# Lovejoy® Product Fact Sheet

## Commonly Asked Questions About:

### Coupling Warranty

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

### Lovejoy Sier-Bath Gear Couplings

- *Standardized product mounting*
- *Heat treated 4140 alloy steel*
- *Increased torque capacity*
- *Grade 8 hardware and Grade C prevailing torque nuts*
- *Service factor reserve*
- *Patented Vari-Crown® Gear teeth for long life*
- *Two lubrication holes*
- *1045 Steel Construction*
- *Calculated stresses due to radial load*

***Q: What features do the Lovejoy Sier-Bath Gear Coupling offer?***

*A: The gear product is torque intensive, which is available in AISI 1045 steel or 4140 alloy steel.*

***Q: If the coupling fails, do I have to replace the complete coupling?***

*A: No. The couplings have interchangeable halves.*

***Q: What method is used to mount the hubs?***

*A: The hubs are standard interference fit, which means that they will need to be heated before they can be mounted.*

### Lovejoy Disc Couplings

- *Standard and special styles*
- *Available in close coupled, spacer, drop out and long shaft styles*
- *Maximum torque of 3,309,000 in-lbs*
- *Meets API 610, 671 standards*

***Q: What features do the Lovejoy Disc Coupling offer?***

*A: Lubrication-free with the ability to inspect while coupling is in operation with the use of a strobe light.*

***Q: If the coupling fails, do I have to replace the complete coupling?***

*A: No. Only the disc pack kit will need to be replaced, which includes the hardware.*

***Q: What material is the disc pack made out of?***

*A: The disc pack is made of stainless steel.*

### 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 does not use fasteners, it twist-locks into place*
- *Higher misalignment rating than standard in-compression jaw couplings*
- *Torque ratings comparable to urethane in-compression*
- *Can be used with sintered iron, 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 of the two hubs or moving equipment.*

***Q: What options are available on the Lovejoy Jaw In-Shear Coupling?***

*A: The Lovejoy Jaw In-Shear Coupling offers customers several hub material options ranging from sintered iron, 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 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*

***Q: What features do the Lovejoy Grid Coupling offer?***

*A: The grid product is component interchangeable with industry standard through size 1200.*

***Q: What method is used to mount the hubs?***

*A: Hubs are standard clearance fit for 1020 through 1090 which we supply TWO set screws as standard.*

***Q: Can the Lovejoy Grid Coupling absorb shock loading?***
*A: Yes. The Lovejoy 1000 Series Grid product line are torsionally resilient couplings which can absorb up to 30% of loading.*

## 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 Motorbase 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 Heavy Duty Tensioner

- *Automatically compensates for belt stretch on large horsepower V-belt applications*
- *Continuously self adjusting*
- *Extends belt life*
- *Eliminates scheduled belt maintenance*
- *Extends motor life by providing proper radial loads on the output shaft bearing*

***Lovejoy ROSTA Heavy Duty Tensioner Warranty***

- *Lovejoy ROSTA Heavy Duty Tensioners come with a ONE YEAR limited warranty on parts.*

***Q: How does the Lovejoy ROSTA Heavy Duty Tensioner work?***
*A: The Lovejoy ROSTA Heavy Duty Tensioner utilizes the ROSTA torsional element in conjunction with an idler pulley system to provide constant compensation for normal belt stretch and movement during heavy load conditions such as start-up and shut down loads.*

***Q: Which applications receive the greatest benefit from the Lovejoy ROSTA Heavy Duty Tensioner?***

- *Applications greater than a NEMA 445T frame motor. The Lovejoy ROSTA Heavy Duty Tensioner is much more cost effective than a large self tensioning motorbase*
- *Any application where the current draw of the motor is being continuously monitored as an indicator of system performance*
- *Any large motor frame where you wish to no longer have to "wrestle" with a slide base to adjust and install the belts*
- *Any application where you wish to simplify belt replacement*

***Q: How are Lovejoy ROSTA Heavy Duty Tensioners selected?***
*A: By providing a few pieces of critical drive data, Lovejoy sales engineers will provide a recommended size and timely quotation.*

***Q: Who supplies the idler pulley?***
*A: Typically the flat face idler pulley and two bearings are supplied by the end user. The Lovejoy ROSTA Heavy Duty Tensioner comes complete with the idler shaft.*

***Q: Does Lovejoy offer installation support?***
*A: Lovejoy can assist in any installation.*

## Lovejoy Shaft Locking Devices

- *Provides a keyless friction connection 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 common uses for Lovejoy Shaft Locking Devices in the power industry?***
*A: Common uses for Lovejoy Shaft Locking Devices include crushers, fans, and conveyors.*

**Lovejoy, Inc.**
**World Headquarters**
630-852-0500
info@lovejoy-inc.com

**www.lovejoy-inc.com**
ISO 9001-2000 Certified

3/07 P/N 68514475267