



**MEET YOUR
PERFORMANCE
PARTNER.**

PRODUCT CATALOGUE
Cast **Polyurethane** Systems





Makro Chemical

Founded in İzmir in 1996, Makro Chemical has become a trusted solution partner in polyurethane systems and high-performance industrial chemicals, backed by nearly three decades of industry expertise.

Since its establishment, our company has continuously adapted to the evolving needs of the market. Through our strong R&D capabilities and technical expertise, we strive to be more than just a manufacturer we are a partner that delivers innovative solutions designed to improve our customers' production processes. In our laboratories, we develop tailor-made formulations that meet the specific requirements of diverse industries while focusing on performance, quality, and sustainability.

Today, Makro Chemical serves a wide range of industries in both domestic and international markets through its modern manufacturing facilities, experienced technical team, and customer-oriented approach. Our polyurethane systems are engineered to deliver superior performance, reliability, and long-term durability, while every new project represents another opportunity to advance our expertise through continuous research and development.

Driven by nearly 30 years of experience, we remain committed to developing innovative technologies that anticipate the needs of tomorrow and to serving as a reliable technology partner for our customers around the world.

MAKRO CAST POLYURETHANE SYSTEMS

High Performance for Demanding Conditions



High-performance cast polyurethane systems provide excellent abrasion resistance, mechanical strength and long service life for heavy industry, mining, material handling and machinery applications.



Advanced Elastomer Technologies

MAKRO Cast Polyurethane Systems consist of high-performance elastomer solutions developed for demanding operating conditions.

TDI- and MDI-based technologies combined with polyether, polyester, PTMEG and caprolactone chemistries enable system selection according to different hardness and performance requirements.

With excellent abrasion and tear resistance, impact strength, elasticity and load-bearing capacity, our systems provide solutions for a wide range of applications — from wheels and rollers to mining equipment and custom-engineered components.

Our Cast Polyurethane Solution Portfolio

TDI / POLYETHER SYSTEMS

For applications requiring high dynamic performance, hydrolysis resistance and long service life.

TDI / POLYESTER SYSTEMS

For industrial applications requiring high abrasion resistance, mechanical strength and oil resistance.

MDI / POLYETHER SYSTEMS

For applications requiring processing flexibility and resistance to water and moisture.

MDI / POLYESTER SYSTEMS

For applications requiring high mechanical performance, abrasion resistance and oil resistance.

CAPROLACTONE SYSTEMS

Specialty systems developed for high-performance applications requiring superior dynamic and mechanical properties.



Every application requires a different level of performance.

Selecting the right cast polyurethane system depends on operating conditions, load, speed, temperature, exposure to water and moisture, as well as contact with oils and chemicals. With a wide range of chemical structures and hardness options, Makro Chemical provides application-specific solutions for wheels, rollers, conveyor components, mining equipment and custom-engineered parts.

WHY CAST POLYURETHANE?



High Abrasion Resistance

Long service life under intensive friction and wear.



High Load-Bearing Capacity

Reliable performance in heavy-duty applications.



Impact & Tear Resistance

High resistance to demanding mechanical conditions.



Dynamic Performance

High durability under repetitive loads and continuous motion.



Wide Hardness Range

Elastomer solutions tailored to different application requirements.



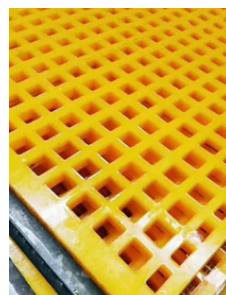
Long Service Life

Helps reduce maintenance requirements and replacement frequency.

Mining & Mineral Processing

Equipment used in mining and mineral processing is exposed to abrasion, impact, water, slurry and continuous mechanical loads. Makro Chemical Cast Polyurethane Systems are developed for the production of elastomer components requiring high mechanical strength and long service life under demanding operating conditions.

Screens • Rollers • Wheels • Wear Parts • Buffers • Custom-Engineered Components



Wheels & Material Handling

Polyurethane components used in wheel and material handling applications operate under high loads, continuous motion, friction and repetitive dynamic forces. These conditions make the mechanical and dynamic performance of the elastomer system critical.

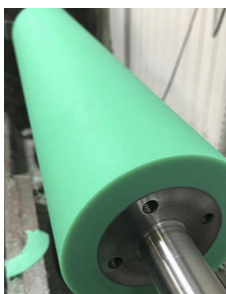
Forklift Wheels • Load Wheels • AGV Wheels • Industrial Wheels • Guide Rollers • Conveyor & Material Handling Systems



Roller & Cylinder Systems

Makro Chemical Cast Polyurethane Systems provide high abrasion resistance, flexibility and mechanical strength for transport, printing, guide and squeeze rollers. They deliver reliable performance and long service life in continuous production lines, providing solutions for industries including steel, paper, packaging and textiles.

Transport Rollers • Printing Rollers • Guide Rollers • Coated Cylinders • Squeeze Rollers



Iron & Steel / Heavy Industry

Makro Chemical Cast Polyurethane Systems provide durable, long-lasting solutions for heavy-duty industrial applications involving high loads, impact and intensive abrasion. They offer high mechanical strength and reliable performance in rollers, wheels, buffers, guide components and custom-engineered parts.

Rollers • Buffers • Wheels • Guide Components • Custom-Engineered Parts



Application Requirement	Recommended Technology
Water / Moisture / Hydrolysis Resistance	Polyether
Oily Operating Environment	Polyester
High Dynamic Performance	PTMEG
Premium Mechanical Performance	Caprolactone
Easy & Controlled Processing	MDI 2K
Formulation / Hardness Flexibility	MDI 3K

The right polyurethane system is not selected based on hardness alone. Load, speed, temperature, operating environment, chemical exposure and dynamic conditions must all be evaluated together.



Makro Chemical provides more than material supply for cast polyurethane applications. We support our customers in evaluating operating conditions, selecting the appropriate system technology and optimizing production processes.

Application Analysis → System Selection → Process Optimization → Technical Support

Your Dependable Partner in Chemical Solutions

At Makro Chemical, we enhance your production processes through our extensive product portfolio, which includes industrial raw materials and specialized chemical solutions, supported by our expert technical team.



We are prepared to be your strategic partner in solutions.

At Makro Chemical, we enhance the production processes across diverse industries through our premium chemical raw materials and technical expertise. With a dependable supply chain, a customer-centric approach, and comprehensive technical support, we are committed to delivering the most appropriate solutions to meet your requirements.

Please reach out to us for comprehensive information regarding our products, to seek technical guidance, or to explore our tailored solutions.



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