KOMAREK

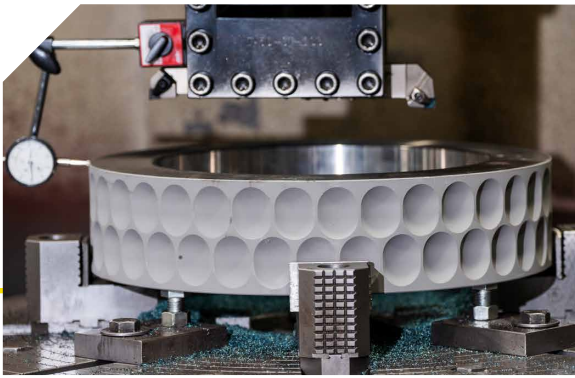
BRIQUETTING
COMPACTION GRANULATION
GRINDING

Roll Press Technology & Material Processing Solutions



Member of the Köppern Group

History of Innovation



For over three generations, KOMAREK has been a trusted name in the design and manufacturing of briquetting, compaction granulation, and high-pressure grinding technology.

As part of the globally respected Köppern Group, we remain a privately owned company with a deep commitment to quality, innovation, and customer support. Our legacy is built on delivering reliable roll press equipment and expert process solutions that help industries transform raw materials into valuable products.

OUR VISION & MISSION

At KOMAREK, we envision a future where innovative engineering and sustainable practices reshape the material processing industry.

Our mission is to provide exceptional quality and cutting-edge technology while upholding the values of integrity, collaboration, and continuous improvement. By empowering our clients to achieve operational excellence, we help create meaningful, lasting impact—not only in their operations but also in the communities they serve.

WHY WORK WITH KOMAREK?

- Family Owned & Operated
- Global Support & Service Provider
- Decades of Industry-Leading Experience
- Manufactured in the USA
- Partner for Long-Term Success
- Complete Process & Material Expertise



Industries Served



KOMAREK provides roll press solutions for a wide range of industries, helping customers improve material processing, product quality, and operational efficiency. Our briquetting, compaction granulation, and high-pressure grinding technologies are used across a wide variety of material processing applications.

From agglomerating fine materials into durable briquettes and uniform granules to grinding and liberating valuable minerals, KOMAREK equipment is engineered to address demanding processing challenges. With decades of industry experience and application expertise, we work with customers to develop reliable solutions tailored to their materials, processes, and production goals.

INDUSTRIES SERVED INCLUDE:

- **Chemical**
- **Minerals**
- **Micronutrients**
- **Agricultural**
- **Energy**
- **Mining**
- **Cement**
- **Recycling**



Briquetting Machines

For over 100 years, roll press **briquetting** has been used to compact material fines and dust into uniform, densified briquettes. Widely adopted in industries like mining, metals, minerals, salts, and agriculture, this technology improves material handling, supports process efficiency, and reduces waste—making it a vital tool in modern industrial operations.

Roll press briquetting began in the early 1900s to address coal waste issues and gained commercial traction in the 1920s–30s, when it expanded into a wide variety of industries and applications struggling with excess fines or dust.

HOW BRIQUETTING WORKS

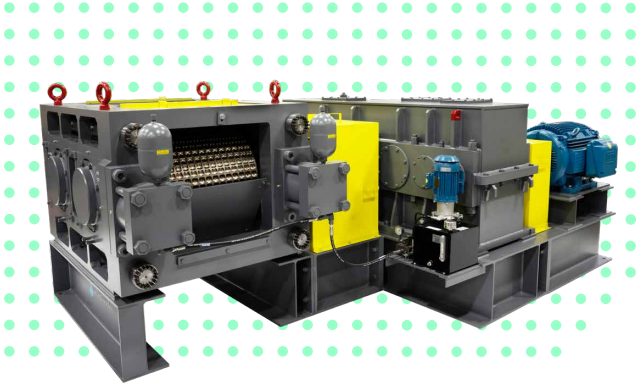
Material is fed to the roll briquetting machine, which applies high pressure to fine particles, compressing them between two counter-rotating rolls. The rolls have cavities or pockets that shape the material into dense, durable briquettes suitable for various applications.

If necessary, a binder is mixed in with the feed material for better material agglomeration.

BENEFITS OF BRIQUETTING:

- Improved Product Flowability
- High Density & High Strength Products
- Product Uniformity & Stability
- Low-to-High Volume Applications
- Improved Product Transportation & Storage
- Binder & Non-Binder Options





Compaction Granulation Machines

Since the 1950s, roll press **compaction granulation** has been used to compress fine powders into dense flakes or cakes, which are then often crushed into granules and screened for size. This process has been instrumental in industries such as salts, fertilizers, cat litter, and various other minerals and materials.

HOW COMPACTION GRANULATION WORKS

Material is fed to the roll compactor, which applies high pressure to fine particles, compressing them between two counter-rotating rolls. The rolls may be smooth or textured depending on the application. As the material passes between the rolls, it is compressed into compacted cakes or flakes.

The compacted material is crushed into granules and sorted by particle size. Smaller particles are recycled back into the compactor, while larger particles are sent for additional size reduction. Granules of the desired size and shape are prepared for finishing processes such as drying, applying anti-caking agents, and final packaging.

If necessary, a binder is mixed in with the feed material for better material agglomeration.

BENEFITS OF COMPACTION GRANULATION:

- Improved Product Flowability
- High Density & High Strength Products
- Product Uniformity & Stability
- Low-to-High Volume Applications
- Improved Product Transportation & Storage
- Binder & Non-Binder Options





High-Pressure Grinding Machines

Since the 1980s, **High-Pressure Grinding Rolls (HPGRs)** have enhanced grinding efficiency across industries like mining, cement, and mineral processing. With improved size reduction capabilities and enhanced material liberation and comminution, HPGRs have become a preferred technology over traditional grinding or crushing equipment.

HOW HPGRS WORK

An HPGR consists of two rolls that rotate inward towards each other. One roll is fixed in place, while the other is floating and able to move closer or farther away from the other. High pressure is applied to the floating roll through hydraulic cylinders while material is choke-fed into the space between the two rolls using a gravity feeder arrangement.

As the material passes between the rolls, some material sticks, forming an autogenous wear layer on the rolls. Consequently, the additional feed material is compressed between the two autogenous wear layers. High pressure is transferred from the hydraulic cylinders, through the rolls, through the wear layers, and ultimately onto the feed material, causing it to crack and break into smaller fragments.

BENEFITS OF HPGRS:

- Low Specific Energy Consumption
- Increased Microcracking
- Low-to-No Water Consumption
- Low Operating Costs
- Focused Active Grinding Zone
- Preferred Particle Breakage Along Mineral Grain Boundaries



Briquetting & Compaction



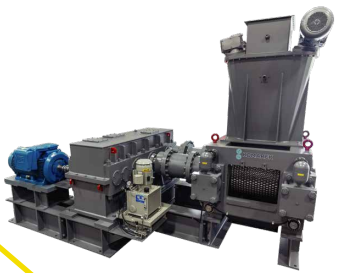
B-Series Machines

- 25 lbs per hour to 10 tons per hour.
- Laboratory & pilot operations to full-scale production.
- Cantilevered roll design for quick & easy roll replacement.

BH-Series Machines

- 330 lbs per hour to 12 tons per hour.
- Rugged industrial frame construction.
- Vertical or horizontal feed options.
- Cantilevered roll design for quick & easy roll replacement.





DH-Series Machines

- 2 tons per hour to 60 tons per hour.
- Capable of high-temperature feed.
- Vertical feed design.
- Solid or segmented roll design for easy roll replacement.

High-Pressure Grinding

KR-HPGR Machines

- 1 ton per hour to 70 tons per hour.
- Laboratory & pilot operations to full-scale production.
- Frame-mounted & fully assembled.
- Specific grinding force of 4,500 kN/m².



Parts & Other Services



PARTS

Worn-out parts can cause major drops in productivity and product quality, directly impacting your company's efficiency and profitability. Ensure you are prepared by having OEM-certified spare parts on hand from KOMAREK. Available worldwide, our high-quality replacement parts are specific to your equipment.

RETROFITS & UPGRADES

Maximize the performance and efficiency of your roll press systems with KOMAREK retrofits and upgrades. By integrating the latest technology, you can reduce downtime, improve product quality, extend equipment life, and meet today's demanding production standards.

MACHINE & PROCESS AUDITS

Frequent downtime and inconsistent product quality can increase costs and reduce productivity. KOMAREK's system audits evaluate material flow, roll press performance, and process integration to identify bottlenecks and improvement opportunities. Our team delivers tailored recommendations to streamline production, improve consistency, and lower operating costs.

INSTALLATION, COMMISSIONING, & TRAINING

KOMAREK provides global installation and commissioning support to ensure your equipment is operating at peak performance from day one. Our experienced team offers start-up assistance, installation supervision, and operator training to maximize efficiency, minimize downtime, and extend equipment life.

Why Replace When You Can Repair?



Extend the life of your roll press equipment with expert repair and refurbishment services from KOMAREK. Our experienced engineering and service team provides cost-effective alternatives to complete part or assembly replacement, helping reduce downtime, control costs, and keep your equipment running reliably.

From detailed inspections and reconditioning to precision machining, grinding, honing, resurfacing, and welding, KOMAREK can repair and remanufacture components and subassemblies of all sizes at our U.S. facility. If a component is beyond repair, our team can recommend a direct replacement or upgraded solution.

OUR REPAIR PROCESS

KOMAREK takes the difficulty out of the repair process, eliminating the stress and guesswork. Our skilled engineering and service team is here to provide you with repair solutions tailored to your specific needs.

HOW IT WORKS:

1. You send us your equipment.
2. We inspect & evaluate it.
3. We review your repair plan.
4. We restore & return it.

*Repair services are available for both KOMAREK and non-KOMAREK roll press equipment.

Laboratory & Rentals



LABORATORY & TEST WORK

Whether you're exploring new material formulations or refining an existing process, KOMAREK is here to support your success. Our in-house laboratory, located in Bensenville, IL, provides expert testing and analysis to ensure the best outcomes for your application. Key processes evaluated at the KOMAREK Lab include roll press briquetting, roll press compaction granulation, and high-pressure grinding (HPGR).

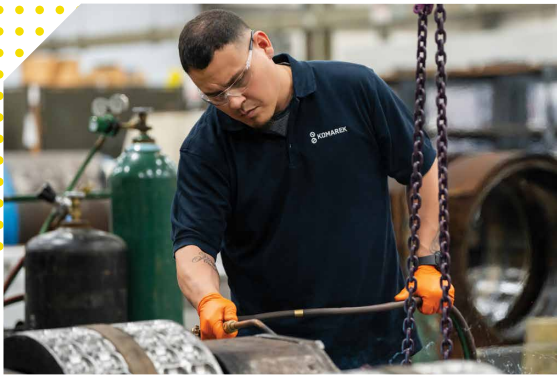
Our lab includes an array of auxiliary equipment such as mixers, screeners, moisture analyzers, and more to be able to simulate and qualify complete processes. Our lab serves a wide range of industries by delivering valuable insights and data related to process feasibility & optimization, equipment feasibility & optimization, and machine and component R&D.

RENTALS

KOMAREK offers a flexible rental program designed to help customers evaluate roll press technology before making a long-term investment. Our rental machines are ideal for pilot testing, short-term projects, or process development, allowing you to assess machine performance under real-world conditions using your own materials.

Each rental unit is maintained to the highest standards and supported by our experienced technical team, ensuring reliable operation and valuable insights during your trial period. We offer a range of machine sizes and configurations to suit various applications, from briquetting and compaction granulation to grinding.

Design & Manufacturing



MACHINE DESIGN

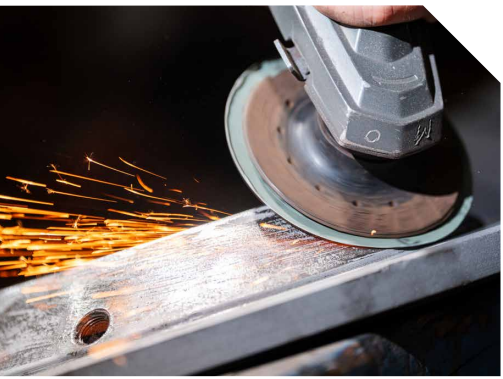
KOMAREK's in-house engineering & design teams customize machines to match each customer's unique feed materials, desired end products, production rates, and quality standards.

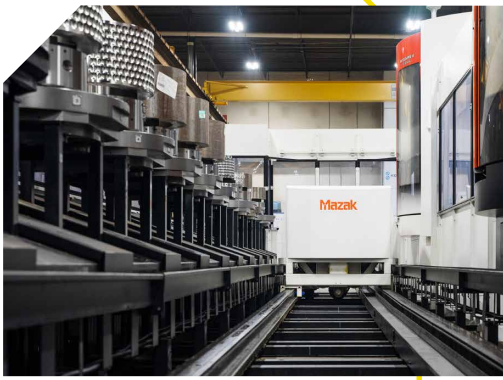
PLANT DESIGN

KOMAREK goes beyond individual machines, offering complete or partial plant solutions that include the upstream, downstream, and auxiliary equipment your roll press process requires.

MANUFACTURING

KOMAREK manufactures and assembles all its roll press technology at its state-of-the art manufacturing and repair facility in Wood Dale, Illinois, USA.

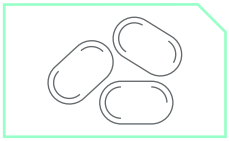






COMMITTED TO YOUR SUCCESS

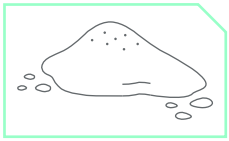
Backed by decades of experience in roll press technology and material processing, KOMAREK provides customers with knowledgeable engineering, manufacturing, and service support focused on optimizing process performance and long-term equipment reliability. Through our extensive global sales and service network covering nearly every continent, we deliver responsive and dependable support wherever it is needed.



Briquetting



Compaction & Granulation



Grinding

KOMAREK Member of the Köppern Group

euragglo shaping the industry

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