



## ROTARY SLITTER KNIVES AND ACCESSORIES FOR SLITTING LINES



IKS KLINGELNBERG GROUP · THE KNIFE MANUFACTURERS

 DIVISION METAL





**KLINGELBERG**



## ROTARY SLITTER KNIVES AND ACCESSORIES FOR SLITTING LINES



### ABOUT US

A long tradition signifies commitment. The history of our company can be traced back to 1863. The manufacturing of machine knives started in 1908. Klingelberg today is numbered as one of the oldest existing machine knife factories in the region called "Bergisches Land". Over the decades, this region has built up a worldwide reputation. Only by constant improvements developing specialised expertise, could the challenges of the market be met. Close cooperation with leading steel mills on one side, good connections and exceptional partnerships with innovative key customers has guaranteed a continuing positive development.



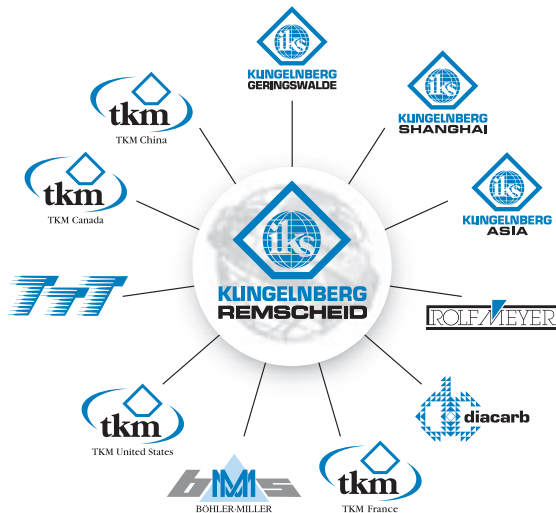
IKS Klingelberg GmbH, Remscheid  
Headquarters

The heart of the Metalworking Division today consists of the constantly expanding factory in Geringswalde/Saxony. Workers with excellent education and reliability combined with enormous investment in buildings and machines have been the fundamentals for success and further expansion.

Additional production facilities for the Metalworking Division are located in Böhrlerwerk/Austria. This location is specialised in straight knives, guide ways and bending tools with highest precision requirements.



Böhrler-Miller Messer- u. Sägen GmbH, Böhrlerwerk  
Sales and Production



The IKS Klingelberg Group



IKS Messerfabrik Geringswalde GmbH, Geringswalde  
Production





KLINGELBERG



## ROTARY SLITTER KNIVES AND ACCESSORIES FOR SLITTING LINES

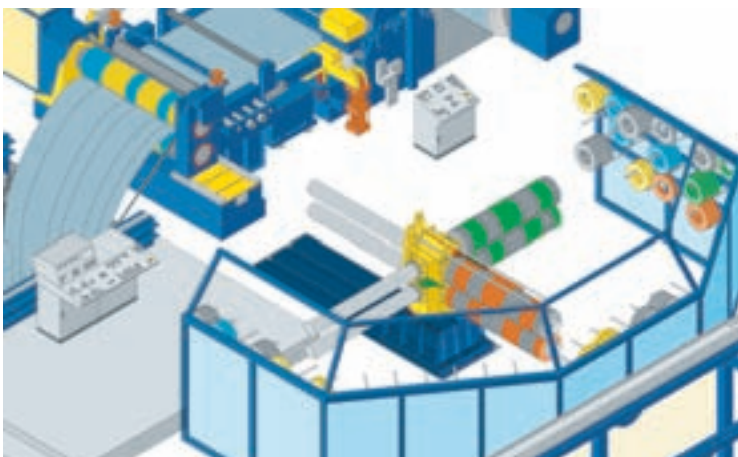
### PRODUCTS

- Rotary Slitter Knives
- Spacers
- Lightweight Spacers
- Steel Stripper Rings
- Rubber bonded Spacers
- tube cut off Knives
- Guide ways
- DYNABLOC quill assemblies
- scraper blades
- software for computer assisted set ups (CASKA)
- Shear Blades
- Cut to length Knives
- bending tools
- Profile Shear Blades
- Separator Discs
- Spacers for separator arbors
- Knife Holders
- separator plates
- press brake tools
- scrap chopper knives



### CUSTOMERS

- Iron and Steel Works
- Processors of non-ferrous materials
- Cold Rolling Mills
- Steel Service Centers
- Tube Mills
- Producers of Profiled Steel
- Producers of Strapping Materials
- Producers of Packaging Materials
- Producers of steel grids
- Slitting Line Manufacturers





KLINGELBERG



ROTARY SLITTER KNIVES AND ACCESSORIES FOR SLITTING LINES

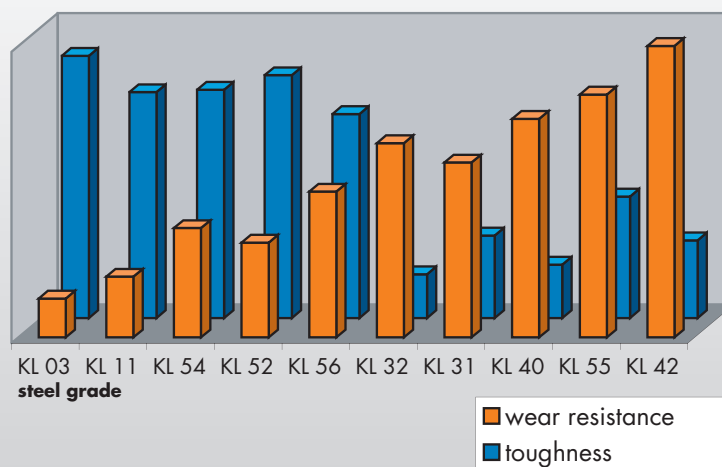
STEEL GRADES

Steel grade recommendations for rotary slitter knives

type of steel	gauges [mm]				
	< 0,6 mm	< 1,5 mm	< 3 mm	< 6 mm	> 6 mm
cold rolled material		KL31, KL32, KL55	KL31, KL55	KL13, KL54	KL10, KL13
hot rolled material				KL10, KL13	KL03, KL11, KL13
stainless steel		KL40, KL55	KL56	KL13, KL56	KL13, KL02, KL61
silicon steel	tungsten carbide	KL40, KL55, KL53	KL13, KL56		
hardened strip steel		KL40, KL42	KL55, KL56		
non-ferrous alloys		KL31, KL32	KL31, KL32	KL56	KL13



Slitting Performance  
a result of  
wear resistance and toughness





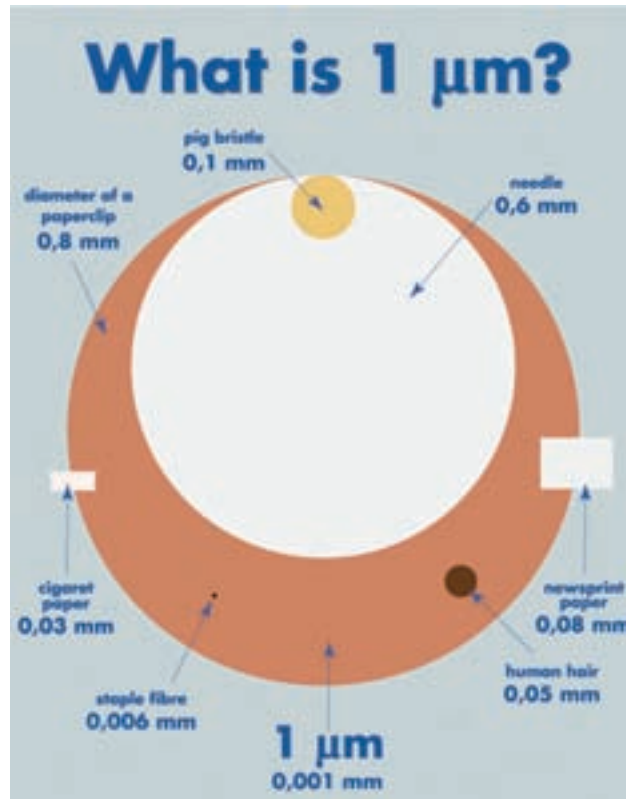
KLINGELBERG



ROTARY SLITTER KNIVES AND ACCESSORIES FOR SLITTING LINES

QUALITY

The trend towards higher levels of performance has led to the development of ultra precision cutting tools of an accuracy known so far only in the use of precision milling tools. Thickness tolerances of  $\pm 0,001$  mm ( $\pm 1 \mu\text{m}$ ) and surface finishes of Ra  $0,1 \mu\text{m}$  have become standard. Demands for tightest tolerances for thickness, parallelism, flatness, O.D. and I.D. can be fulfilled with specialized know how and highly modern production technologies. New quality standards are being met by means of loading robot systems for set ups on working arbors. For highly demanding accuracies- such as required in the splitting process of thinnest aluminium or copper foils - it is possible today to manufacture tools in guaranteed thickness tolerances of  $\pm 0,0005$  mm and I.D. tolerances of H3 dependent on I.D. size. These are produced and checked in a climate-controlled room which guarantees the observance of the required tolerances.



Obtainable manufacturing tolerances of our precision tools

O. D. in mm	thickness tolerance	parallelism	flatness dependent on thickness (mm)						surface finishes Ra ( $\mu\text{m}$ )		
			< 1	1- < 2	2- < 3	3- < 5	5- < 10	> 10	ground	lapped	KSF-polished
> 150	+/-0,0005	0,001	0,03	0,003	0,003	0,001	0,001	0,001	0,4	0,2	0,1
> 150 - 250	+/-0,0005	0,001	0,03	0,005	0,003	0,001	0,001	0,001	0,4	0,2	0,1
> 250 - 420	+/-0,0005	0,001	0,05	0,01	0,005	0,002	0,002	0,002	0,4	0,2	0,1
> 420 - 600	+/-0,0250	0,005			0,05	0,02	0,01	0,01	0,4	0,2	0,1
> 600 - 700	+/-0,1000	0,050						0,05	0,4		





KLINGELBERG



## ROTARY SLITTER KNIVES AND ACCESSORIES FOR SLITTING LINES



### SOFTWARE

To supplement our supply of a complete tooling package as an initial installation of a slitting line a software package for computer assisted set ups is offered. This software is written tailored to customers needs.

As a special service we can determine the tooling needed based on given slitting parameters.



### GRINDING SERVICE

The Geringswalde factory can provide accurate regrinding services in a short turn-around time. This offers reliable and professional know how from the machine knife manufacturer without the risk of losing accuracy of the tooling.



### RESOURCES PLANNING

We can provide special containers and boxes for the storage and transportation of high precision tooling or can recommend specialists in the field.





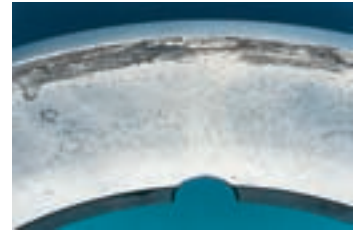
KLINGELBERG



## ROTARY SLITTER KNIVES AND ACCESSORIES FOR SLITTING LINES

### KSF MICROPLAN

We offer a device for polishing and cleaning of parallel surfaces of circular tools (knives and/or spacers). The machine has been designed for parts up to 450 mm Ø and is in conformity with CE-regulations.



### RELIABILITY

The constant modernization of manufacturing equipment over the last 10 years has led to an increase in capacity, which has clearly reduced the delivery time in favour of our customers. Today, most common knives are available from stock. We aim for our customers' satisfaction.

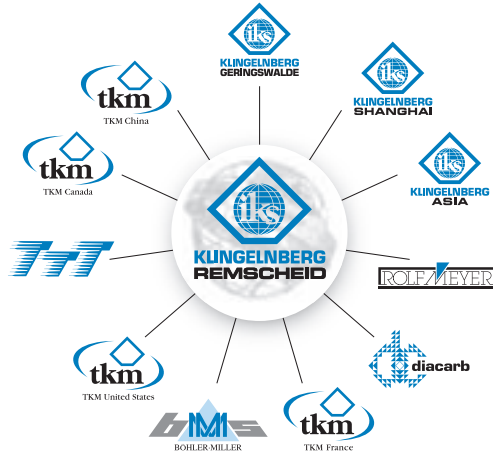


Since 1995 we have been certified to DIN EN ISO 9001. We obtained the registration under No. Q-20529-081 from TÜG in June 2008, according to DIN EN ISO 9001:2008.

### SEMINARS

In addition seminars about slitting belong to our range of customer services. In such seminars we are transferring our know-how to our customers and we offer them fully fledged package solutions leading to winning margins and competitive advantages.





**DIE IKS KLINGELBERG GRUPPE**  
**THE IKS KLINGELBERG GROUP**



- |   |  |   |
|---|--|---|
|  | MESSER FÜR DIE PAPIER-INDUSTRIE                          | KNIVES FOR THE PAPER-INDUSTRY                       |
|  | MESSER FÜR DIE METALL-INDUSTRIE                          | KNIVES FOR THE METAL-INDUSTRY                       |
|  | MESSER FÜR DIE HOLZ-INDUSTRIE                            | KNIVES FOR THE WOOD-INDUSTRY                        |
|  | MESSER FÜR DIE KUNSTSTOFF-, GUMMI- & RECYCLING-INDUSTRIE | KNIVES FOR THE PLASTIC, RUBBER & RECYCLING INDUSTRY |

Please contact IKS Klingelberg or Böhler Miller for further contacts all over the world!



**IKS KLINGELBERG GMBH**

Headquarters & Sales  
 In der Fleute 18  
 D-42897 Remscheid  
 Germany  
 T: +49 (0) 2191-969-0  
 F: +49 (0) 2191-969-111  
 E-Mail: [info@interknife.com](mailto:info@interknife.com)  
[www.interknife.com](http://www.interknife.com)



IKS Klingelberg GmbH, Remscheid



**BÖHLER MILLER Messer u. Sägen GmbH**

Sales & Production  
 Waidhofner Straße 11  
 A-3333 Böhlerwerk  
 Austria  
 T: +43 (0) 7442 / 601 - 0  
 F: +43 (0) 7442 / 601150  
 E-mail: [info@bmms.at](mailto:info@bmms.at)  
[www.bmms.at](http://www.bmms.at)



Böhler-Miller Messer- u. Sägen GmbH, Böhlerwerk



**IKS KLINGELBERG GERINGSWALDE GMBH**

Production  
 Mittweidaer Straße 44  
 D-09326 Geringswalde  
 Germany  
 Tel. +49 (0) 37382-846-0  
 Fax +49 (0) 37382-846-24  
 E-Mail: [iksgw@interknife.com](mailto:iksgw@interknife.com)  
[www.interknife.com](http://www.interknife.com)



IKS Messerfabrik Geringswalde GmbH, Geringswalde

IKS KLINGELBERG GROUP · THE KNIFE MANUFACTURERS



 DIVISION METAL

