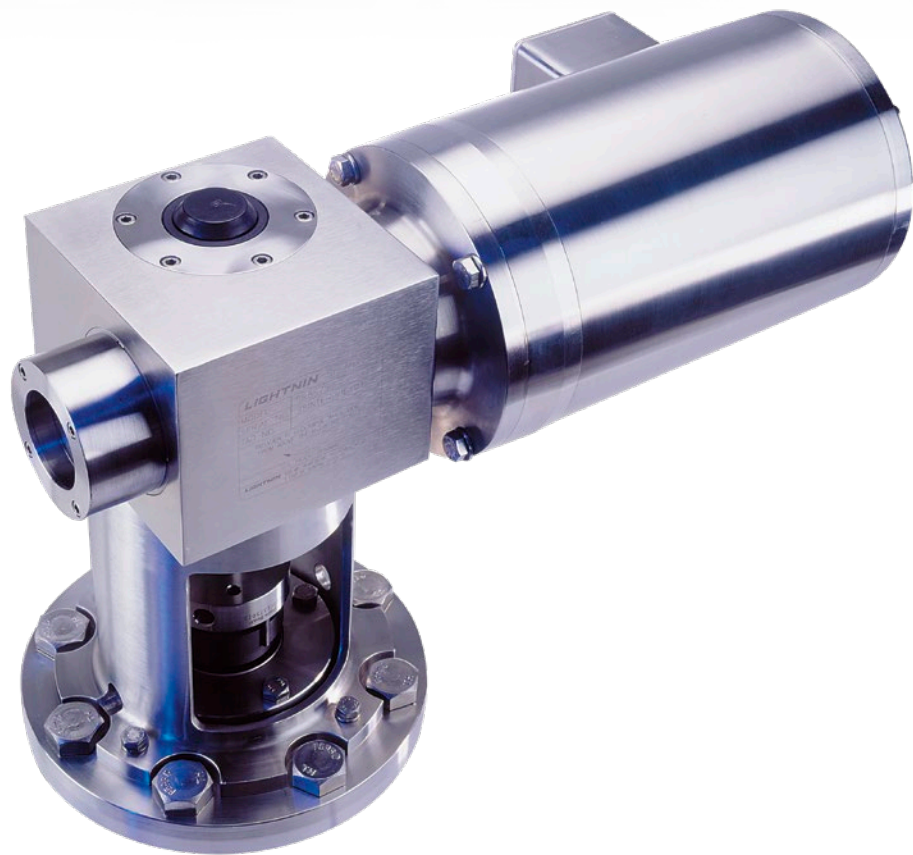


SR Sanitary

RIGHT ANGLE MIXERS FOR THE PHARMACEUTICAL MARKET



A World Leader in Industrial Mixing since 1923, Lightnin has 90 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.

SPX FLOW, Inc. (NYSE:FLOW) is a leading manufacturer of innovative flow technologies, many of which help define the industry standard in the market segments they serve. From its headquarters in Charlotte, North Carolina, it operates a sales and support network, centers of manufacturing excellence, and advanced engineering facilities, throughout the world. Its cutting-edge flow components and process equipment portfolio includes a wide range of pumps, valves, heat exchangers, mixers, homogenizers, separators, filters, UHT, and drying technology that meet many application needs. Its expert engineering capability also makes it a premium supplier of customized solutions and complete, turn-key packages to meet the most exacting of installation demands.

Incorporating many leading brands, SPX FLOW has a long history of serving the food and beverage, power and energy, and industrial market sectors. Its designs and engineered solutions help customers drive efficiency and productivity, increase quality and reliability, and meet the latest regulatory demands. In-depth understanding of applications and processes, state-of-the-art Innovation Centers, and advanced pilot/testing technology further assist in optimizing processes and reducing timescales to reliably meet production targets.

SR Right Angle Mixers from the Lightnin Family of SanStar Mixers

Designed for use in aseptic environments, the Lightnin SR Sanitary Right-Angle Mixers offer a proven track record of superior, dependable performance.

Lightnin SR Sanitary Right-Angle Mixers are designed for biological, pharmaceutical, cosmetic, and food processing applications on tanks ranging from 100 to 20,000 liters (25 gal. to 5200 gal.).

- Used in the most stringent cGMP (Good Manufacturing Practices) facilities
- Designed for media suspension and storage, buffer solution breakdown, plasma extraction, fermentation (including bacteria and cell culture), and general media processing
- Aseptic dry running seal can be supplied with sterilizable sanitary gland
- Designed for CIP/SIP environments
- Small mixer footprint for restricted tank head geometries
- Low headroom less than 430mm (17"), right-angle gear drive and low center of gravity; processing tanks can easily be moved from one location to another with the mixer in place
- All 300 Series stainless steel exterior finish available
- Supplied with Lightnin A310/A510 low-shear impeller
- Customers can tailor the most cost-effective mixer configuration based on specific process and environmental requirements
- Available with Lightnin's Quality Assurance Documentation validation support package
- Comes with Lightnin's 100% process guarantee



LIGHTNIN'S CAPABILITIES IN THE BIOTECHNOLOGY AND PHARMACEUTICAL INDUSTRIES

The standards for Good Manufacturing Practices set by the FDA are more stringent than those for the general Chemical Industry. As a supplier of equipment to cGMP facilities, Lightnin has instituted several procedures and systems to assist engineering contractors, system suppliers, and end-users in meeting these requirements, including:

- A team of in-house experts with experience in aseptic manufacturing: Lightnin's team of experts includes people with knowledge in processing, mechanical design, quality assurance, production, installation, service, and documentation.
- An order plan specific to aseptic mixers: On large projects, a Lightnin team of experts led by a project coordinator oversees the entire project. Internally, Lightnin creates a detailed project plan that controls the order from order entry through shipping to assure that all specifications are met exactly.
- Enhanced finish standards and verification: Lightnin's standard finishes are defined both by Roughness Average (Ra) and by whether the raw material is cast or fabricated. Verification of specified finishes is available in the QAD.

MIXING TECHNOLOGY — LIGHTNIN'S COMMITMENT TO YOUR SUCCESS

The heart of any mixer is its impeller, and Lightnin has dozens to choose from. Successful impeller design requires a commitment to mixing research and the capability to carry out dynamic testing using state-of-the-art facilities, instruments, and procedures. At Lightnin's Process Technology Laboratory, scientists use proprietary equipment and computer-assisted protocols to create new impellers, document their performance, and validate them against real-life mixing processes. The end result is an impeller that meets the needs of each unique process accurately and efficiently — generating lower capital and operating costs for many thousands of customers, year after year.

VALIDATION SUPPORT

Quality Assurance Documentation, including the Lightnin Quality Plan, project-specification tests and data reports, materials of construction, weld procedures, and polish verification data, is available to facilitate the validation process.

Lightnin's Authorized Service Centers worldwide can provide installation, commissioning, and ongoing maintenance services to ensure that your system is running within validated specification.

SPECIFICATIONS

Wetted Parts

- A310/A510 high-efficiency, low-shear hydrofoil impeller with or without stabilizers
- 316L stainless steel material
- Welded construction
- Threaded in-tank shaft coupling available
- Surface finish per customer specification
- Electro-polish available

Drive Assembly

- 0.37kW (0.5HP)
- 5:1 and 10:1 reduction (nominal 350 and 175 rpm restrictively, at 60Hz)
- L-10 bearing life exceeds 100,000 hours
- 1.75 service factor
- Food-grade lubricant
- Food-grade white epoxy finish
- Stainless steel output shaft and all stainless hardware
- Sealed gearbox with expansion chamber; no breather valve required

Motors

- Washdown and inverter duty, TEFC, 208-230/460V, 3-phase, 60 Hz, food-grade white epoxy finish
- Washdown duty, TEFC, 115V, single-phase, 60 Hz, food-grade white epoxy finish

Seals

- Single dry running
- With or without sanitary gland

Pedestal and Mounting Flanges

- 4-, 5-, or 6-inch ANSI 150# flange, or 4- or 6-inch Tri-Clamp® sanitary connection, DN 100, 125 or 150 PN10 flanges are also available
- Solid 316L SS construction on flanges
- Hard anodized aluminum pedestal
- Surfaces unpainted and finished to 0.2µm Ra (63µinch Ra)

Custom Options

- High-alloy impeller and shaft
- All stainless steel gearbox and 300 Series stainless steel motor option available
- Steel-it paint
- Explosion-proof or ATEX motor
- Alternative size mounting flanges or Tri-Clamp® sanitary connections
- Alternative impellers including props, Rushton turbines, and A315, A320, or A340 high-solidity hydrofoils
- Extended power and speed range
- Optional 316L stainless steel pedestal construction
- AC variable frequency drives (VFD) available
- Local readout tachometer option

SR Sanitary Mixers

RIGHT ANGLE MIXERS FOR THE PHARMACEUTICAL MARKET



EXPERT SALES AND SERVICE IS AVAILABLE AROUND THE WORLD

The worldwide Lightnin organization stands ready to spec, quote, and service all your mixing applications. On a global basis, strategically located Lightnin manufacturing and service facilities make equipment delivery and after-order service fast and dependable. Our dedicated global service teams are readily available to support your process equipment. Genuine spare parts and service solutions can be obtained from locations around the world and ensure operating capacity of your valuable production equipment.

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For other Sales locations, click
www.spxflow.com/lightnin/contacts/where-to-buy/
or use your SmartPhone and the QR Code.



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