

LIGHTNIN[®] **Series 10 Mixers.**

**ONE TOUGH
MIXER. ONE
EASY CHOICE.**



**YOU AND LIGHTNIN.
THE RIGHT MIX.**

LIGHTNIN

LIGHTNIN Series 10 Mixers.

Durable, Versatile, Cost-effective.

One look at this rugged design will tell you, *LIGHTNIN's* field-proven Series 10 is no ordinary mixer. In thousands of installations and hundreds of applications worldwide, *Series 10 mixers deliver a superior combination of value and performance.*

No submerged oil seals or split lines below oil level eliminate the potential for oil leakage into tank.

Check, add or change oil without removing the safety guard.

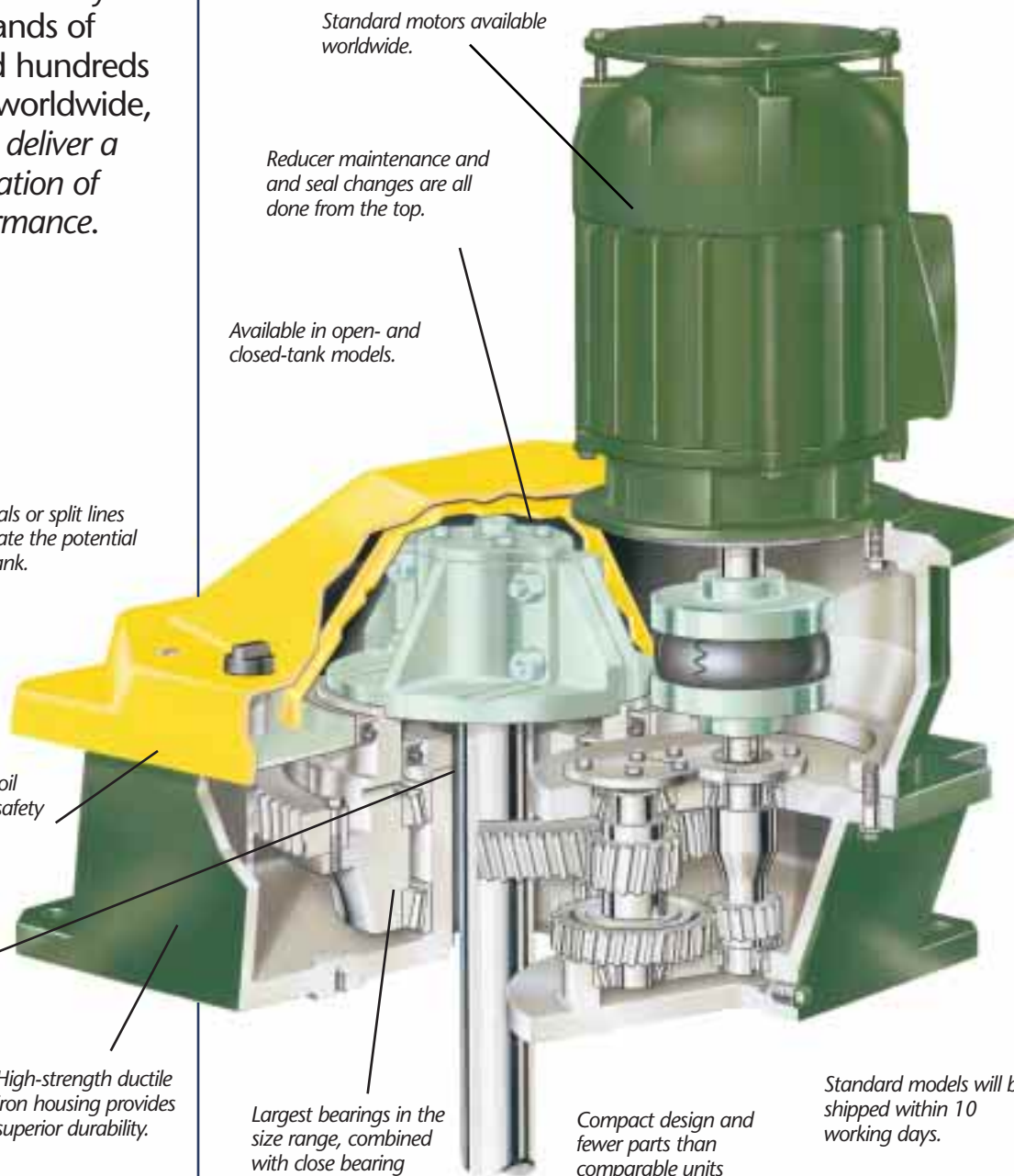
Cavity for optional seal.

High-strength ductile iron housing provides superior durability.

Largest bearings in the size range, combined with close bearing spacing, minimizes shaft deflection at the seal.

Compact design and fewer parts than comparable units simplify installation and maintenance.

Standard models will be shipped within 10 working days.



Unmatched Durability

■ Long gear and bearing life.

The largest tapered roller bearings in a mixer of this class help produce an L10 life of 100,000 hours and greater. Designed specifically for mixer service, Series 10 speed reducers are capable of handling large variations in mixer loads, adapting to different process conditions and accommodating long overhung shafts. "Off-the-shelf" speed reducers not designed for mixer service can't make this claim.

In addition, high-quality carburized and ground gearing features a minimum AGMA Service Factor of 1.5 for long life and added protection against shock loading.

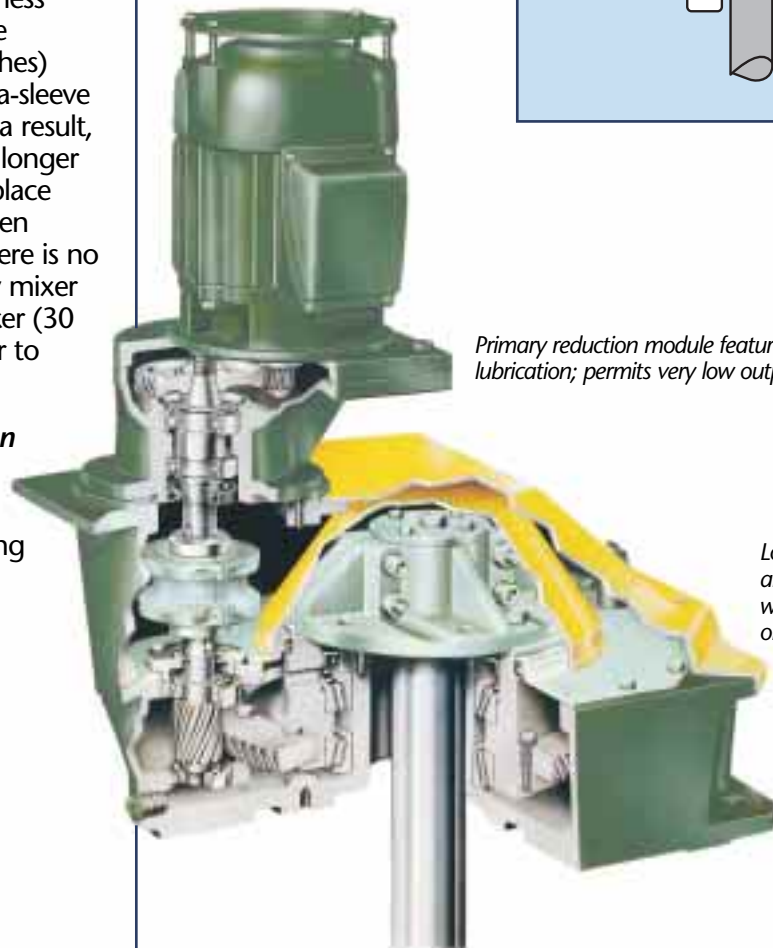
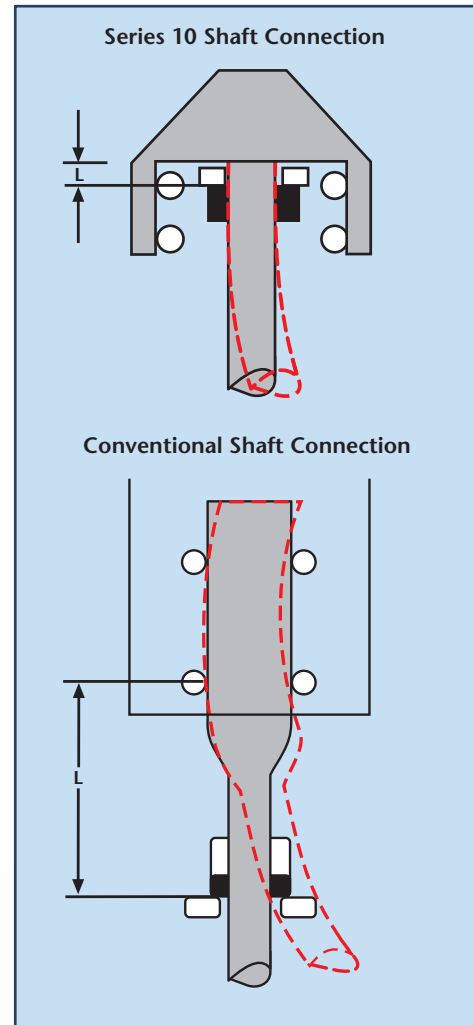
■ Unique output shaft connection—the largest of any competitive unit – reduces shaft deflection to extend seal life.

Greater mechanical stiffness reduces deflection at the seal (less than 0.010 inches) compared with seal-on-a-sleeve or cartridge designs. As a result, you'll be able to specify longer overhung shafts and replace seals less frequently. When servicing is called for, there is no output shaft seal on any mixer in the world that's quicker (30 minutes or less) or easier to replace.

■ High-strength ductile iron motor pedestal.

Stable, rigid mounting permits single-point lifting of the drive assembly.

Distance between seal face and rigid support (L) is shorter in Series 10 design compared to conventional design, minimizing shaft deflection at seal face.



Primary reduction module features lifetime lubrication; permits very low output speed.

Low-speed module components are immersed in lubricant. Dry well construction protects against oil leakage.

Excellent Versatility

■ *Wide range of output speeds.*

Select the combination of output speed and torque that meets your mixing requirements.

■ *Choice of motors.*

Select the motor that's consistent with your specific plant standards. A wide variety of motor options is available, including explosion-proof and multiple-speed units.

■ *Longer shaft lengths accommodate a wider range of tank configurations.*

Carbon steel or 316 stainless steel shafts are standard. Shafts in excess of 30 feet in length let you specify Series 10 mixers for large tanks without the need for steady bearings. Alloy and composite shafts are also available.

■ *Choice of mechanical seals.*

Closed-tank mixers can be equipped with dry-running single mechanical seals or lubricated double mechanical seals for hazardous materials and higher-pressure applications.

■ *Optional seal pedestal design eliminates temperature constraints.*

Series 10 mixers can be mounted on a pedestal to permit operation up to vessel temperatures of 400°F.

■ *Dry-well construction and no submerged seals prevent oil leakage.*

An integral reducer housing with drywell construction prevents oil loss, as well as the risk of product contamination. The reducers simply can't leak, even when the mixer is mounted on angle risers. In addition, the absence of submerged oil seals or split lines below the oil level prevent leakage over the tank or into the product.



Optional angle riser brackets let you save up to 15% on tank costs by eliminating the need for baffles.



Shafts in excess of 30 feet in length let you specify Series 10 mixers for large tanks without the need for steady bearings.

Lower Ownership Costs

■ **Fewer moving parts simplifies maintenance.**

Series 10 mixers let you reduce spare parts inventory, frequency of repair and servicing costs.

■ **Perform routine maintenance quickly.**

Check, add or change oil without removing the high-strength safety guard. Synthetic oil needs to be changed only once a year. Oil-lubricated gears and bearings do not require grease servicing.

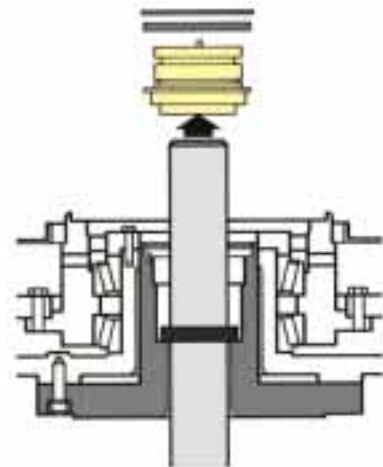
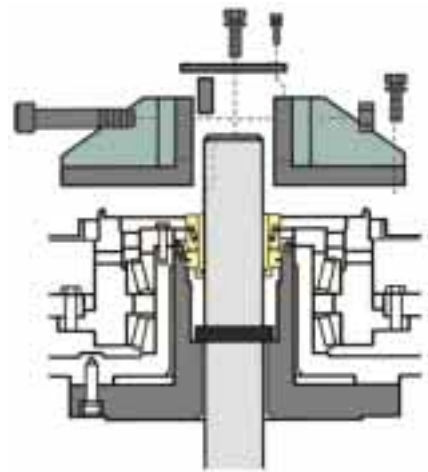
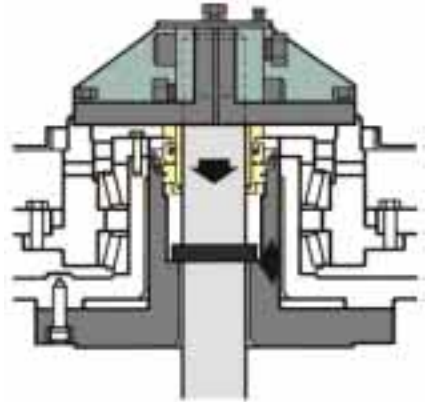
■ **Easiest seal replacement.**

Seals are replaced from the top of the mixer without disturbing the shaft. No stub shafts, jacking plates or bolts are required.

■ **High-efficiency helical gearing provides more usable power.**

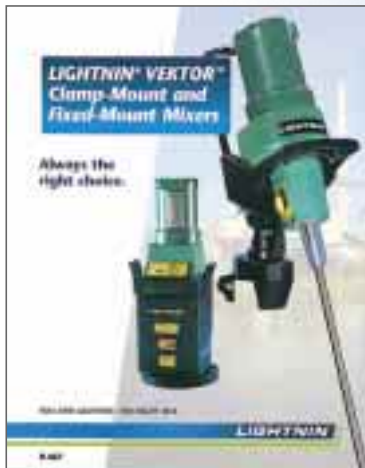
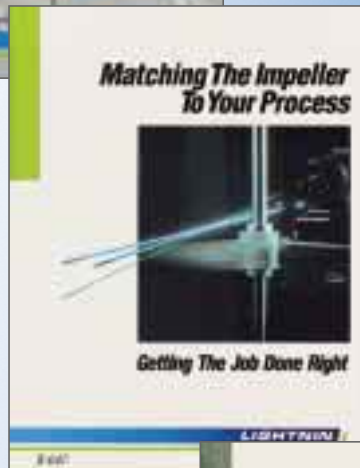
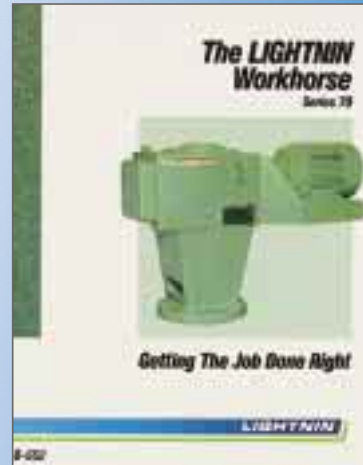
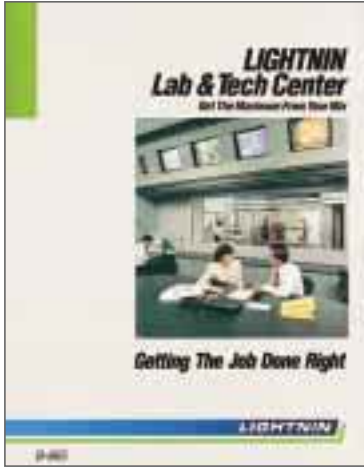
Efficient in-line helical gearing and parallel shafts minimize horsepower loss through the drivetrain. As a result, virtually all the power you pay for is transferred into the mixing vessel.

30-Minute Seal Replacement



Seal changes are performed in less than 30 minutes. Simply loosen hardware and lower the shaft support collar onto the hub shoulder (1). Once the split coupling has been removed (2), lift off the seal assembly and replace with a new or rebuilt unit (3).

Learn more about these other high-performance mixers from *LIGHTNIN*. Ask your local *LIGHTNIN* Sales Engineer for the following product literature.



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