

LIGHTNIN SanStar Line of Sanitary Mixers



LIGHTNIN Aftermarket Services: The Fastest Route To Uptime.

Expertise: Experienced technicians are the backbone of our dedicated service organization. They're uniquely qualified to keep your LIGHTNIN mixers running right.

Lightnin Certified Technicians: Aftermarket technicians are certified via training courses to ensure that the work they do meets the highest standards for consistency and reliability.

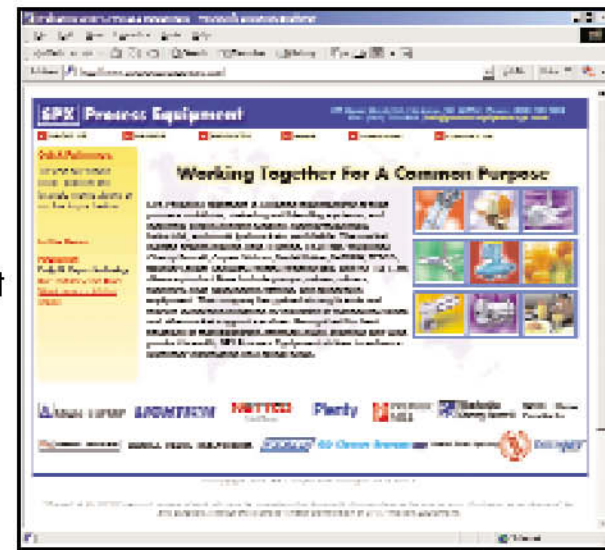
Genuine LIGHTNIN Parts: All repairs follow original design specs and use only factory-authorized replacement parts.

Full LIGHTNIN Factory Warranty: We're so confident we'll do the job right that all authorized repair and service work is covered by a full factory warranty. What we repair, we guarantee — 100%.

- Factory Service Program
- Exchange Program = Minimal Downtime
- Quick Turnaround



An SPX Process Equipment Operation
 For more information about LIGHTNIN's Bio-CIP or to discuss your application, contact your local LIGHTNIN Sales Representative. Visit our website: www.spxprocessequipment.com or contact us at LIGHTNIN@processequipment.spx.com
 Call 1-888-MIX-BEST (U.S. and Canada) or +1 (585) 436-5550 (Worldwide).
 Fax +1 (585) 436-5589.



Your Local Contact



For technical details on products and services available from SPX Process Equipment, contact us at info@processequipment.spx.com or visit www.spxprocessequipment.com

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 LIGHTNIN IS A REGISTERED TRADEMARK OF LIGHTNIN IN THE UNITED STATES AND MAY BE REGISTERED IN OTHER COUNTRIES.



Bio-CIP MagMixer™

The Newest Member of the SanStar Line of Sanitary Mixers

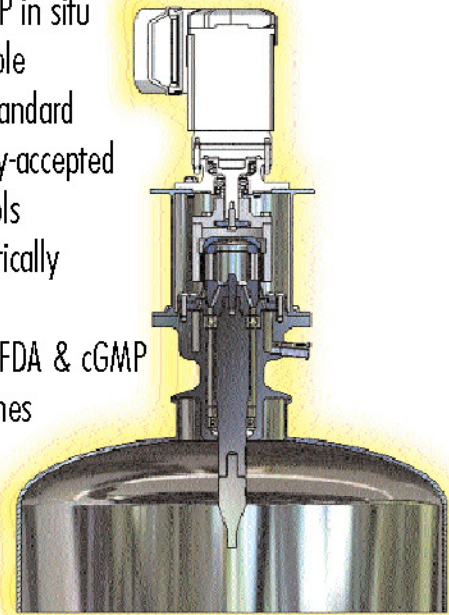
Bio-CIP Top-Entry MagMixers

From the LIGHTNIN Family of SanStar Mixers

Specifically designed and developed to meet the industry demand for sealless **Bioreactor** mixers. This line of mixers is supported by LIGHTNIN's 80 plus years of unrivaled experience in mixing technology, process knowledge, and technological innovation.

- Designed specifically for the BioTech & Pharmaceutical industries
- Elimination of mechanical seals and associated maintenance
- SIP/CIP in situ cleanable with standard industry-accepted protocols
- Hermetically sealed
- Meets FDA & cGMP guidelines

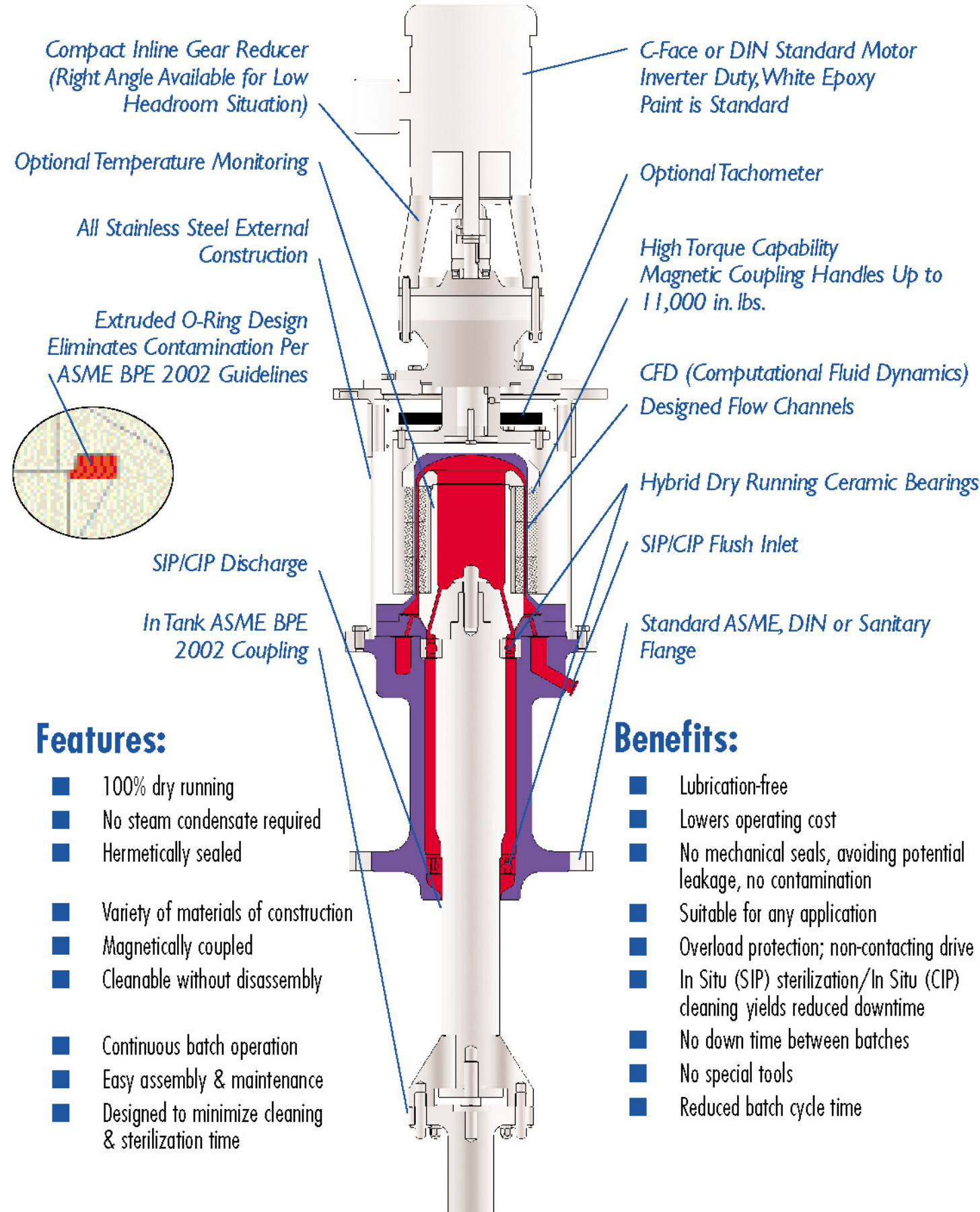
Typical BioPharm Installation



Applications:

- BioReactors
- Fermenters/Purification
- Pharmaceutical Processing
- Markets that require full process containment

First Ever Clean-In-Place Top Entry MagMixer!



Features:

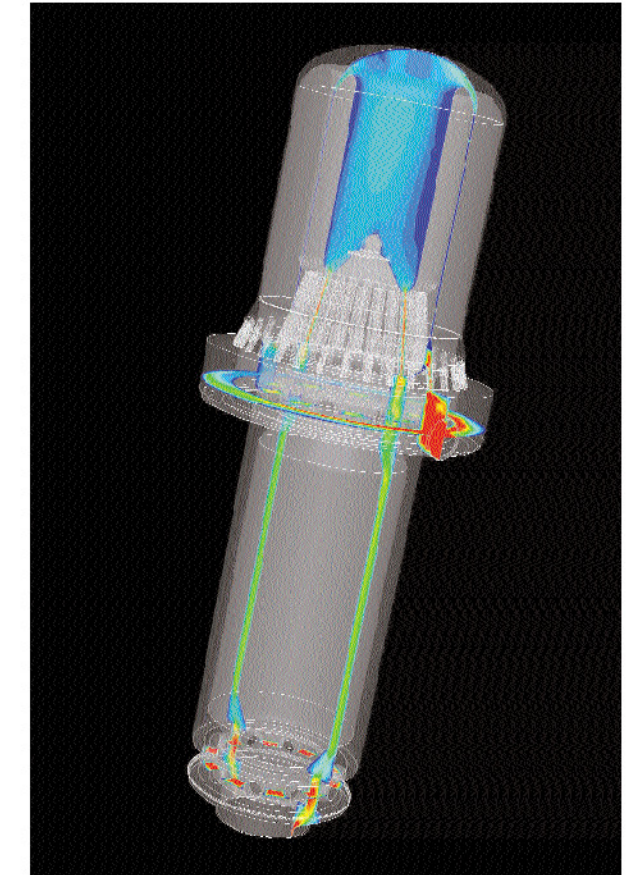
- 100% dry running
- No steam condensate required
- Hermetically sealed
- Variety of materials of construction
- Magnetically coupled
- Cleanable without disassembly
- Continuous batch operation
- Easy assembly & maintenance
- Designed to minimize cleaning & sterilization time

Benefits:

- Lubrication-free
- Lowers operating cost
- No mechanical seals, avoiding potential leakage, no contamination
- Suitable for any application
- Overload protection; non-contacting drive
- In Situ (SIP) sterilization/In Situ (CIP) cleaning yields reduced downtime
- No down time between batches
- No special tools
- Reduced batch cycle time

Materials of Construction:

- Standard 316L Construction
- Alternative materials e.g. AL6XN or Hastelloy
- In tank components available in many alloys
- Hybrid Bearings Silicone Nitride Balls 440C Races with a variety of pharmaceutical/biotech materials
- Special USP Class VI flow through bearing retainer



State-of-the-Art Computer Aided Design and Flow Modeling

Technical Data:

- Patented design; additional patents pending
- Five standard sizes from 1/4 Hp through 10 Hp
- Speeds to 350 RPM available
- LIGHTNIN's Impeller Spectrum for process specific mixing solutions