How do Lovejoy ROSTA Motorbases work?

A: Lovejoy ROSTA Motorbases utilize a rubber based torsion element as a pivot point. This design allows the base to compensate for normal belt stretch (eliminating the need for adjustment) and to "flex" with the system during heavy load conditions such as start-up and shutdown (eliminating belt hop and screech).

Q: Are Lovejoy ROSTA Motorbases difficult to install?

A: No. Lovejoy ROSTA Motorbases are made to fit NEMA frame sizes from 143T to 445T. You simply bolt your motor to the base and tension your belt per the included instructions.

Q: What if my motor is larger than a 445T?

A: Lovejoy can custom design a special element to tension any belt or chain drive system. Please contact us for more information.

Q: Why do Lovejoy ROSTA Motorbases cost more than regular slide bases and will they pay for themselves?

A: The Lovejoy ROSTA Motorbase utilizes an engineered rubber based torsion element as a pivot point. This configuration adds to the cost of the base. However, with extended belt life and less wear and tear on other components, the Lovejoy ROSTA Motorbase easily pays for itself, sometimes in a matter of months.

Q: Is it easy to change the belts on a Lovejoy ROSTA Motorbase?

A: The pivot design allows for very simple belt changeover – a major time saver.

Lovejoy ROSTA Oscillating Elements

- *Long-life. Typically last 5 - 10 times longer than coil springs*
- *Reduce peak transmitted forces which increases life of side plates, frames, supporting steel work mechanisms, bearings and belts*
- *Vibration isolation exceeding 95% often eliminates the need for expensive isolation frames*

Lovejoy ROSTA Oscillating Elements Warranty

- *Lovejoy ROSTA Oscillating Elements come with a TWO YEAR limited warranty on parts.*

Q: How do Lovejoy ROSTA Oscillating Elements work?

A: Lovejoy ROSTA Oscillating Elements utilize a series of 4 rubber based torsion elements as coil spring suspension replacement. This configuration provides lateral stiffness that eliminates the need for costly "side-snubbers". This cannot be achieved with conventional coil springs Also, the rubber elements dampen vibration and are very effective as an isolation mount.

Q: How do you select the right Lovejoy ROSTA Oscillating Element?

A: Lovejoy provides our customers with a detailed screen mount selection worksheet. By simply answering a few questions, Lovejoy can provide a quote for properly selected components in a matter of days.

Q: Are Lovejoy ROSTA Oscillating Elements difficult to install?

A: No. Lovejoy ROSTA Oscillating Elements can be specified to retrofit almost any shaker screen. They are simply bolted to mounting plates on the screen.

Q: Who supplies the mounting plates?

A: Typically the mounting plates are fabricated by the end user if they have machine shop capabilities. Mounting plate drawings are provided with a quote.

Q: What if I buy a new screen, can I still install AB's on it?

A: Absolutely. Lovejoy ROSTA Oscillating Elements can be fitted to nearly any screen - old or new.

Q: Will I have to modify my feed chute?
A: During the oscillating element selection process, the desired screen height is taken into account on where to place the mounting plates. Therefore, in most cases, the feed chute does not need to be modified.

Q: Can someone be on-site for installation?
A: Absolutely! Lovejoy's nationally distributed sales force is on hand to assist with installations. In addition, our Applications Engineering group is at your disposal.

Lovejoy Grid Couplings

- *Steel grid is woven between the slots cut into the two hubs*
- *Torque transmitted through a shearing action across the spring*
- *The cover only serves to hold the grease in place*
- *The only metallic coupling design with some damping ability*
- *High torque capacity for its size*
- *Allows some axial movement*

Coupling Warranty
- *Lovejoy couplings come with a ONE YEAR limited warranty on parts*

Q: Is the Lovejoy Grid Coupling directly interchangeable with the industry standard?
A: Yes. The components are interchangeable with the industry standard.

Q: What are the common uses for Lovejoy Grid Couplings in the aggregate industry?
A: Common uses include pumps, fans, conveyors, and gyratory crushers.

Lovejoy Jaw In-Shear Couplings

- *Utilizes standard jaw type hubs with unique elastomer*
- *Special urethane elastomer is wider and operates in shear*
- *Stainless steel ring uses no fasteners and twist-locks into place*
- *Higher misalignment rating than standard in compression jaw*
- *Torque ratings comparable to urethane in-compression*
- *Can be used with aluminum or stainless steel hubs*
- *Large opening in center allows shaft end positioning flexibility*

Q: What are the benefits of a Lovejoy Jaw In-Shear Coupling over a standard jaw coupling?
A: The Lovejoy Jaw In-Shear Coupling utilizes a quick change feature that allows for element replacement without moving either hub.
Q: What coupling materials are available?
A: The Lovejoy Jaw In-Shear Coupling offers customers several hub material options ranging from aluminum to stainless steel. A spacer Jaw In-Shear type is also available as a non-lubricated drop in replacement for the grid spacer style coupling.

Lovejoy FARR Gear Couplings

- *Heat treated 4140 alloy steel construction*
- *Male and female pilots*
- *Increased torque capacity*
- *Service factor reserve*
- *Calculated stresses due to radial load*
- *Grade 8 Bolts and Grade C Prevailing Torque Nuts*
- *Standardized product mounting*
- *Standardized keeper plate design*
- *Standardized length through bore*

Q: What are the common uses for Lovejoy FARR Gear Couplings in the aggregate industry?
A: Common uses for Lovejoy FARR Gear Couplings include conveyor drives, alignment free conveyor drives, bucket elevators.

Q: What is the torque range capacity of the Lovejoy FARR Gear Coupling?
A: The FARR Gear Coupling has 16 sizes ranging from 7,600 to 7,700,000 in-lbs.

Q: What type of service factor should be used in sizing a Lovejoy FARR Gear Coupling?
A: A service factor of 2 is normally used against the nominal torque of the application.

Lovejoy Shaft Locking Devices

- *Provides a keyless friction between shafts and hubs*
- *Zero backlash*
- *Permits axial and angular timing*
- *Easy to mount and dismount*
- *Not effected by reversing, dynamic or shock loads*
- *Will not mar your shaft or hub*

Q: How do Lovejoy Shaft Locking Devices work?
A: Lovejoy Shaft Locking Devices convert forces generated by locking screws into radial forces that tighten the device on a shaft and hub.

Q: What are the common uses for Lovejoy Shaft Locking Devices in the aggregate industry?
A: Common uses for Lovejoy Shaft Locking Devices include vibratory screens, crushers, and conveyors.

Q: Are Lovejoy Shaft Locking Devices interchangeable with other brands?
A: Yes. Lovejoy Shaft Locking Devices are interchangeable with other brands.

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