

Harder. Faster. Yellow.

The new Kronenflex®
cutting-off wheels





Nothing can beat good, solid tools

For us, as the inventor of high-speed cutting-off wheels, it goes without saying that we are interested in the continuous optimization and improvement of our Kronenflex® products. With increased aggression, a longer service life and the high safety standards you have come to expect from us, our wheels guarantee the satisfaction of our most demanding and important idea generators: our users.

The new Kronenflex® cutting-off wheels from Klingspor

/// SPECIAL



The Thin line
A 980 TZ SPECIAL

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The Hard line
A 960 TZ SPECIAL

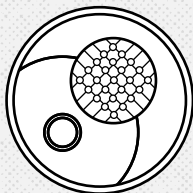
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The Aggressive line
Z 960 TX SPECIAL

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The advantages at a glance



1.

Improved stability

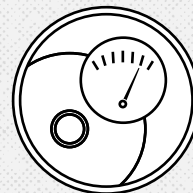
The special combination of glass fiber, resins in liquid and dry form and constant production conditions during pressing and firing of the wheels provides for extra high stability.



2.

High quality raw materials

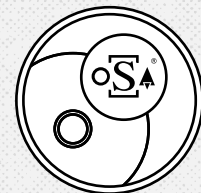
Perfect adaptation of bonding agent and fillers to the grain type used provides for higher aggression and a longer service life.



3.

Better performance

Our synthetically manufactured abrasive grits ensure consistently high quality during utilization. With an iron, sulfur and chlorine content of less than 0.1%, our wheels are ideal for all stainless steel applications.



4.

Time-tested safety

Like all Klingspor products, our latest developments also conform to the stringent oSa regulations and we guarantee compliance with the European EN 12413 safety standard.

5.



Kronenflex® box

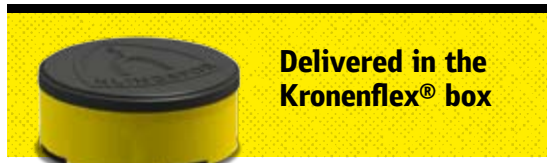
Normally, the performance of cutting-off wheels is significantly affected by climatic influences during the first few weeks after being manufactured. So that you can make use of all the advantages of our high-performance products resulting from new developments, you receive these cutting-off wheels in the air-tight Kronenflex® box. They remain fresh much longer than products packaged in cardboard boxes, to give you up to 40% more performance.

The Thin line

This cutting-off wheel, with a thickness of only 0.8 mm, even cuts through hard materials such as stainless steel sheets with precise, clean cuts with practically no burrs, minimizing finish-machining. The A 980 TZ can also be used for fast and safe cutting of extremely hard or tough materials.

Applications

- Maintenance and repairs
- Metalworking
- Bodywork



Delivered in the Kronenflex® box



A 980 TZ SPECIAL 0.8 mm



Quality	SPECIAL
Hardness	■■■■■■■□
Aggression	■■■■■■□□
Service life	■■■■■■■□



Recommended materials	
Stainless steel	●
Steel	●
Non-ferrous metals	●



Properties	
free of iron, sulfur and chlorine	
very short cutting times	
low thermal load	
minimal burr formation	

Diameter × width × bore hole in mm	Form	Maximum operating speed	Max. RPM	Packaging unit in pieces	Article number
115 × 0.8 × 22.23		80 m/s	13,300 rpm	25	322182
125 × 0.8 × 22.23		80 m/s	12,200 rpm	25	322183

The Hard line

The A 960 TZ is the all-round thin high-performance cutting-off wheel from Klingspor. The optimized binding system provides for a significantly longer service life.

Applications

- ▶ Maintenance and repairs
- ▶ Metalworking
- ▶ Plant construction
- ▶ Steel construction



A 960 TZ SPECIAL 1.0 mm



Quality	SPECIAL
Hardness	■■■■■■■■■
Aggression	■■■■■■■■□
Service life	■■■■■■■■■



Recommended materials	
Stainless steel	●
Steel	●



Properties
free of iron, sulfur and chlorine
short cutting times and long service life
low thermal load
low burr formation

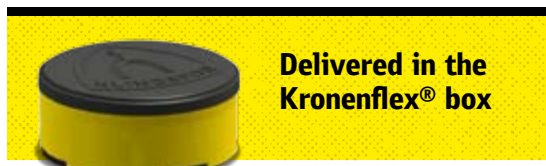
Diameter × width × bore hole in mm	Form	Maximum operating speed	Max. RPM	Packaging unit in pieces	Article number
115 x 1.0 x 22.23	— —	80 m/s	13,300 rpm	25	322180
125 x 1.0 x 22.23	— —	80 m/s	12,200 rpm	25	322181

The Aggressive line

The Z 960 TX is the ideal cutting-off wheel for tough / hard materials such as titanium and high-alloy steels. The newly developed grit mixture with alumina zirconia ensures constant resharping during use.

Applications

- Maintenance and repairs
- Metalworking
- Plant construction
- Steel construction



Z 960 TX SPECIAL 1.0 mm



Quality *SPECIAL*

Hardness	■■■■■■■■
Aggression	■■■■■■■■
Service life	■■■■■■■■



Recommended materials

Stainless steel	●
Alloys	●
Carbon steel	●
Titanium	●



Properties

free of iron, sulfur and chlorine
short cutting times and long service life
low thermal load
low burr formation

Diameter x width x bore hole in mm	Form	Maximum operating speed	Max. RPM	Packaging unit in pieces	Article number
115 x 1.0 x 22.23	—	80 m/s	13,300 rpm	25	322184
125 x 1.0 x 22.23	—	80 m/s	12,200 rpm	25	322185

Together for perfect results

The safety, cost effectiveness and productivity of our Kronenflex® cutting-off wheels are the result of a balanced combination of state-of-the-art manufacturing technologies and the correct on-site use of our tools. The following pages therefore provide detailed information on their manufacture and use.

Four steps to a high-performance product

Klingspor cutting-off wheels are always the result of many years of intensive research and extensive practical testing. The development of a wheel for a particular application depends not only on the use of high-quality raw materials and state-of-the-art technologies, but especially on the interplay of the different components and processes. The most crucial of these are the use of optimized glass fibers, resins, grain types and sizes, a consistent pore volume during pressing of the blanks and, finally, the precisely controlled firing process.





1. Binding system

Aggression and service life are determined both by the composition of the binding system, a combination of resins and fillers, and also by the grain types, grain sizes, mixing conditions and quantities of abrasive grits. Also, active abrasive substances affect the cutting performance of the products.



2. Pressing

The goal of the pressing process is to achieve uniform material density of the products. Thanks to technologies developed by Klingspor, the weight and thickness tolerances are minimal. This enormous precision provides for constantly high performance from the first cut to the last.



3. Firing

The exactly coordinated multi-stage firing process optimizes the products for the intended application. A separate temperature curve is used for each binding system, to produce consistently high-quality products day after day.

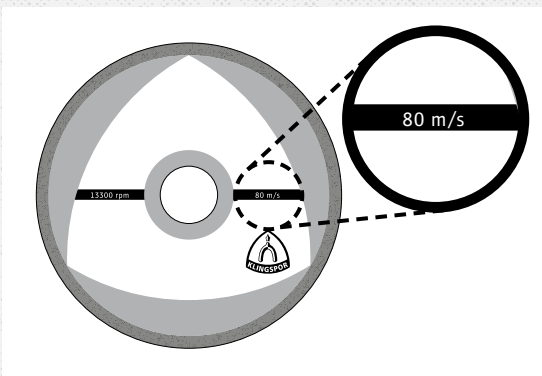
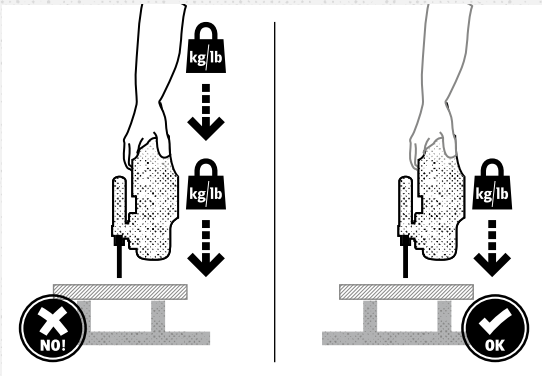


4. Quality inspections

During the production process we conduct regular inspections to ensure that our cutting-off wheels have the necessary aggression and service life, that they fully comply with all safety standards and that the material properties remain constant.

Correct cutting

Thin Kronenflex® cutting-off wheels for angle grinders are high-performance products that feature extremely short cutting times and low burr formation. They are ideal for thin-walled materials to be cut off in a precise, fast cutting process with low heat generation. By following a few basic rules, anyone can achieve optimal results with maximum safety.



1.

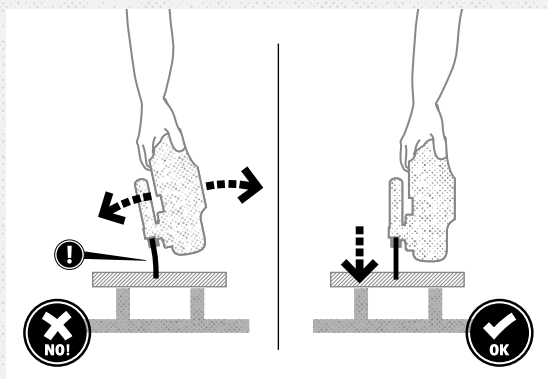
Correct tool pressure = Longer service life

Thanks to the exceptional cutting performance of our wheels, the intrinsic weight of the machine provides sufficient tool pressure. Excessive pressure results in faster wear.

2. Optimal peripheral speed

= Improved cutting performance

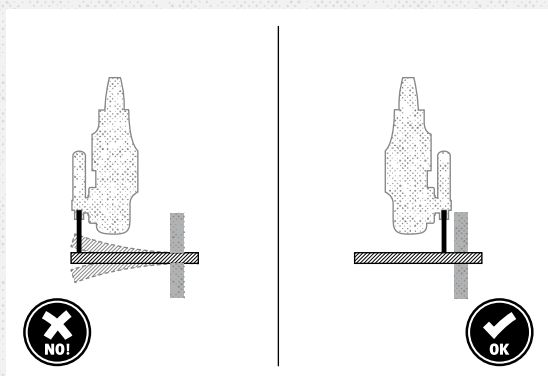
The ideal ratio between the number of cuts and wear on the wheel is achieved just below the maximum permissible peripheral speed. Always ensure a continuously high speed. Operation at slow speeds will cause premature wear on the wheels.



3.

Correct handling = Increased safety

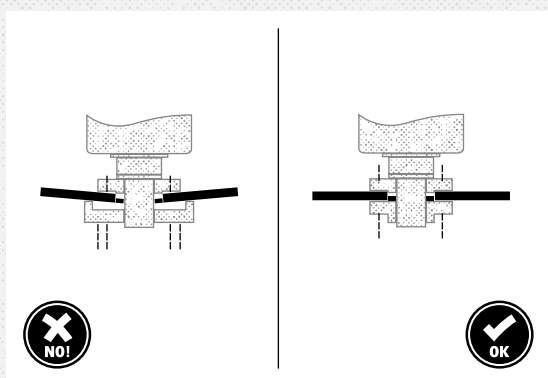
Force can be applied to grinding/cutting-off wheels only in radial direction. This prevents flexing, bending or even breakage of the wheel under high tool pressure.



4.

Ideal start of cut = Increased stability

The material should always be clamped as close as possible to the cutting area to prevent it from vibrating, wobbling or slipping. The workpiece being cut must be clamped tightly, without allowing the wheel to run off center in the material of the workpiece.



5.

Correct mounting = Better power transfer

Cutting-off wheels are mounted on the machine by means of wheel flanges that transfer input forces onto the wheels. Never use damaged or unserviceable flanges and always observe the applicable regulations and standards. The use of wheel flanges of different diameters is not allowed.

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