



Knives and Tools for the Tire Industry



Precision and Perfection:
For Optimal Cutting Performance, Surface Consistency and Longevity.

The foundation of our products and cutting solutions is our knowledge of "cutting" as well as our in-depth understanding of the requirements of various sectors.

The TKM Group produces a variety of highquality cutting tools for the tire industry. Our extensive range of products, from steel cord shear blades to extruder knives, supports all manufacturing processes for semi-finished products. Our knives and tools

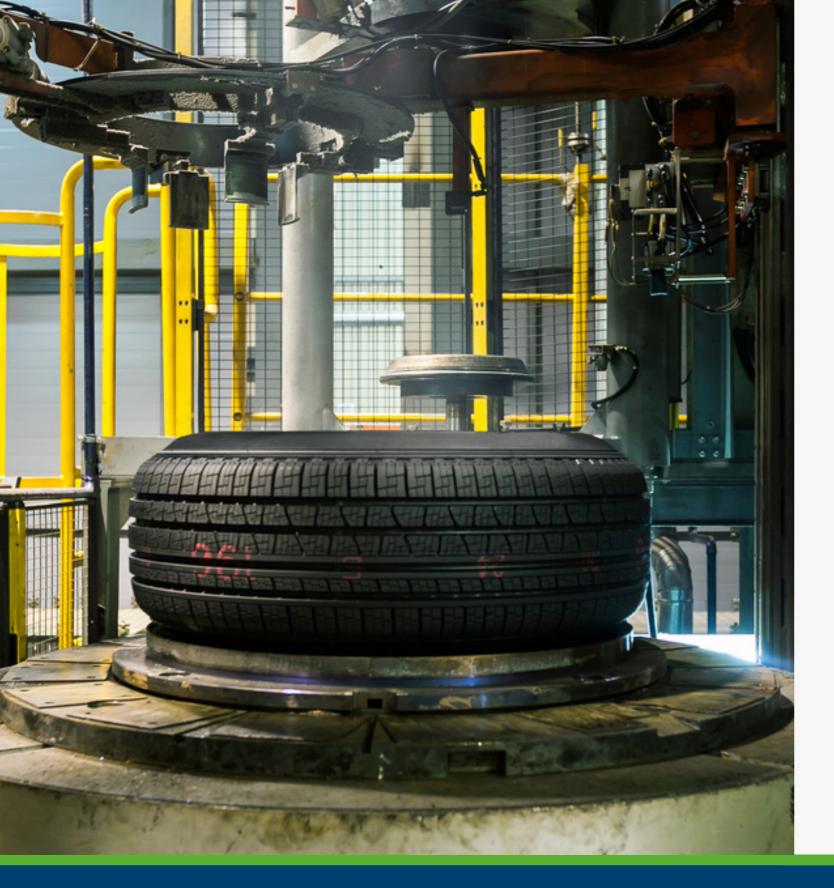
enable precision assembly of the various tire components with respect to dimensions like diameter, tread width and wall thickness, as required by the end product.

Thanks to uncompromising quality management – from the procurement of raw materials to delivery – we can guarantee that absolutely no tolerance deviations will impair the performance of the tool.

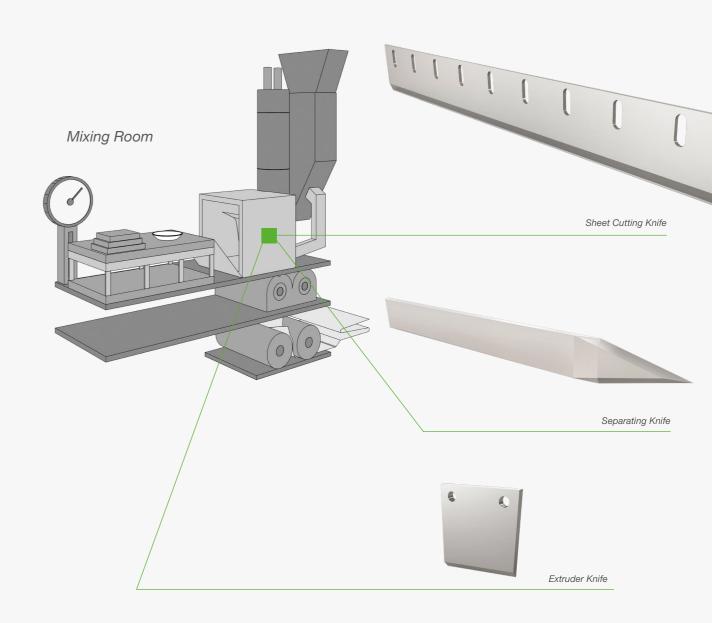
TKM, The Knife Manufacturers.

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## Knives and Tools for the Tire Industry

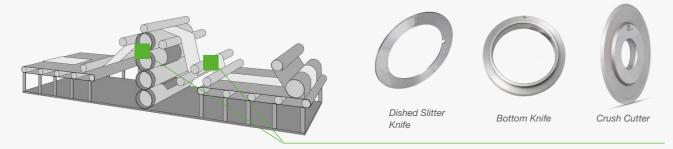


The TKM Group is your full range supplier for all cutting tools used in the tire manufacturing process.

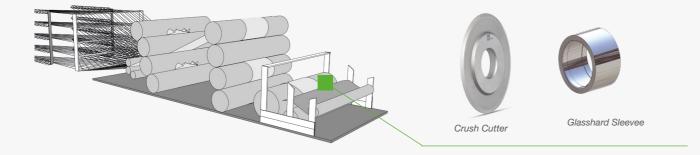
From the mixing room to the final inspection, TKM has the right cutting solution for you.

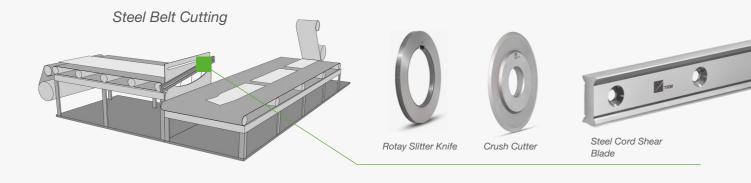
## Knives and Tools for the Tire Industry

#### Bead Cutting

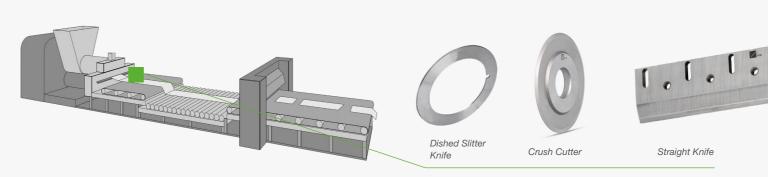


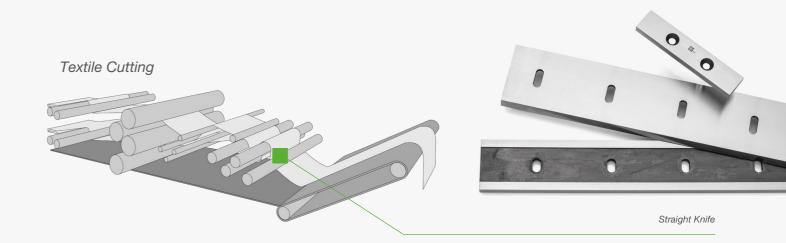
#### Side Wall Cutting





#### Apex Cutting





Carefully selected steel grades are the basis of TKM knives and cutting systems for the tire industry.

From tough tool steel through durable, high-percentage chromium steel to powder metallurgical highspeed steel and tungsten carbide.

The selection of the raw material suitable to the application is based on customer specific requirements and our many years decades of experience.

TKM manufactures all tools within the tightest tolerances and according to OEM specifications. Process-critical production steps such as hardening are done in our own hardening facilities to ensure consistent quality.

### Steel Cord Shear Blades

#### **Steel Cord Shear Blades - 1st Generation**

- Solid steel made from special steel developed especially for this application - our SK36
- Four cutting edges
- Coating possible



#### **Steel Cord Shear Blades - 2nd Generation**

- Version with carbide insert brazed
- One long performing cutting edge
- Coating possible



### Rotary Slitter Knives

In order to improve cutting performance, wear resistance and toughness, TKM is constantly working on new designs and surface executions.

Our most popular steel grades for rotary slitter knives are our SK39 and powder metallurgical versions.



#### **Steel Cord Shear Blades**

To keep the quality of the steel cord shear blades consistently at the highest level, TKM offers our partners regrinding service for all executions.

Please contact your TKM specialist for a personal consultation on the selection of the most suitable design for you.

#### **Surface Characteristics**

Depending on the steel grade and the cutting requirements, TKM can supply the knives "finished ground" or "polished".

A perfect surface has a direct influence on the cutting result and also on the lifetime of the knife.



#### **Application Consulting**

A TKM specialist will assist you in finding the right tools and execution for your cutting application.

In case your cutting requirements change TKM will be able to help you adapt the necessary tools to keep the cutting performance at the highest level.

#### **Services**

- Resharpening Service
- Tool Maintenance

## Resharpening Service and Tool Maintenance



#### **Resharpening Services**

Low quality resharpening can affect the cutting performance and your efficiency.

We at TKM have the equipment and the experience to guarantee the best sharpness and surface quality according to OEM specifications.

Please contact your TKM specialist for a personal consultation on the resharpening service.

#### **Key Facts**

- Resharpening/Polishing of Circular Knives
- Resharpening of Long Knives
- OEM Quality Level

# Close By — Worldwide The TKM group forms a systemof cutting expertise. We create additional value

- far beyond cutting.



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## TKM Headquarters, Remscheid



TKM, the internationally leading corporate group, manufactures and sells high-quality industrial knives, saws, doctor blades and precision consumable parts for industrial applications.

Our technologies, products and industrial services are applied and appreciated worldwide across many industries.

As an independent family company, we have

been setting the standards in quality and innovation, technical expertise and close cooperation for over 100 years.

Reliability, integrity and commitment are the hallmarks of our collaboration. We define our claims to excellence in terms of these fundamental values:

Innovativeness, precision and proximity.

#### Innovativeness:

We find new approaches and constantly further develop products and processes, in order to produce the best performing industrial knives and tools.

#### **Precision:**

Our products, services and expertise greatly improve the quality of processes, products and production at our customers' end – and thereby support their corporate development.

#### **Proximity:**

Our solutions are sustainable and represent a balance between environmental measures, economic development and social commitment.

We use the potential of our local companies and create unparalleled value for our customers through our market proximity.

## TKM Geringswalde The Metal Expertise for Circular Products

In Geringswalde we concentrate on the development and production of tools for cutting applications in the metal and paper industries. We create customized tools and solutions for systems, machines and services over production and storage areas totaling around 6,500 m2.

On the basis of innovative ideas and consistent standards around the world, we strive for

innovative development together with our customers – down to the last detail.

The high number of trainees provides an important foundation for our corporate development. By opening perspectives to young people and promoting their talents, we afford professional and international development opportunities for their future and for TKM.



#### **TKM Geringswalde**

- 135 employees 10% trainees
- 74 tool machines (70% CNC machines)
- 6.500 m² of production and storage space
- Products: 90% metal, 10% paper products
- Production batch sizes: 1 to 2.500
- Production volume: 250.000 to 300.000 precision parts per year

## TKM Austria The Metal Expertise for Long Products

At our Austrian production site, in Böhlerwerk, we develop and produce products for cutting applications for the metal, paper, wood, stone, rubber and plastic industries.

In the last couple of years, we have developed the Böhlerwerk site into a competent partner for the production of complex components for mechanical engineering. Equipped with state-of-the-art machinery, we design and deliver all industrial knives and machine elements required for current applications. In this way, we can ensure the efficiency of your systems.

With our know-how and substantial in-house production depth, we'll find the right solutions for your manufacturing processes.



#### TKM Austria - Böhlerwerk

- 180 employees 10% trainees
- 75 machine tools, including machines and systems for 5-axis milling, precision grinding and chamber, inductive and vacuum heat treatment ovens, plus an alignment shop
- 11.000 m² of production and storage space
- Main areas of production: Metal, wood, paper, machine elements, plastics/recycling
- Production batch sizes: 1 to 500



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