

Advanced Service Capabilities That Put You First



MISSION: BE THE CUSTOMER'S FIRST CHOICE IN MIXING

Technical Agitation and Mixing Solutions On-Call

Philadelphia Mixing Solutions, Ltd.[™] and its subsidiary Mixing Solutions Limited[™] lead the industry in providing customers with improved agitation and mixing processes for their mission-critical mixing operations. Backed by over 60 years of industry experience, and with a rich tradition of technology going back to our roots with the original Philadelphia Gear Corporation, our technicians can analyze, design and implement superior mixing operations in a wide variety of agitation applications.

We are a process solution focused company. From high-viscosity non-Newtonian environments to rapid blending and agglomeration, Philadelphia Mixing Solutions and Mixing Solutions Limited can help customers optimize their operating performance. The result—greater throughput, higher quality and lower energy consumption that improves bottom line performance. With manufacturing locations based in the United States and United Kingdom and representatives worldwide, we provide local support for your global operation.



★ Manufacturing facilities

📍 Regional offices

Markets

- Chemical
- Oil & Gas
- Water & Wastewater
- Mineral Processing
- Power Generation
- Paints & Coatings
- Pulp & Paper
- Food & Beverage
- Phosphoric Acid



IN-DEPTH TECHNICAL SUPPORT

CONNECT WITH EXPERTS WHO TAKE YOUR CHALLENGES PERSONALLY

Our leadership in mixing technologies and services delivers these differences:

- Immediate, In-depth technical support from application engineers who personally stand on call 24/7
- Dedicated field service team and comprehensive site surveys that address your individual needs
- Expert equipment inspection and repair, plus analysis of root causes of failure
- Enhanced uptime with drive exchanges, advanced upgrades and retrofits and readily available OEM parts
- Advanced training to provide your team with insights to optimize your operations

OUR APPLICATION ENGINEERS ARE CONNECTED TO YOUR NEEDS 24/7

Whether you're facing immediate emergency down situations or need routine technical support, you deserve the confidence of an immediate personal connection to an application expert. With our full staff of experienced, knowledgeable application engineers and customer service representatives responding to your call, you can count on:

- Expedited emergency services for mixer repair or replacement, so when the team arrives the following day, your process is back in motion as soon as possible
- 24/7 emergency on-call service assistance

DEDICATED FIELD-SERVICE TEAM, INSIGHTFUL SITE AUDIT

MEETING YOUR EXACT NEEDS— FROM EQUIPMENT INSTALLATION TO AUDITING THE ENTIRE SITE

To ensure the success of your mixing operations and to keep your plant's mixers operational without unplanned downtime, you benefit from a dedicated team of technicians with multiple onsite maintenance options that help you by:

- Meeting installation/commissioning requirements: covers proper start-up procedures and verifies proper installation
- Providing convenient onsite consulting and repair: diagnostic services with onsite repair services are available at your plant location—otherwise, we arrange for the system to be sent to our Inspect and Repair Department
- Ensuring peak performance with preventive maintenance, diagnostic services and benchmark tests conducted at your plant ensure mixing-solution and equipment performance
- Training services for your plant team to ensure proper care of mixing equipment
- Performing site audits to optimize your equipment base. Get a master list of all mixers in one convenient and detailed document with all the pertinent information, which includes: make/model, input/output speed, criticality, application, serial number, order number, equipment number, and plant ID#
- Documentation of any symptoms: high heat, bearing noise, leaking seals, and oil leaks
- Covers all makes to provide a knowledge base to facilitate rebuilds/replacements and the use of our Drive Exchange Program



SITE AUDIT REPORT

(1) - CL Critical Level (To be determined by Customer):										
LEVEL A Red- Requires a turn-around of less than 24 to 48 hours										
LEVEL B Yellow - Requires a turn-around of less than 7 to 14 working days										
LEVEL C Green- Requires a turn-around of less than 6 to 8 weeks										
No Color indicates mixer is not critical or spares are readily available										
Caustic Department										
Eqpt. #	Description	MFG	Model #	Serial #	Order #	HP	In/Out Speed	Spare	Comments	DE AVAILABLE
S10010	14' Single Pan	PMSL	3815 VEH		45011	75	1200	No	25 4-1 ratio	New Yes
S10011	14' Weisk Pan	PMSL	3815 VEH		45004	75	1200	Yes	30 2-1 ratio High speed gear ratio	New Yes
S10012	14' Strong Pan	PMSL	3815 VEH		07870	75	1200	Yes	32 2-1 ratio	New Yes
S10013	10' Strong Pan	PMSL	3815 VEH		Removed	75	1200	Yes	Info removed by Design Gear 3/27/08	New Yes
S10014	10' Weisk Pan	PMSL	3815 VEH		not legible	75	1200/30	Yes	45-1 ratio	New Yes
S10220	10' single Evap	Lightnin	5820				1200/30	No	40 1-1 machine	
	10' Single Pan	PMSL	MV-24		15010	100	1200/45	Yes	35 4-1 ratio	Yes
	T-5 Tank	Lightnin	5829			5	1800	No	40 2-1 ratio	Yes
	Caustic Sump	Lightnin	030			7	1730	No	Head ratio for Drive Exchange	Yes
	#8 mix tank	Lightnin	840			15	1800/84	No	25 5-1 ratio	Yes

EXPERT EQUIPMENT INSPECTION AND REPAIR

GET THE PROBLEM FIXED PROPERLY—AND GET TO THE ROOT CAUSES OF THE FAILURE

As operational mixers approach the end of their useful life, the Inspect and Repair Program provides significant value by getting close-to-new operation from old equipment. The Program provides a comprehensive array of services that:

- Keeps equipment in proper working order
- Increases reliability and dependability
- Provides high quality repairs to meet stringent specifications
- Extends equipment life
- Covers Philadelphia Mixing Solutions, Lightnin, Chemineer, Falk, and other models

The Program can be customized with tiered options to fit various customer needs, which may include:

- Remedies for mechanical fatigue, upset conditions, shock load, process change, and impeller balance
- Forensic disassembly, including roto blast and a pressure wash, and digital photography to determine and document the root cause of failure
- Verification of alignment of housing bearing bores with our Coordinate Measuring Machine (CMM)
- Warranty coverage of our repair services



ENHANCE UPTIME WITH UPGRADES, DRIVE EXCHANGES, AND OEM PARTS

KEEP YOUR OPERATION RUNNING FASTER, BETTER, AND LONGER

Failure is not an option for a company with a history of mechanical-design and process-design excellence that's as long as ours. Count on our 100-year heritage in gear-drive design and 60-years experience in designing gear drives specifically for mixing and agitation systems to provide a solution today. Our expertise in designing and building new systems translates into understanding why drives fail—and to providing the programs that prevent it.

Our Upgrade and Retrofit Program for mixer and agitator drives involves:

- Collecting the mixer performance and the operational history of the unit to be replaced
- Appraising the unique loads that mixing and agitation impose on a gear drive system
- Analyzing the in-tank parts design with reference to the current process in the tank

Each upgrade and retrofit project is based on completely understanding your mixer from the top (mixer gear drive) to the bottom (in-tank mixing components)—and building designs that accomplish your specific task.

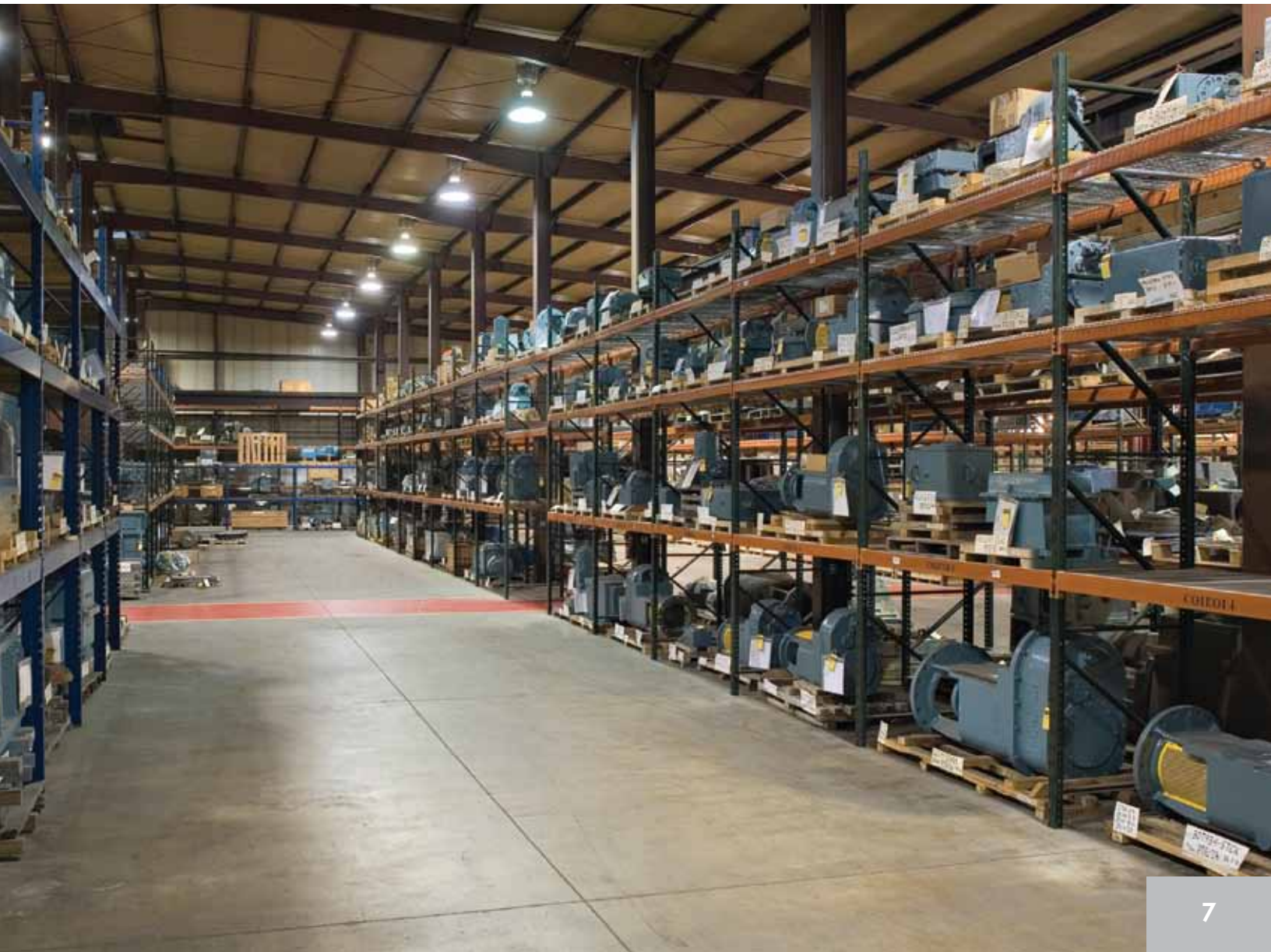
Our side entry service is available onsite for your convenience, and includes diagnostic and repair services. Additionally, we can retrofit auto actuators and leak detectors.

Our Drive Exchange Program reduces downtime by providing a rebuilt and improved mixer drive in exchange for a failing drive. The Program provides:

- Delivering a spare drive onsite that is ready for installation
- Providing predictive and preventative maintenance planning to avoid or minimize downtime and lost production
- Warehousing an inventory of rebuilt mixer gear drives to expedite replacement
- Customizing programs tailored to your process with detailed reports
- 3-year warranty

Our Parts and Customer Service Program provides OEM parts available for immediate shipment to help you avoid unplanned downtime.







For full details on our industry-leading service offering, visit www.philamixers.com or contact your representative:



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An Employee Owned Company

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