

THE **HEXPOL** EXPERIENCE

 **HEXPOL**
COMPOUNDING

A Material Difference



HEXPOL IS EVERYWHERE

Delivering Solutions for your Evolving Needs

HEXPOL Compounding is one of the leading and largest global providers of custom rubber, silicone, thermoplastic and TPE compounds. Our scientists and technologists are among the best in the world, providing proprietary and standard compounding solutions that address our customers' evolving needs.

We are committed to delivering value and helping you improve the products you make. With more than 15 strategically located campuses throughout North America, we have a network of resources to serve customers of all sizes, wherever they are. For more information about HEXPOL locations, visit our website at HEXPOLcompounding.com to view a copy of *HEXPOL is Everywhere You Are (HEXLOC)*. Our industry knowledge is vast and our application expertise is unmatched, whatever the market:



TRANSPORTATION

The right formulation and mixing capabilities mean optimum rubber products for automotive, mass transit, rail, and aircraft applications, from seals and gaskets to hoses, belts, and rail seals.



ENERGY

Compounds for rubber components on blow-out-preventers, stators, packers, hoses, seals, and pipe wrapping for oil & gas; tubing and panel isolators for solar applications; mounts to reduce vibration and noise on wind turbines.



WIRE & CABLE

One of the world's largest manufacturers of elastomeric compounds for insulated wire and cable. HEXPOL compounds meet demanding standards for power transmission applications, including cables, electrical insulators, and lighting arrestors, to name a few.

CONSTRUCTION & INFRASTRUCTURE

Elastomeric solutions for insulation, window and door seals, roofing membranes, flooring, road marking, pond liners, caulk and coating compounds.



MEDICAL TECHNOLOGY

Premium compounds that meet stringent standards of purity to ensure safety for health care applications. Our compounds can be found in medical devices, prosthetics, and pharmaceutical tools.

GENERAL INDUSTRIAL

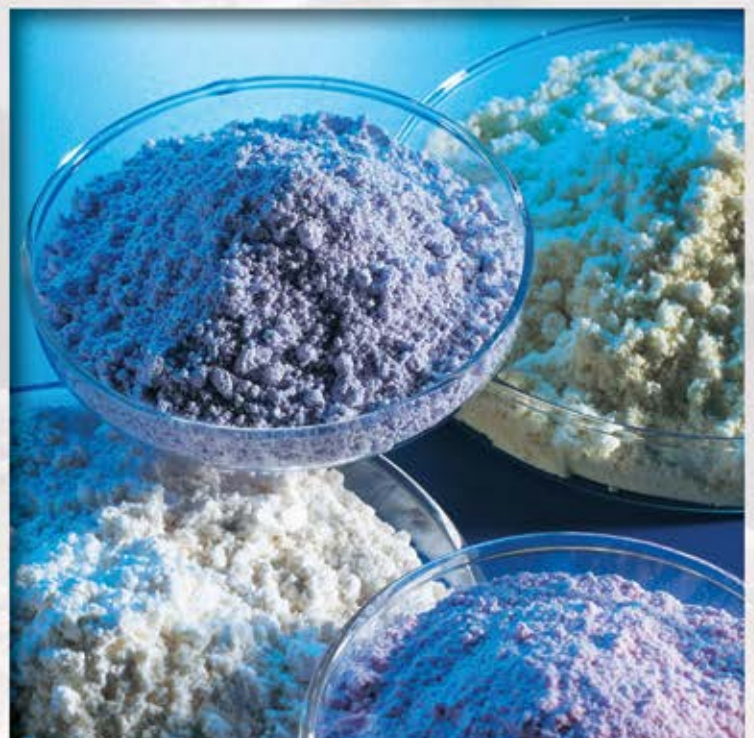
Compounding solutions for rubber belting and belt covers, hoses, seals and gaskets, adhesives and sealants, and tank linings.

RYWHERE YOU ARE

HEXPOL Compounding Capabilities Include:

- **Rubber Compounding** – Custom mixing and formulation development
- **Roller Compounds** – Expertise across a range of rubber roller applications
- **Silicone** – HCR silicone, fluorosilicones, and all types of silicone/EPDM compounds
- **Performance Additives** – A comprehensive line of custom and standardized productivity enhancing products and color concentrates
- **Tire-Toll** – Large-volume mixing for tread, retread, sidewall, coating stocks, bead, inner liner, bladder, and white compounding
- **Retreading Products** – Molded envelopes and curing tubes for tires, especially for trucks, heavy equipment, and aircraft
- **Thermoplastic and TPE Compounding** – Combining the best characteristics of thermoset rubber with the processing advantages of thermoplastics

HEXPOL Compounding delivers the latest in formulation development, mixing innovation, and technology. That means optimum finished rubber products and superior value for our customers.





A Material Difference

HEXPOL has an industry-leading reputation for developing strategic, operational, supply chain, and financial benefits for our customers. Whatever the challenge – such as material requirements, regulatory changes, or emerging new markets – we help you find robust solutions. Our customers around the world continually realize the benefits of HEXPOL manufacturing technology, quality, research and development, customer collaboration, and environmental commitment – **A Material Difference**.



Manufacturing Technology

HEXPOL Compounding means technology and mixing innovation. Our compounding campuses feature the most advanced processing lines in the industry, with continual investments in automation, new equipment and proprietary process control systems.

HEXPOL technical leadership includes:

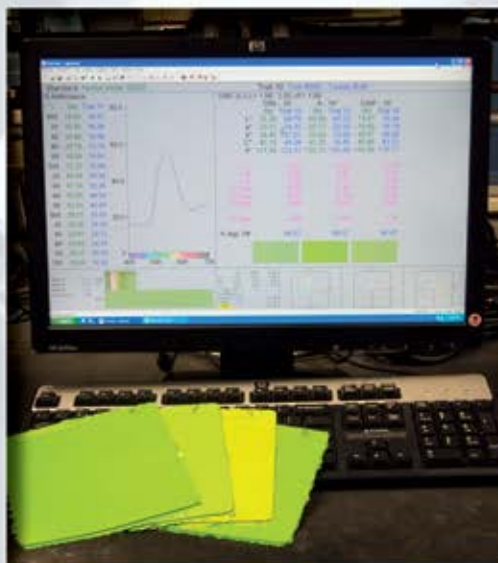
- State-of-the-art mixing technology
- Automated mixer control
- Integrated mixer and laboratory automation
- In-line gear pump technology
- Automated batch-off unit
- Testing and quality control



Our global computer systems are integrated to ensure standardization of the manufacturing and testing processes at all of our production locations for superior compound quality – from raw materials to packaged products.

Quality

HEXPOL is committed to providing the highest level of product and service quality. Fully automated process systems in our ISO 9001:2008 certified facilities optimize production, dynamically measure material properties, and eliminate operator influence, while ensuring lot traceability, protecting proprietary formulations, and guaranteeing batch-to-batch consistency. Our goal is continuous quality improvement.



HEXPOL technologists work with key suppliers around the world to ensure a consistent and secure supply of quality raw material. Through our global sourcing capabilities, we buy over 4,000 unique raw materials and deliver the best values to our customers.

HEXPOL has the world's best analysts and our campuses have comprehensive laboratory services that feature the latest testing equipment:

- Alpha technology software to manage quality/development testing
- ISO 9001:2008 certified
- A2LA Accredited (ISO/IEC 17025:2005) – The highest accreditation in the rubber industry

All of our locations meet ASTM International standards for rubber and plastics.

Research & Development

Excellence in Research & Development is the foundation to HEXPOL's position as a world leader in rubber compounding. Our scientists and technologists are among the best in the world and we have the most extensive R&D capabilities in the industry. We partner with customer scientists and consider their processes, technical specifications, cost effectiveness, as well as the latest in raw materials to develop and commercialize new technologies and solutions.



HEXPOL helps our customers develop new formulations and materials for innovative new rubber products.

Customer Collaboration

Collaborating with our customers, we create solutions for the most demanding applications, helping them achieve innovation and product quality, accelerated growth into new markets, and manufacturing flexibility on a global scale. Environmental Commitment



Environmental Commitment

HEXPOL is committed to sustainable development and the health and safety of people in the communities where we have production facilities. Our environmental policy addresses management of natural resources, reducing the use of hazardous chemical substances, as well as the reduction of emissions and waste.



HEXPOL is Your Competitive Advantage

Helping You Meet Challenges in the Markets You Serve

HEXPOL leverages product innovation and market knowledge to provide compounding solutions in an array of industries. Our proprietary formulations, thorough knowledge of OEM specifications, fabricating expertise, and troubleshooting capabilities are nationally recognized.

Transportation

HEXPOL formulation development and mixing capabilities help ensure optimum rubber products for cars, trucks, mass transit, rail, and aircraft. Major transportation manufacturers have their own standards. HEXPOL has the speed and flexibility to stay current with OEM requirements. We provide formulation development to specification for hoses, belts, seals, gaskets, vibration mounts, grommets, and more. For more information, visit our website at hexpolauto.com to view a copy of Rubber Compounding for Global Automotive Applications (HEXMX-7000).



Energy

As the demand for new energy sources increases, HEXPOL provides compounds for components used in the exploration, recovery, and distribution segments of the Oil & Gas, Solar, and Wind markets. Whether you need us on an oil rig in the Gulf of Mexico, a solar array in the Arizona desert, or a wind farm on the east coast – HEXPOL is there.

We produce compounds for rubber components on blow-out-preventers, stators, and packers, as well as down hole equipment, hoses, seals, and pipe wrapping for oil and gas; tubing, plating, and panel isolators for solar applications; and mounts to reduce vibration and noise on wind turbines.

Wire & Cable

HEXPOL is one of the world's largest manufacturers of elastomeric compounds for insulated wire and cable. Our compounds meet demanding standards for power transmission applications, including cables, electrical insulators, and lighting arrestors, to name a few.

We help you select the right elastomer and develop compounds to specification. Elastomer types include NBR, EPDM, CPE, CSM, and CR. Our compounds meet multiple standards, including UL, IEEE, UL Canada (formerly CSA), ISO 6722, and SAE J100.





Construction & Infrastructure

HEXPOL formulations for construction and infrastructure applications address performance, protection, life cycle costs, and formulas to meet precise specifications.

We have compounds important for repairs to our aging infrastructure. And our elastomers meet numerous federal, state, and municipal specifications, as well as UL MSHA, ASTM, and NSF standards.

Our elastomeric products are suited for applications such as seals, bridge interfaces, gaskets, caulks and coatings, roofing membranes, flooring and road marking.



Medical Technology

HEXPOL provides premium compounds with the right properties to meet stringent standards of purity to ensure safety for medical and pharmaceutical applications. We have the experience and manufacturing procedures as recommended by cGMP, USP, and the FDA.

Total traceability of each batch ensures the quality of the elastomers used for medical applications.

General Industrial

Compounding solutions from HEXPOL are available for multiple industrial applications, including manufacturing equipment and material handling components. HEXPOL compounds provide performance, durability, age resistance, and flexibility in industrial components such as belting, hoses, seals, and gaskets.

HEXPOL – We Think Globally and Act Locally

HEXPOL AB is one of the world's leading polymer groups. With a global presence, our Compounding and Engineered Products businesses leverage distinct synergies in technology, purchasing, and production that benefit our customers around the world. We provide customers with the resources of an international corporation and the responsiveness of a small and agile local company.

Based in Malmo, Sweden, HEXPOL has a global footprint, with manufacturing facilities strategically located to serve customers across North America, Europe and Asia. HEXPOL is a U.S. \$1.3 billion a year business with 3,900 employees at 34 locations in 11 countries. HEXPOL is a public company traded on the Nordic Stock Exchange.



Silicone

At HEXPOL, we're re-introducing true custom mixing for silicone rubber compounds. That means dedicated resources, equipment, and custom recipe development to provide silicone rubber with the right properties for your application.

We have a line of standard silicone compounds, including HCR, fluoro-silicones, and silicone/EPDM compounds. If you have your own formulation, we can mix that and deliver a precise compound. For more information about our silicone capabilities, visit our website at SiliconebyHEXPOL.com to view a copy of True Custom Mixing for Silicone Elastomers (HEXS-9000).



HEXPOL SILICONE COMPOUNDING



Performance Additives Products

HEXPOL and its legacy brand, RheTech, offer a range of proprietary additives, including a palette of color concentrates, productivity enhancing pre-dispersed chemicals, and master-batch products. From dispersed accelerators and fillers to vulcanizers and tackifiers, our technical support team provides cost-effective solutions for our customers' toughest problems.

Carefully prepared colorants and additives from HEXPOL are designed to minimize manufacturing costs and reduce worker exposure, while maintaining optimum quality and consistency. For more information about Hexpol additives, visit our website at HEXPOLPerformanceAdditives.com to view a copy of Performance Additives Products (2000SP).



HEXPOL PERFORMANCE ADDITIVES

Thermoplastic and TPE Compounds

HEXPOL Compounding is a leading developer and manufacturer of thermoplastic and thermoplastic elastomer (TPE) compounds. With RheTech, as part of the HEXPOL family, we provide an industry-leading line of thermoplastic and TPE products and services.

Our TPE products combine the performance of thermoset rubbers with the processing ease of plastics to deliver enhanced design possibilities for a diverse range of markets, from automotive to pharmaceutical.



RheTech

A HEXPOL COMPANY

HEXPOL TPE

For more information on RheTech, visit rhetechnology.com.

Custom Tire-Toll Compounds

HEXPOL's Tire-Toll professionals and their industry-leading capabilities allow us to manage and deliver quick turn-around with emergency compound volumes exceeding 500,000 pounds per day.

We've proudly partnered with the tire industry for over 40 years, providing compounding for cars, trucks or buses, aircraft, mining, off-highway vehicles, or non-pneumatic solid tires. For more information about Tire-Toll compounds, visit our website at HEXPOLcompounding.com to view a copy of Tire-Toll Compounds (HTT 3000).



Retreading Solutions: We Cover Them All

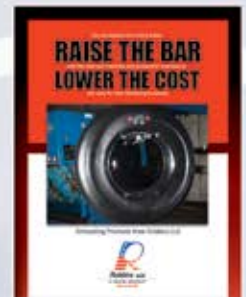
With Robbins LLC as part of the HEXPOL family, we are the global leader in outside and inside envelopes, curing tubes, retreading accessories, and rubber compounds for tires. We have an array of shapes and sizes, especially for trucks, heavy equipment and aircraft. HEXPOL Accu-Fit CMT® envelopes set the standard in the retreading industry for quality and service life, lowering your cost per cure. For more information about envelopes and curing tubes, visit our website at robbinsllc.com to view a copy of Retreading Products from Robbins LLC (RB-1000).



Robbins LLC

A HEXPOL COMPANY

Made in the USA



A LEGACY OF EXCELLENCE

HEXPOL is a leading developer and manufacturer of quality polymer compounds. Our rich heritage embraces custom collaboration by sharing innovation and market knowledge to match the right compound with the application. We provide proprietary compounding solutions that address or customers' evolving needs, including:

- Rubber Compounding
- Rubber Roll Applications
- Silicone Compounding
- Performance Additives and Color Concentrates
- Tire-Toll, Retreading Products
- Thermoplastic and TPE Compounding

HEXPOL legacy brands expand our global footprint, strengthen our technology leadership, and optimize our already superior customer service.



 **HEXPOL**
COMPOUNDING



HEXPOL's Comprehensive Capabilities

Proprietary and Standard Compounding Solutions

As a leading developer and manufacturer of advanced, high-quality rubber compounds, our integrated approach to recipe development and mixing considers customer processes, technical specifications, cost effectiveness, and raw materials.

Rubber Compounding

Manufacturers of rubber components require compounds that meet exacting performance standards. They need custom mixing and formulation development to meet evolving requirements and new opportunities in their diverse industries.

HEXPOL has multiple primary compounding lines at facilities around the world. In North America, we have over 40 mixing lines, six mixing mills and over 500,000 metric tons of working capacity. A variety of tilt, tangential, and intermesh mixers – ranging in volume from 55 liters to 620 liters – can mix an assortment of polymer types, including natural rubber, EPDM, SBR, NBR, HNBR, ACM, FKM, FFKM, AEM, IIR, CR, CSM, CM, VMQ, ECO, NR/IR, PVC blend and XNBR.

HEXPOL produces compounds for cured sheets, as well as injection, compression, extrusion, and transfer molding. Additional HEXPOL Rubber Compounding capabilities include:



Open mills, calendars, gear pumps, and auxiliary operations

Forms – slab, strip, pellets, pre-forms, and sheet

Black and color compounding

Extrusion processes

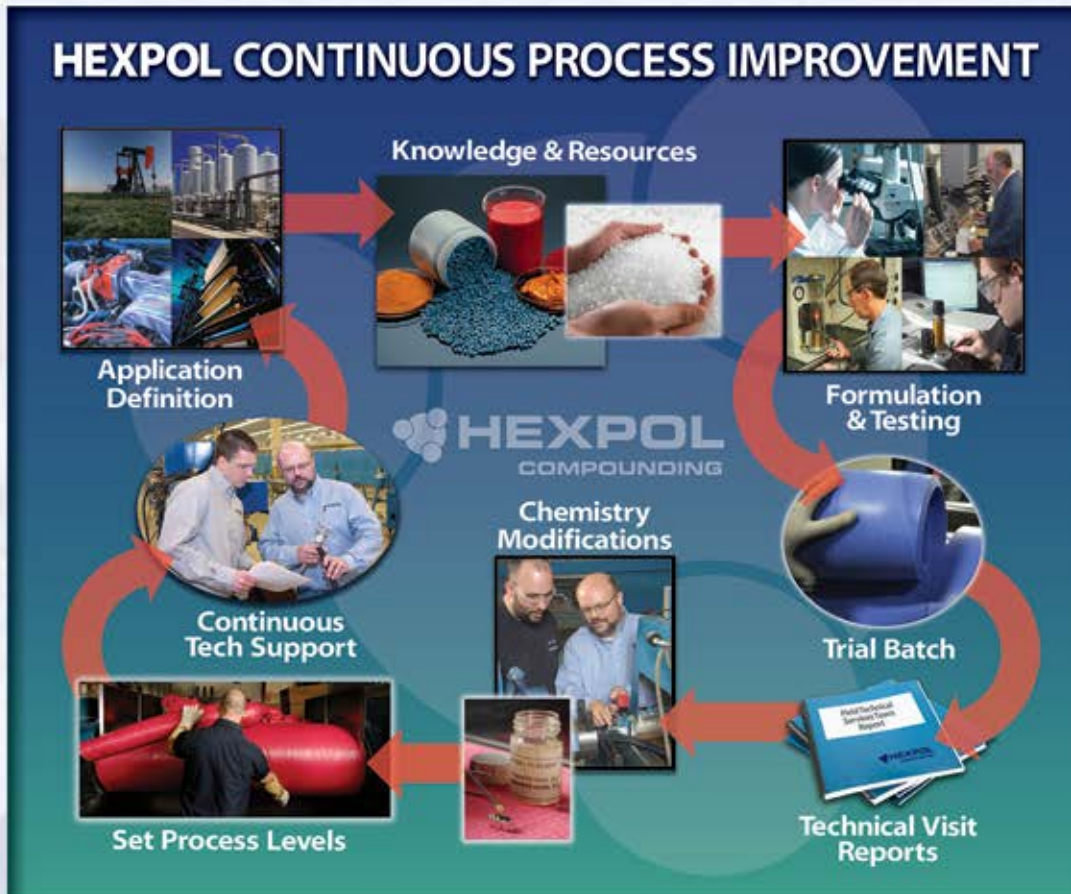
Strained and non-strained

We can manufacture any compound, custom or standard, to meet customer needs. Only the right composition and a perfect mixing process result in optimum properties of the final product.

How to Improve Process Quality, Productivity & Performance

Continuous Improvement is in our DNA. HEXPOL has embraced proven continuous improvement principles with our unique Continuous Process Improvement (CPI) model, including the eight components in the illustration below. Following this model, HEXPOL works closely with you to help improve your processes, products, and services.

Elastomer compound development isn't only about cost per pound; it's about quality and value. Benefits from our (CPI) model are included in HEXPOL's cost per pound. Using CPI, HEXPOL helps your reduce time-to-market for your products and achieve higher performance in all areas of your operations. For more information, visit our website at HEXPOLContprocessimprove.com to view a copy of Continuous Process Improvement (HEXLOC 1000).



Rubber Compounds Formulated for the Roller Industry

We've been serving the rubber roller industry since 1983. As the global leader in formulating and mixing compounds, HEXPOL has a full range of quality roller compounds – off-the-shelf and custom formulations – that use a spectrum of polymers and specialized compounds.



HEXPOL formulations perform in harsh roller industry conditions and stand up to exposure to the wide variety of chemicals used in the roller market. We have a thorough understanding of the industry and its requirements. For more information about our roller capabilities, visit our website at HEXPOLKennedale.com to view a copy of Rubber Compounds Formulated for the Roller Industry (HEXK-8000).



 **HEXPOL**
COMPOUNDING
KENNEDALE TEXAS



HEXPOL Field Technical Services: Know How. Know Why.

HEXPOL field technical service representatives are among the best in the world. Together, they have seven U.S. patents and seven foreign patents in polymer bonding/chemistry. Their mission is to consult with customers, analyze processes, and provide personalized service that matches the product with the process.

Know How. Know Why.

Investing in People Fosters Excellence – We continually invest in their expertise through technical training and leadership programs. Whether they are polymer chemists, industry experts, technical sales or customer service representatives, we strive to elevate customer satisfaction and on-target solutions.

Know How. Know Why.

HEXPOL Values the Process – Our field representatives align HEXPOL's process with the customer's process to achieve product specification requirements that help ensure end product excellence. A process with stability, reliability, and repeatability is a predictable process that consistently produces the right product.

Know How. Know Why.

The HEXPOL Technical Visit – We can conduct periodic and confidential on-site reviews, observing and analyzing attributes such as equipment, operator activities, and production processes to solve problems, increase productivity, and improve product quality. HEXPOL brings value to each and every customer relationship.

Know How. Know Why.



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For more information about legacy brands and worldwide resources, visit HEXPOLCompounding.com or call 440.834.4644 and press 6 for customer service.