



Products and Cutting Solutions

for the Postpress Industry



Precision and Perfection:

For optimal cutting performance, surface consistency and longevity.

The foundation of our products and cutting solutions for the postpress industry is our knowledge of “cutting” as well as an in-depth understanding of our customers’ requirements.

Whether the parts are made of tool steel, carbide, or special materials, whether coated or refined, we turn out products with state-of-the-art technology that prove their merit in precision and cutting edge retention.

Intensive dialog with our customers forms the cornerstone of our services.

Working together with you, we’ll develop the best tools and systems for optimal integration in your cutting and production processes.

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 our cutting tools.

In this way we can offer customized solutions with measurable added value. TKM, The Knife Manufacturers.

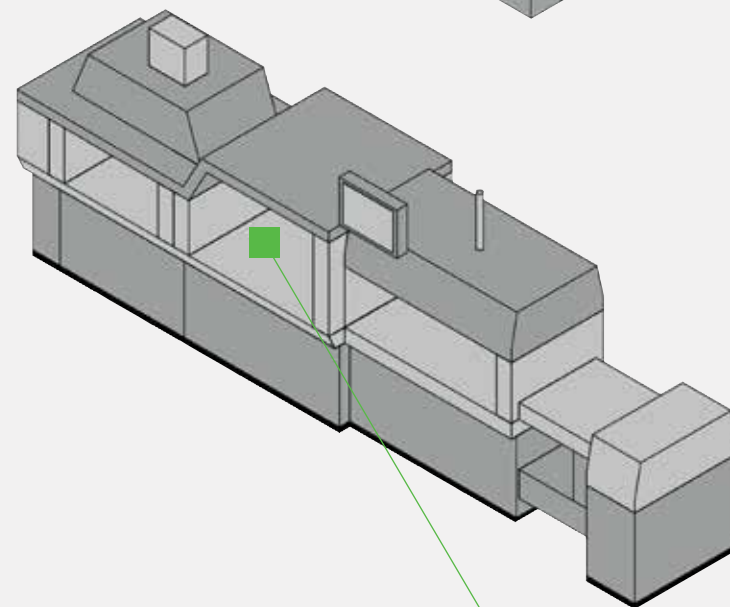
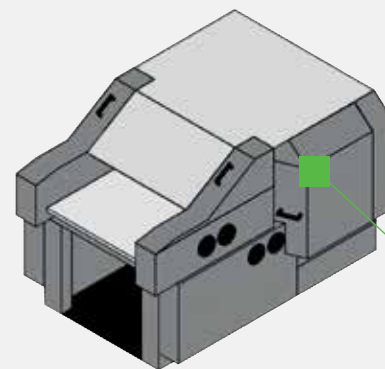
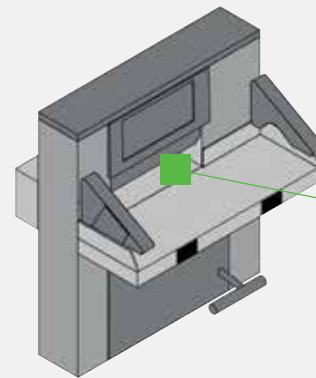
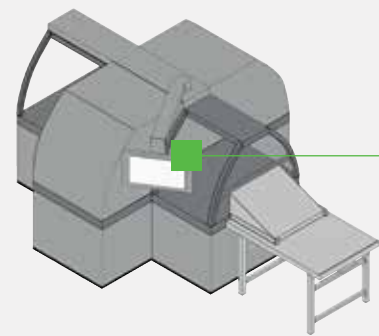
The TKM line of products

- Paper cutting knives
- Three way trimmer knives
- Trimmer knives
- Rotary trimmer knives

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Product and Cutting Solutions for the Postpress Industry



Three way trimmer knives and cutting sticks



Paper cutting knives and cutting sticks



Rotary trimmer knives



Saddle stitchers/trimmers

Three knife trimmer

Kolbus

Perfect binder

Schneider Senator

Heidelberg

Soft cover

Müller Martini

Wohlenberg

Rotary trimmer

Polar

Saddle stitcher

Anti stick

RIMA

Gämmerler

Highspeed cutter

Hard cover

Paper cutting knives

TKM paper cutting knives ensure optimal cutting results and service lifetimes.

Special materials such as aluminum offset plates, banknotes and digital printing paper require special bevel configurations.



Tolerances

- Straightness of cutting edge 0.1 mm / 1000 mm
- Flatness cut edge 0.03 mm
- Polished surface < RA 0.1 µm
- Flatness 0.1 mm / 1000 mm
- Taper 0.1 mm

Three way trimmer knives

TKM three way trimmer knives are suitable for cutting in short and large print runs.

The TKM Anti Glue Knife reduce ink depositing on the spine and glue buildup on the blade.

Only the right selected bevels and material qualities will guarantee a perfect cutting for the front, head and tail cut.



Tolerances

- Straightness of cutting edge 0.1 mm / 1000 mm
- Flatness cut edge 0.03 mm
- Polished surface < RA 0.1 µm
- Taper 0.1 mm
- Parallelism 0.02 mm

Trimmer knives

Precise, powerful, long life.



Rotary trimmer knives

TKM rotary trimmers are offered for all commercially available rotary trimmers (Gämmerler, RIMA, Müller Martini etc.).

In addition to standard applications, TKM develops solutions that are specially tailored to customer-specific requirements.



Special technical features

Upper knives

- HSS/tool steel/PM steel/carbide insert
- 22° - 24° single angle (steel)
- Wear mark approx. 14 mm residual insert width (steel)
- Wear mark approx. 7 mm residual insert width (carbide)
- 21° base material/23° primary bevel (carbide)/25° preliminary bevel (carbide)

Upper knife tolerances

- Straightness of cutting edge 0.02 mm
- Flatness 0.03 mm
- Polished surface < RA 0.1 µm
- Parallelism 0.02 mm

Lower knives

- Lower knives made of solid steel (chrome steel) or HSS / carbide / PM steel tipped insert
- Straightness of cutting edge 0.02 mm
- Polished surface < RA 0.1 µm

Advantages/features of TKM rotary trimmers

- Continuously variable, single screw on carbide inserts
- Unlimited use of the milling body (no need for spare parts)
- Tight tolerances in axial runout (< 0.01 mm)
- Low coefficient of friction through non-stick coating
- Reduction of ink and glue deposits
- Long service lifetimes when cutting shingles up to 15 mm in thickness
- Available for all commercial rotary trimmers

Quality



Recommendation for knife changes

TKM guideline

The TKM paper cutting knives should be changed when the inlay reaches the following width:

Steel grades

Durapid/Duritan/Duratec
14 mm residual insert width

Carbide grades

Incomet Supreme/Ultra Cut
7 mm residual insert width

Recommendation for knife changes



Service life comparisons (knife quality vs. service life)

Quality	TKM quality	Service life
Standard	Durapid	1
12% chrome steel	Chromalit	1.5 - 2
18% W.HSS steel (High-speed steell)	Duritan	> 3
Powder metal steell	Duratec	4 - 6
Carbide, standard grain		> 10
Carbide, fine grain		> 15
Carbide, submicron grain	Incomet Supreme	> 30
Carbide, ultra fine grain	Ultra Cut	> 60

Carbide grades

Quality	Hardness (Vickers)	Microstructure
Standard grain	1100 HV 10	
Fine grain	1330 HV 10	
Submicron grain	1500 HV 10	
Incomet Supreme		
Ultra fine grain		
Ultra Cut	1680 HV 10	

For the efficient use of our tools,
we always stand at the side of
our customers not only as a
supplier and consultant, but as
a reliable partner, through all
phases of their daily business.

Collaborative Thinking and Support:

Perfect consulting and accompaniment
are obvious for us.

- Regrinding Service and Tool Maintenance
- Consulting
- Training

Regrinding Service and Tool Maintenance

- Reproducibility
- Unique grinding qualities (New Wave)
- Operational safety

“New Wave”

TKM offers its customers a special feature with the **“New Wave” finish**.

Knives with a New Wave finish guarantee a better material flow and less dust buildup.

The result of this New Wave technology is a very homogeneous blade edge with significantly better and longer service lifetimes.

In practice, the New Wave finish affords **two to three times** longer service lifetimes compared with conventional grinding techniques.

Consulting

- Identification of actual status and technical consulting
- Development of a service concept
- Service routing and sustainability
- Documentation, analysis, research and development.

Training

- Application-specific training
- Technical cutting seminars
- Fundamentals of cutting technology
- Materials science
- Special customized topics



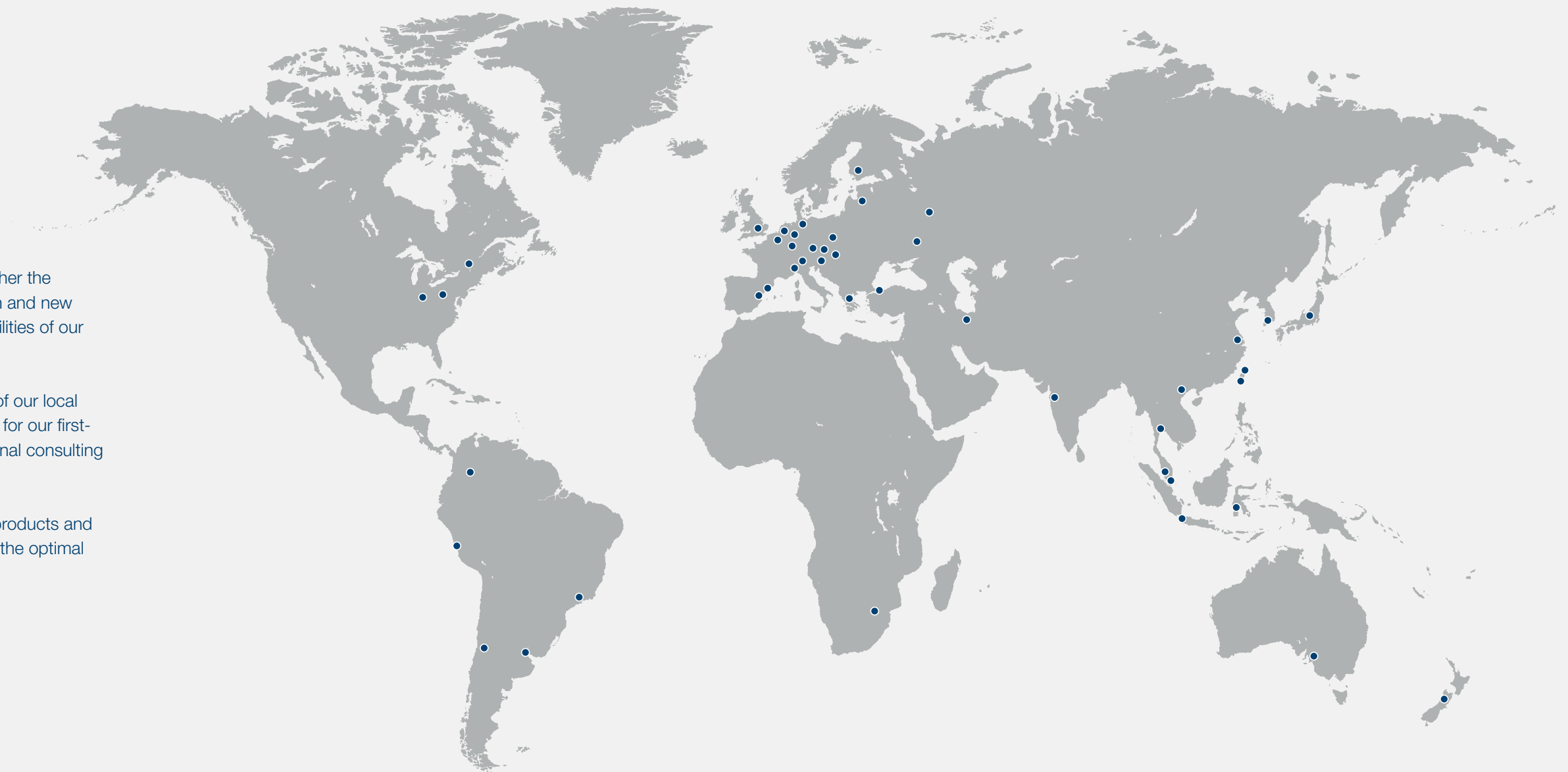
Close by – Worldwide.

The TKM group forms a system of cutting expertise. We create additional value – far beyond cutting.

Throughout the world, we share together the consistently pursued aim of innovation and new technologies, as is reflected by the abilities of our workers and employees.

As a network, we utilize the potential of our local companies, which lay the foundations for our first-class service, high flexibility and personal consulting on site.

As developers and manufacturers of products and systems, we will passionately look for the optimal solution for you.



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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 by being:

Innovative, precise and close by.

Innovative:

We strive for new technology and continuously develop products and processes, in order to produce the highest performing Industrial machine knives and cutting tools.

Precise:

Our products, services and technical ability all help benefit our customers processes, productivity and finally finished product to assist in their operational development.

Close by:

Our philosophies are sustainable and stand for a balance between environmental measures, economic development and social engagement.

No matter where you are in the world a TKM subsidiary or partner is never far away.

TKM Meyer

The specialist for the printing and packaging industry



TKM Meyer is the development, manufacturing and service center for doctor blades as well as for knives and consumable parts for the printing and packaging industry.

Together with the Remscheid site, TKM Meyer constitutes the center of excellence in the paper division for the paper, printing and packaging industry as well for the postpress industry.

The high in-house production level is the basis for the excellent stock availability and supports our comprehensive service ideas.

Specific product and system developments are implemented locally. Care, maintenance and repair of tools round off our services, thus ensuring a stable tool quality and long machine service lifetimes.

TKM Meyer

- 150 employees, 10 % trainees
- 83 tool machines, 52 % CNC machines
- 6500 m² of production and storage space
- Products: 55 % packaging industry, 45 % commercial printing
- Production lots of 1 to 2500 units
- Production volume: 300,000 parts/year

TKM Diacarb



TKM DIACARB

Based in Rotterdam, TKM DIACARB is the service center of the TKM Group and system supplier for high-tech services in the maintenance and repair of industrial cutting tools.

The combination of optimized processes and logistic performance offer you comprehensive and cost-effective repair management.

Profile

- Approx. 45 employees
- Production area: 2000 m²
- 23 CNC machines
- Approx. 30,000 service jobs per year

Technologies

Patented grinding technologies:

- New Wave
- Hyper Wave



TKM

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TKM Meyer

TKM Diacarb

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TKM Austria

TKM TTT Finland

TKM US

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