



98 Series Mixers

TOP GEAR MIXERS



A World Leader In Industrial Mixing Since 1923. Lightnin has over 85 years of unrivaled experience in industrial mixing technology, process knowledge, and technological innovation. Lightnin enjoys a global reputation for durable, long-lasting mixers, agitators, aerators, and flocculators for fluid process systems. We offer a full spectrum of impeller designs for diverse applications. In addition, we offer a worldwide service network, mixer repair, gearbox repair, and replacement parts programs. Look to Lightnin for knowledge, technology and service excellence.

Based in Charlotte, North Carolina, SPX Corporation (NYSE: SPW) is a global Fortune 500 multi-industry manufacturing leader with over \$5 billion in annual revenue, operations in more than 35 countries and over 15,000 employees. The company's highly-specialized, engineered products and technologies are concentrated in Flow Technology and energy infrastructure. Many of SPX's innovative solutions are playing a role in helping to meet rising global demand for electricity and processed foods and beverages, particularly in emerging markets. The company's products include food processing systems for the food and beverage industry, power transformers for utility companies, and cooling systems for power plants. For more information, please visit www.spx.com.

Lightnin 98 Series – Geared for the long run

We understand that when it comes to efficient process plant operations, equipment reliability is of paramount importance. As a long-standing member of AGMA (American Gear Manufacturers Association) SPX's Lightnin brand recognizes that multipurpose commercial gearboxes are poorly suited to Agitator service.

For more than 50 years the Lightnin products have utilized proprietary, purpose designed agitator gear drives to ensure dependability and low cost of ownership. With more than 1 million units in the field our operating experience is unsurpassed.

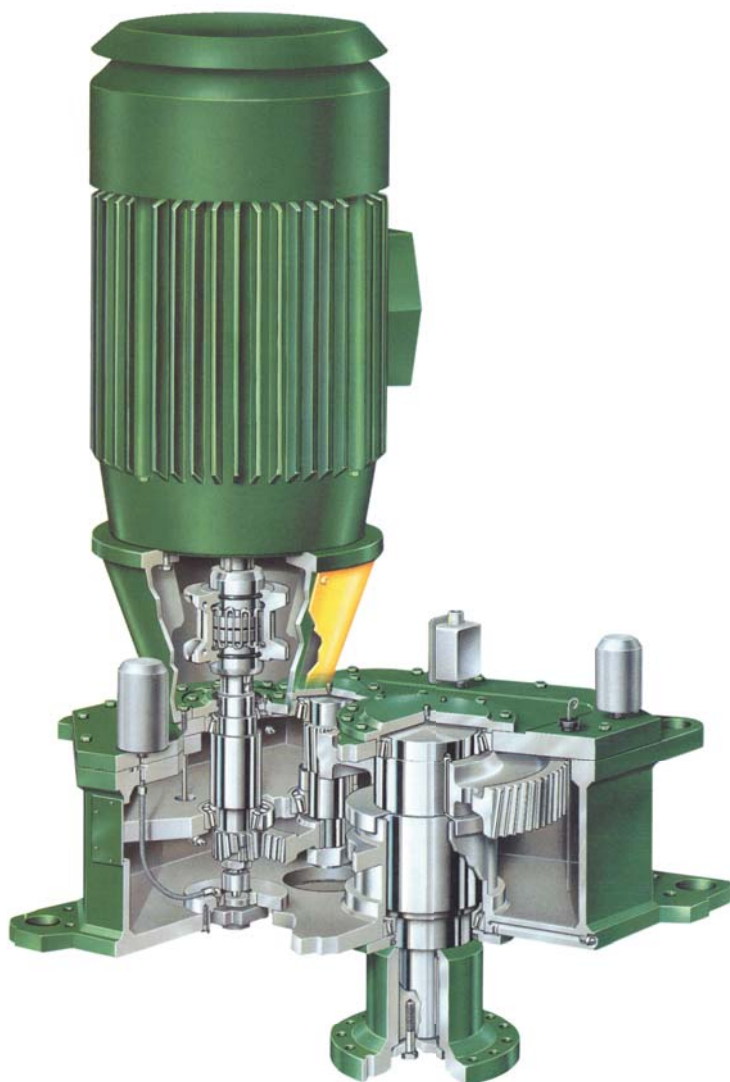


98 SERIES FEATURES:

- **Parallel shaft, double reduction design** provides enhanced installation flexibility where there are space limitations on top of the vessel.
- **Carburized and ground helical gearing** helps ensure quiet operation and extended gear life.
- **Dry well oil dam** is integrated into the gear housing to prevent lubrication from leaking down the mixer shaft.
- **Integral positive displacement pump** driven off the input shaft provides continuous lubrication whenever the mixer motor is operating. No separate lubrication motor is required.
- **Compact drive design** requires significantly less oil for lubrication - eliminates need for large oil sump.
- **Forced lubrication system filters** any contaminants to increase oil life.
- **Standard flanged motors and pedestal mounted** reduces assembly time while eliminating high-speed coupling alignment and the need for outboard motor support.
- **Integral mounting plate** eliminates the need for an additional bolted plate.
- **Optional seal cartridge** can be removed easily in four simple steps without having to move the gear drive or motor, and without having to loosen any mixer shaft bearings.

STANDARD RANGE:

- 15 - 130 kW (20 - 175 hp)
- 20 to 100 rpm
- Open tank, stuffing box or mechanical seal options



Select SPX Mixing equipment and you get more than an efficient and cost effective process. You get over 85 years of experience in superior processing technology. We were the first to use computational fluid dynamics (CFD). This experience has enabled us to design and develop products specifically for chemical, municipal and mining industries into the 21st century.

Our laboratory is a standard for the business, and allows us to optimize your process, from pilot to full-scale testing. Your benefits are higher reliability, lower production costs, greater output, resulting in higher profits. We guarantee it!

Processing.....we perfected it

CUSTOM FEATURES AS STANDARD

COMBINE THE 98 AND THE LIGHTNIN SEAL TO EXTEND BEARING, SEAL AND GEAR LIFE.

Traditionally, internal gear drive components are subject to large axial and bending loads which are the primary source of unwanted gear deflection and misalignment. Left unchecked, these dynamic loads can significantly reduce gear life or cause sudden gear-drive failure. These loads are attributed to the fluid forces which act on the mixer shaft at the impellers.

THE SOLUTION

Lightnin's design isolates the gearing from the effects of these fluid forces through the following combination of design advantages:

- The lower quill shaft bearing experiences no external loading and does not support the mixer shaft in any way.
- Clearance between the mixer shaft and quill shaft ensures that no bending loads are imposed on the quill shaft, effectively isolating the gearing from the mechanical effects created by the fluid forces.
- The fixed bearing located below the gear drive in the seal cartridge absorbs radial reaction forces in addition to the axial loads. As a result, they are prevented from being transferred to the gear drive.
- The precise positioning of the fixed bearing within millimeters of the mixer seal faces minimizes shaft runout and dynamic deflection to maximize seal life.

98 Series Mixers

TOP GEAR MIXERS



Global locations

AMERICAS

SPX FLOW TECHNOLOGY

Rua João Daprat
231 São Bernardo do Campo
SP 09600-010, Brazil
P: +55 11 2127 8278

SPX FLOW TECHNOLOGY CHILE

SPX Chile Limitada
Av. Ricardo Lyon 222 of. 503
Providencia - Santiago
Chile
P: +56 2 8969 320

SPX FLOW TECHNOLOGY MEXICO

APV Soluciones Integrales, SA de CV
Amargura # 60 Primer Piso
Col. Lomas de La Herradura
52785 Huixquilucan
Edo de Mexico
P: +52 55 5293 9048

SPX FLOW TECHNOLOGY

135 Mt. Read Blvd.
Rochester, NY 14611
P: (888) 649-2378 (MIX-BEST), US and Canada) or +1 (585) 436-5550
F: (585) 436-5589
E: lightnin@spx.com • www.lightninmixers.com

EMEA

SPX FLOW TECHNOLOGY

Ocean House, Towers Business Park
Didsbury, Manchester
M20 2LY, UK
P: +44 161 249 1170

SPX FLOW TECHNOLOGY AFRICA

Unit 12B
Growthpoint Office Park, Tonetti Street
Midrand,
South Africa
P: +27 11 207 3700

SPX FLOW TECHNOLOGY MIDDLE

EAST FZE
P.O Box 299745,
Downtown Jebel Ali
The Galleries 4
Dubai, U.A.E.
P: +971 4 8143400

APAC

SPX FLOW TECHNOLOGY PTY LTD

Suite 2.3, Quad 2
8 Parkview Drive
Homebush Bay NSW 2127, Australia
P: +61 2 9763 4900

SPX FLOW TECHNOLOGY CHINA

2F, Treasury Centre
No. 1568 Huashan Road
Shanghai 200052, China
P: +86 (21) 22085889

SPX FLOW TECHNOLOGY SINGAPORE

25 International Business Park
03-03/12 German Centre
Singapore 609916
P: +65 6264 4366

For other Sales locations click
<http://www.spx.com/en/lightnin/where-to-buy/>
or use your SmartPhone and the QR Code



SPX reserves the right to incorporate our latest design and material changes without notice or obligation.

Design features, materials of construction and dimensional data, as described in this bulletin, are provided for your information only and should not be relied upon unless confirmed in writing. Please contact your local sales representative for product availability in your region. For more information visit www.spx.com.

The green ">" is a trademark of SPX Corporation, Inc.

ISSUED 03/2013 B-769

COPYRIGHT © 2013 SPX Corporation