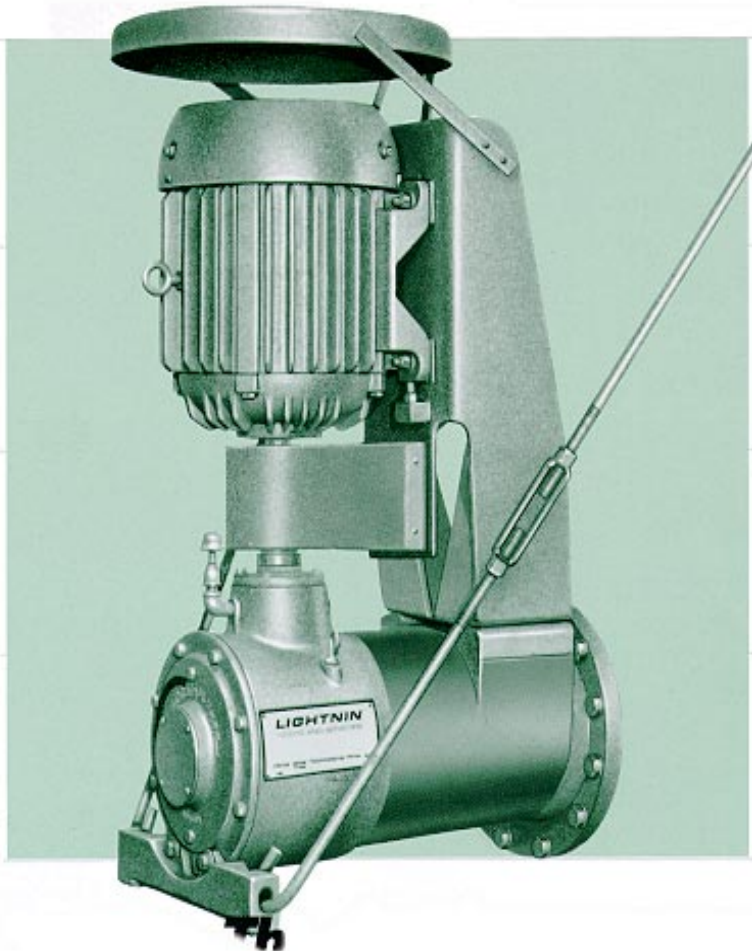


# ***RSE Series Side-Entering Mixers***

***Bulletin B-527***



***Getting The Job Done Right***

**LIGHTNIN**

# **The *LIGHTNIN RSE* Is Both Compact And Heavy-Duty, For Economical, Dependable Service.**

## **Sizes To 75 HP, 50% Greater Flow**

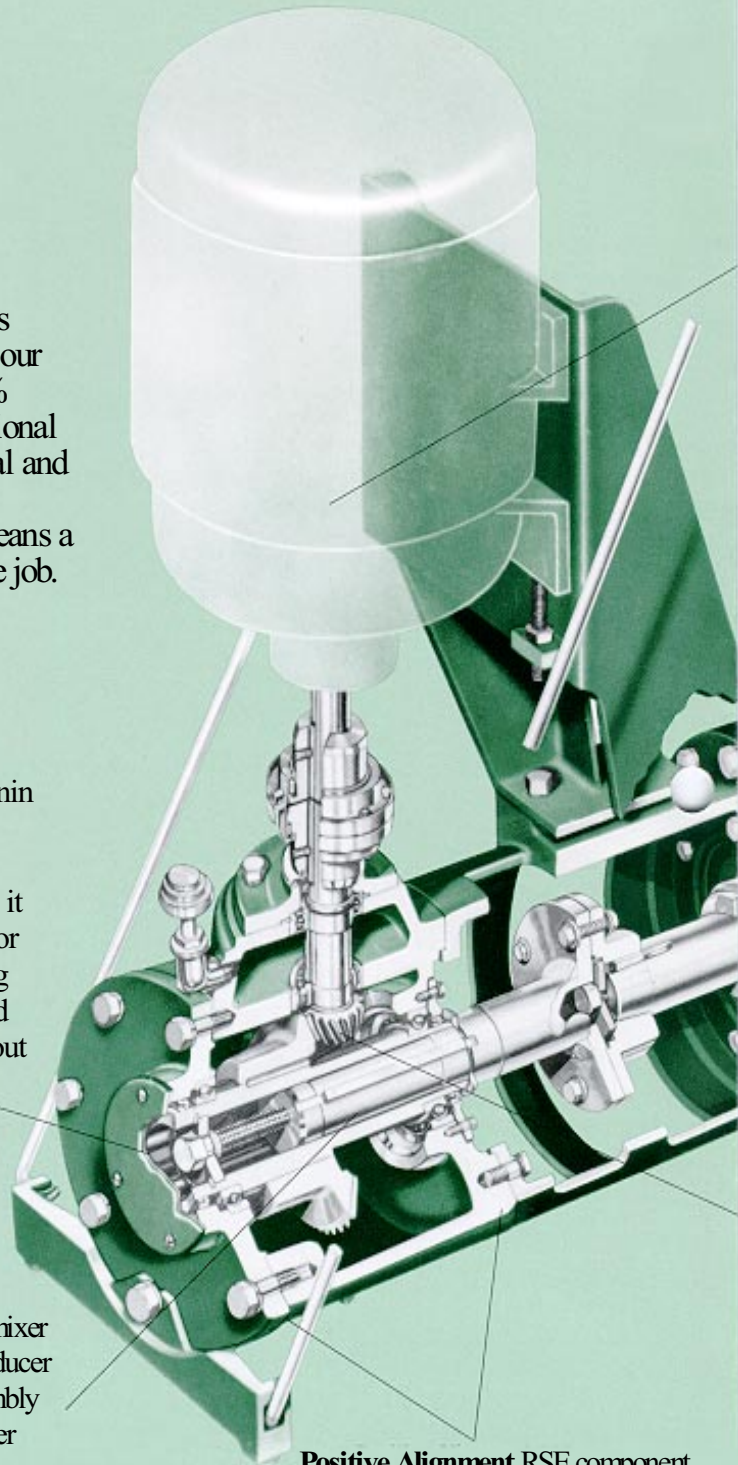
Our complete line of RSE Series mixers ranges from 1 to 75 HP. Each includes our energy-efficient A312 impeller for 50% greater blending capacity over conventional impellers. Installation costs are minimal and operating costs are reduced 40%.

In many cases this high efficiency means a smaller model or fewer units can do the job. And that means decreased installation expense and fewer manholes per tank.

**Lightnin Shut-Off** The patented Lightnin shut-off is standard on mechanical seal mixers, and may also be furnished on stuffing box models. This device makes it possible to replace the mechanical seal or repack the stuffing box without draining the tank. Replacement can be completed quickly, without special tools and without the need of skilled help.

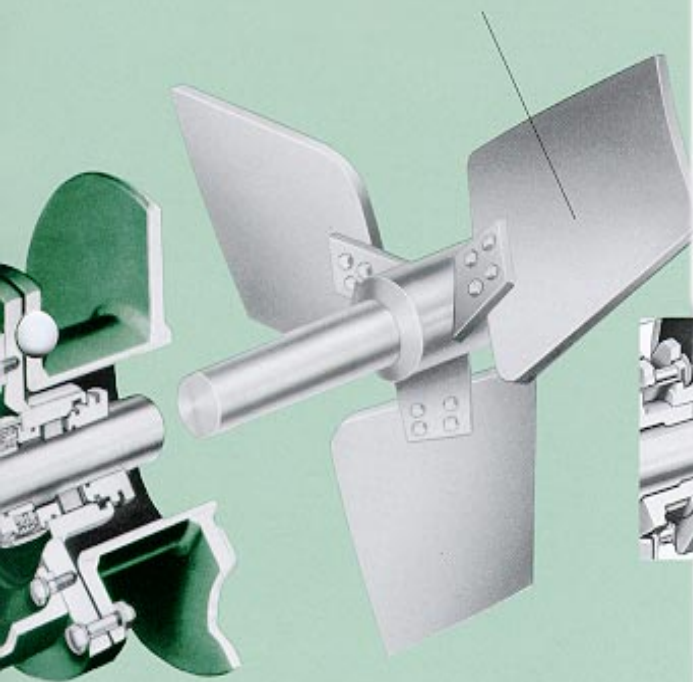
**Rugged Shaft Support** In the RSE the mixer shaft is directly supported in the speed reducer quill shaft. The mixer shaft support assembly is designed to withstand all of the propeller fluid dynamic forces which will be encountered. Note that with this construction all shaft bearings are outside the tank. This eliminates the corrosion and contamination problem of bearing surfaces in contact with tank contents.

**Positive Alignment** RSE component sections are housed in rugged castings, each accurately machined to close tolerance with rabet fit. Alignment of parts within the mixer is positively assured, and cannot be disturbed during installation, operation or repair.



**Right Angle Gear Drive** Designed for side-entering service, the right angle drive is a spiral bevel gear unit. The ratings of all bearings greatly exceed AGMA requirements. The integral design assures an extremely compact installation, which brings the center of gravity close to the tank, reducing vibration and simplifying mounting.

**A312 Impeller** The laser-designed A312 impeller comes standard on all RSE models. Delivering 50% more blending capability than conventional impellers, the A312 is unsurpassed for applications that require high mixing intensity.



**Precision Bevel Gears** High quality spiral bevel gear and pinion are precision-generated, match lapped, individually mounted and micrometer checked for quiet running.

### **Positive Sealing Of Tank Contents**

The Lightnin cartridge seal, designed specifically for mixer service, is standard on the RSE line. It is a complete, replaceable, packaged unit with built-in alignment, thoroughly tested and ready to run. Sealing faces are lubricated by tank contents and operate without adjustment for the life of the seal. All flexible sealing elements are of Buna N. Where this is not suitable, a complete line of single Teflon or Viton A type seals is available.



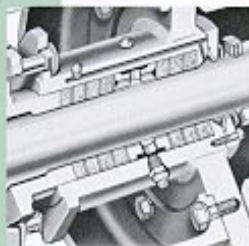
For applications which contain abrasive solids or tacky substances, a flushing design is available. Inboard shaft is stainless steel for easier maintenance.

### **Lightnin Stuffing Box**

Packed stuffing boxes can be furnished to meet all process conditions. Five different types are available, each designed for easy repacking. The standard stuffing box has a split packing gland, seven rings of packing with separators and a properly proportioned lubricant-distributing

lantern ring. It all means

longer service with less leakage and less maintenance. Flanges are designed to ASME Code for Unfired Pressure Vessels, and, as standard, are suitable for temperatures and pressures of ASA 150 pound series.



For stuffing box lubrication, the Lightnin spring-loaded lubricator is furnished as standard. For constant pressure up to 75 psi, the Lightnin weight-loaded lubricator is an optional extra.

### **Easy Maintenance**

Lightnin mixers are "Maintenance Designed." Features include bayonet oil level gauge, weatherproof breather, clear flow drain nipple and cap and lifting eyes. Mixer bearings are either prelubricated and sealed or splash lubricated by the oil in the gear case. No greasing is necessary. All units are protected against corrosion and climatic conditions by special corrosion resistant paint, chemical inhibitors, and protective wrappings.

### **Denvery**

All RSE Mixer components are in stock on our shelves. Mixers are shipped as packaged units, factory assembled and aligned, ready to install and run. Delivery to meet your needs is our standard.

**Worldwide Offices So Help  
Is Always Nearby.**

Every day, over a million LIGHTNIN mixers are at work around the world. Each is guaranteed to perform the job it's specified to do. 100%. Many have been doing that job for 10, 15, 20 years or more. Each has the full support of LIGHTNIN, no

matter where in the world it mixes.

Call your nearest LIGHTNIN Sales Engineer for more information about any LIGHTNIN product or service.

LIGHTNIN Sales Engineers are located in all principal cities. They

are fully qualified to solve all your fluid mixing problems. Look them up in Chemical Engineering Catalog, Chemical Engineering Equipment Buyer's Guide or in the yellow pages of your telephone directory. Or call or write us directly.



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