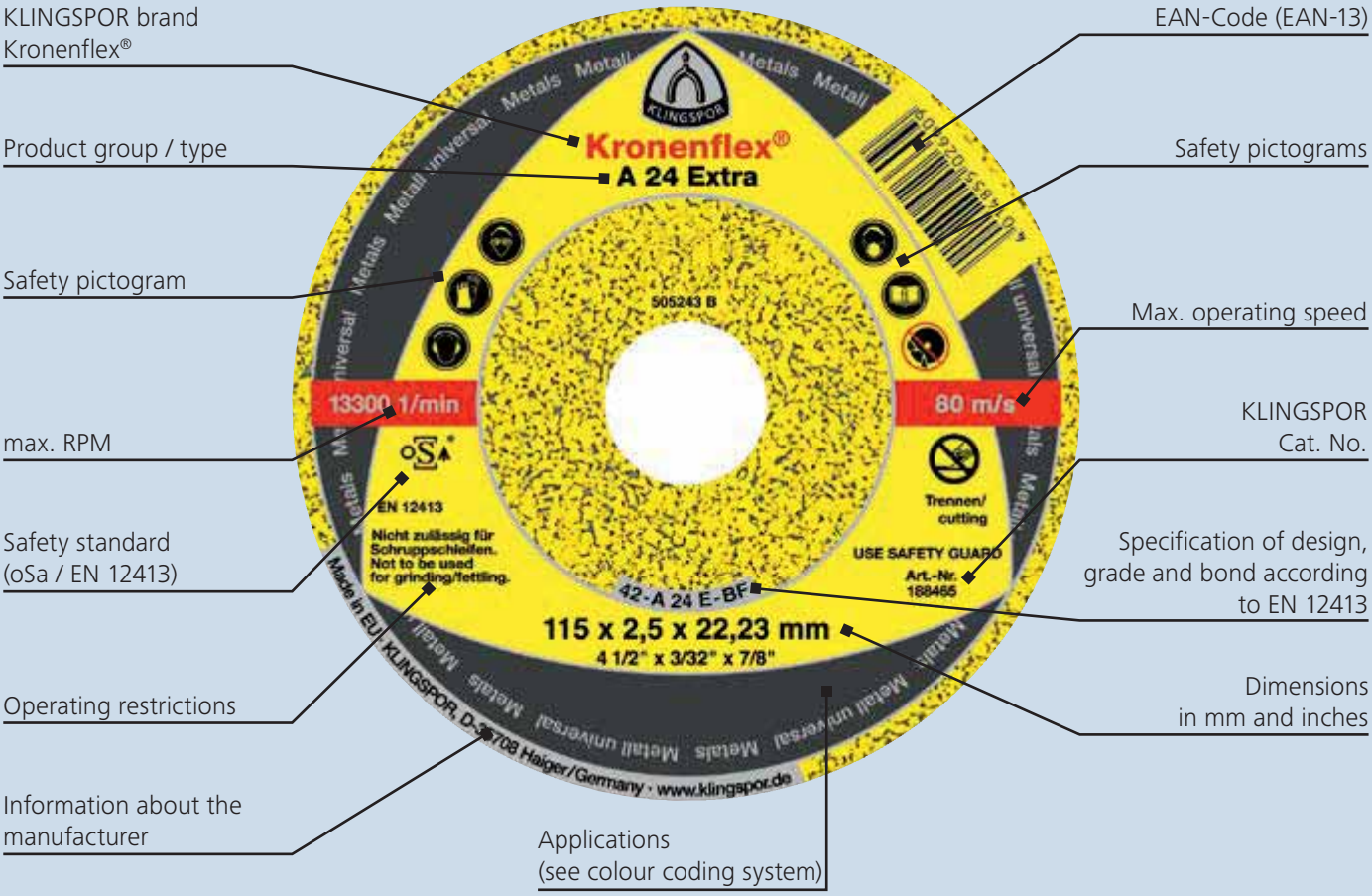



## KLINGSPOR cutting-off wheel and grinding disc colour coding system

| **Metal universal:** | **Steel:** | **Stainless steel:** | **Castings:** | **Aluminium:** | **Stone/concrete:** |
|---|---|---|---|---|---|
| Grey | Black | Blue | Red | Silver | Green |

## Quality classes

Kronenflex® cutting-off wheels and grinding discs come in three performance classes with six colour codes for a quick overview of the most important material applications.




| **Product group** | **EXTRA** | **SUPRA** | **SPECIAL** |
|---|---|---|---|
| Performance class | Products for universal implementation, offering a particularly attractive price / performance ratio. | Optimized products for different applications. Excellent service life and cutting performance. | High performance products for special applications. Highest service life and cutting performance in the respective material application area. |

**Label and cover sheet**

The label includes all of the important information on the product, manufacturer and information on the proper use of the grinding tool

**Metal ring**

Provides information on the production period of the disc


**Mixture**

**Glass fibre**

**The grit:**

Today all grit types are only produced synthetically. Only grit produced synthetically can ensure continuously high wear and cutting disc quality.

**Resins and fillers:**

Additional, important components for cutting and grinding discs are resins, (in liquid and dry form), and fillers. These components are key in determining the disc properties, such as stability, stock removal rate, shear strength and can be adjusted to meet the needs of the specific application.

Glass fibre is a reinforcing layer to ensure stability and increases the safety of the cutting-off wheel. The number and strength of the glass fibre layers is dependent upon the disc type and application.

The higher the potential lateral load on a cutting-off disc (it is greater during free cutting than during stationary cutting), the more glass fibre that the cutting disc must contain, or the contained glass fibre must be more stable. Particularly thin material is used for thin cutting discs (0.8 mm to 1.0 mm), to, in spite of the thin discs, ensure that a large grit ratio is achieved between the layers.

Grinding discs are constructed with at least 3 glass fibre layers.



| Quarter | |
|---|---|
| V 01 | January-March |
| V 04 | April-June |
| V 07 | July-September |
| V 10 | October-December |

## Safety and storage

The shelf life of cutting-off wheels and grinding discs is primarily determined by their moisture content. Cutting-off wheels and grinding discs that are subjected to increased humidity after they were manufactured loose their original service life. Proper storage ensures a consistent long service life. Cutting-off wheels and grinding discs that are subjected to water or steam are a safety risk.

The user is obligated to operate the product properly. This also applies for legal reason, also as regards the expiry date. Principally the following applies: cutting-off wheels and grinding discs may not be used past the expiry date!

## Working safely...

### ... by being careful and recognizing risks

Please avoid the risks listed below when working with cutting-off wheels and grinding discs.

- contact with rotating abrasive discs
- abrasive disc breakage
- dust deposits and grinding dust
- vibration
- noise

### ... through personal protective gear

Goggles, gloves, ear muffs and dust masks must be worn. When working on hard grinding applications additional protective gear is required, such as face protection, leather aprons and safety boots.

### ... through protective machine covers

Protective covers and guards are supplied with the grinding machine and may not be changed or removed. When using cup grinding wheels the outer surface must be completely enclosed.

In addition, cup grinding wheels may only be used in combination with an adjustable wheel guard, to balance the wear on the disc and to keep the exposure of the disc at a minimum.

### ... through visual inspection and performance of checks prior to mounting

Ensure the disc RPM matches the machine RPM setting and avoid exceeding the maximum admissible operating speed.

Carefully check the cutting-off wheel and grinding disc for damage. If the cutting-off wheel or grinding disc is damaged, do not use the damaged product. Our cutting-off wheels and grinding discs are marked with the corresponding safety pictogram.

### ... through proper use

Ensure that the respective disc is being used properly. Avoid damage to the mounting bore or to the disc through jerks, excessive force, or falls.

Ensure that the disc is properly and securely mounted and use the proper mounting flange.

Prior to starting work the abrasive disc should run at operating speed for at least 30 seconds.

Please observe the FEPA safety regulations and the European Standard 12413.

The peripheral speed and grinding pressure are important parameters for achieving optimal cutting-off and grinding disc results.

## The optimal speed

**Too low**

If the RPM of the machine is too low, the cutting-off wheel and grinding disc tend to "jump", and the disc edges wear down unevenly. Particularly with thin material cross sections, such as cutting tin or wire, this causes the grit to be separated from the bond and the disc wear speed is above average.

**Optimal**

KLINGSPOR cutting-off wheels and grinding discs are high-performance products and were developed such that best disc performance (measured according the stock removal volume to disc wear ratio) is achieved in the range right below the maximum peripheral speed. Keep the machine running at a consistently high RPM and, if needed, select a more powerful machine.

**Too high**

The maximum RPM and peripheral speed is printed on the label of each disc. For your own safety, please be sure not to exceed the recommended speeds when grinding.

## The proper grinding pressure

An important prerequisite for a satisfactory cutting result is the correct dose of grinding pressure.

A common mistake is made to protect the disc by reducing the grinding pressure to preserve the disc and extend the cutting life of the wheel. If this is done, the material overheats (turns blue); the cutting-off wheel becomes clogged and "burns up".

This is why the grinding pressure should always be set such that the cutting time is as short as possible. This is particularly true for heat sensitive material with large material cross-sections.

## The proper hardness

**...for cutting-off wheels**

Generally, the rule of thumb when selecting the proper cutting-off wheel is: the harder the material, the softer the abrasive bond. The reason: the service life of a cutting-off wheel is dependent upon if the cutting surface of the work pieces hardens or not. Overheating results in the disc "glazing" and the cutting properties are negatively affected. In this case, the hardness of the bond should be decreased and a softer cutting-off wheel should be used.

**...for grinding discs**

The "rule of thumb" also applies to grinding discs: the harder the material, the softer the grinding disc bond.

In addition, the application plays a decisive role.

Corner and burrs have very sharp edges and cause the grit to be separated and ripped out of the bond. We suggest the selection of a hard bond.

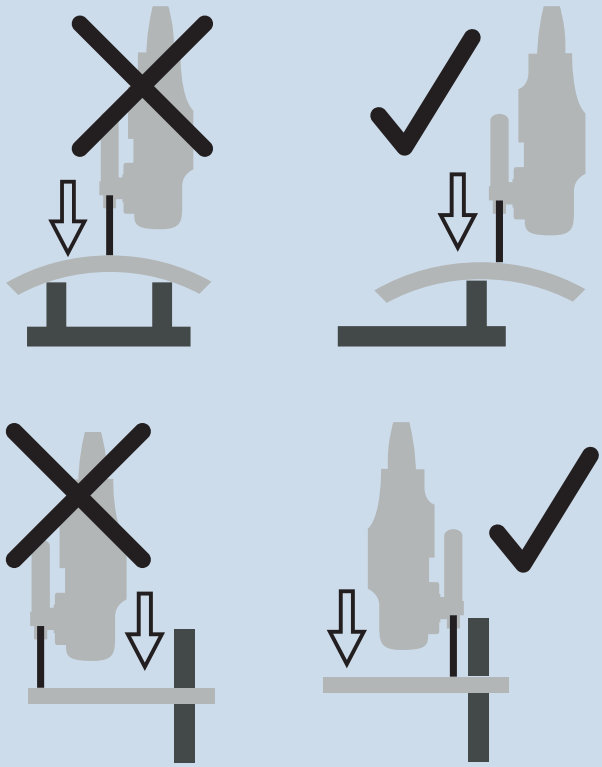
On the other hand, when working on surfaces or small weld seams a disc that is too hard would become dull and would no longer be effective. It would have a good service life, but would also have a low stock removal rate and high work costs.

A medium or soft disc bond would be best for finish grinding.

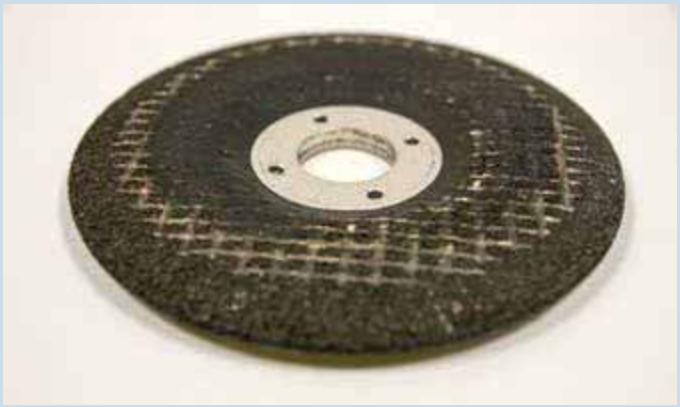
## Correct angle of attack for cutting-off

Pressure may only be placed on the cutting-off wheel from a radial direction. This is the only way to avoid wobbling, buckling and disc breakage, especially when applying a high level of grinding pressure.

The work piece that is to be cut-off should be properly affixed to the workbench to ensure that the disc does not slide off to the side. In addition, we recommend that the material is affixed as close to the cutting site as possible to ensure that it does not vibrate, flutter or slip to the side.



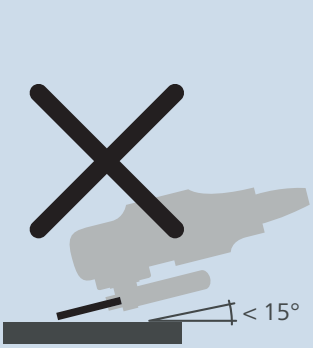
## Correct angle of attack for grinding



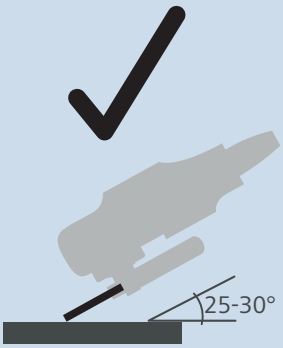
Defective grinding disc (the angle of attack is too flat)

Grinding discs work best at an angle between 25-30° to the work piece.

This angle provides the best stock removal to disc ware ratio. If possible, always select this angle of attack.




Angle of attack is too flat!




Optimal angle of attack: 25-30°

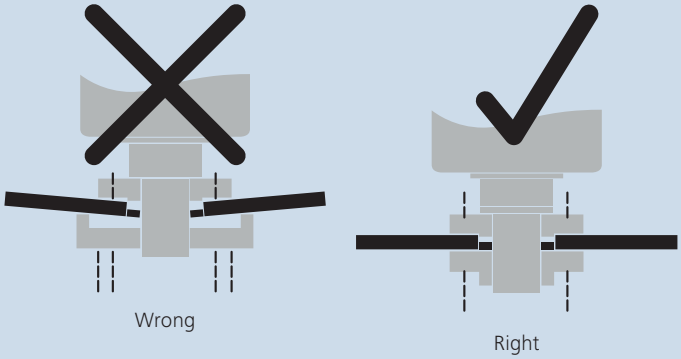
When grinding and the angle of attack is below 15° a very thin edge which levels off is formed around the circumference of the disc. Even minimal changes to the angle of attack can result in a situation in which the grinding pressure can no longer be absorbed resulting in the grinding disc slipping to the side.

Valuable grit is not used and an imbalance is created that results in having to replace the disc prematurely.

## The correct mount...

**... for better power transmission**

Cutting-off wheels and grinding discs are mounted to the machine with a flange wheel. The flange elements are responsible for transferring power to the disc. For reasons of safety it is extremely important that defective or unusable flanges are not used.



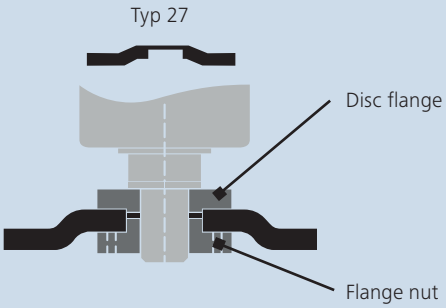

**... and for more safety**

The use of wheel flange FL 76 provides increased lateral stability and user control, specifically when using thin cutting-off wheels with a flat form and diameter of 180 mm and 230 mm.

The applicable regulations and standards must be complied with when using the wheel flange. The contact surface and diameter of the wheel flange must match. Using wheel flanges with diameters that do not match is prohibited.

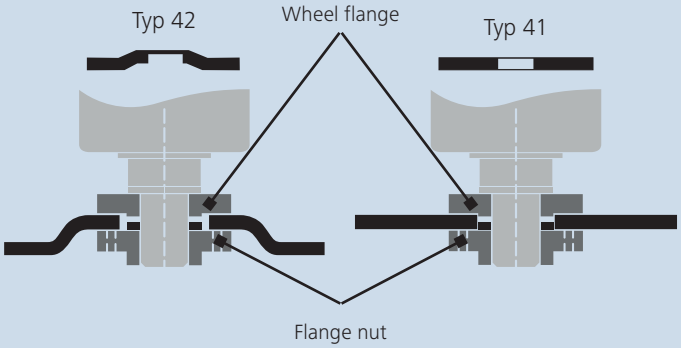
## Depressed centre grinding disc

**4 - 10 mm thickness**




## Flat and depressed centre cutting-off wheels

**0.8 - 4 mm thickness**




## Recognize and avoid errors

| | Issue | Possible cause | Solution |
|---|---|---|---|
| Cutting-off discs | Cutting surface is blue | Cutting time is too long | Increase feed speed or grinding pressure |
| | | Drive power is too low | Use a more powerful machine |
| | | Disc is too hard | Select a softer bond |
| | | Material cross section is too great for the disc diameter | Work with a saw cut / work with a smaller material diameter |
| | | Cutting disc is too wide for the material/application | Use a thinner cutting disc |
| | Disc wear is too high | White cutting surface: disc hardness is too low | Select a harder bond |
| | | Peripheral speed is too low | Increase peripheral speed |
| | | RPM decrease is too great | Reduce grinding pressure or use a more powerful machine |
| | Crooked cut | Work piece is not mounted properly | Mount the material closer to the cutting site |
| | | Grinding pressure is too great | Reduce grinding pressure |
| | | Disc width is too thin for the material/application | Increase disc width |
| | | Disc is completely worn down | Replace disc |
| | Disc breakage | Machine is operated incorrectly | Avoid lateral pressure on the disc |
| | | Incorrect wheel flange diameter | Use wheel flange with identical diameters |
| | | Cutting-off wheel is used for grinding | Cutting-off wheels may not be used for grinding! |
| | | Material is not properly affixed | Mount the material closer to the cutting site |
| | Disc periphery is frayed | Disc periphery is burned | Select a softer bond, decrease grinding pressure |
| | | Material is not properly affixed | Mount the material closer to the cutting site |
| | Disc jumps | Wheel flange is dirty or worn out | Clean wheel flange or replace wheel flange |
| | | Bearing is defective | Replace machine or replace bearing |
| | | Bore dimension and mount do not match | Use proper bore dimension or use a reducer ring |
| | Bore hole is broken | Wheel flanges are of different sizes | Use wheel flanges that have the same diameters |
| | | Machine is operated incorrectly | Reduce lateral pressure on the disc |
| | | Cutting-off wheel is used for grinding | Cutting-off wheels may not be used for grinding! |

## Recognize and avoid errors

| | Issue | Possible cause | Solution |
|---|---|---|---|
| Grinding discs | Removal rate is too low | Shiny contact surface: bond is too hard | Select a softer bond |
| | | Grinding pressure is too low | Increase grinding pressure |
| | | Machine performance is too low | Use a more powerful machine |
| | Disc is loaded/clogged | Bond is too hard | Select a softer bond |
| | | Loading/clogging with NF-metals | Use softer bond or select a special cutting-off wheel for NF-metals |
| | | Grinding pressure is too low | Increase grinding pressure |
| | Wear is too high | Grinding pressure is too high | Reduce grinding pressure |
| | | Bond is too soft | Select a harder bond |
| | | Machine RPM decreases too quickly. | Reduce grinding pressure |
| | | Machine performance is too low | Use a more powerful machine |
| | Periphery is not rounded / breakage on the edge | Disc angle is too flat | Increase disc angle (at least 15°) |
| | | Grinding pressure is too high | Reduce grinding pressure |
| | Disc wobbles | The mount is not centred | Check bore diameter and mounting diameter and adjust accordingly |
| | | Mounting shaft is worn | Replace machine |
| | | Mounting flange is worn, dirty or incorrect | Replace / clean mounting flange / check dimensions |
| | | Disc wobbles | Use a new disc |

## The safe use of KLINGSPOR abrasives

KLINGSPOR cutting-off wheels and grinding discs are manufactured in accordance with the oSa and EN12413 standards, this ensures the highest level of user safety.


Wear safety goggles or glasses to protect the eyes


Wear dust mask


Use ear muffs


Wear safety gloves to protect hands


Observe safety instructions


Do not use for wet grinding

## Kronenflex® cutting-off wheels 2.0 – 3.2 mm

KLINGSPOR Kronenflex® cutting-off wheels with disc thickness of 2.0 to 3.2 mm are known for their particularly high lateral stability.

This is particularly important for applications which require deep cuts into solid material – e.g. to cut risers/casts or large profiles. The enormous lateral forces that occur while working require particularly high cutting-off wheel stability.

In spite of its thickness, KLINGSPOR Kronenflex cutting-off wheels of the 2.0 to 3.2 mm class are known for their excellent cutting rate and long service life. These cutting-off wheels are ideal for applications that require a high degree of lateral stability.

## Typical materials for these products

- Steel
- Stainless steel
- Construction steel
- NF-metals
- Cast materials
- Stone
- Plastics
- Mineral materials
- Solid materials
- Pipes
- Flat irons
- Tins

## Typical applications for these products

- Foundries
- Locksmiths
- Shipyards
- Steelwork
- Plant construction
- Metal works
- Maintenance and repair work

| Type | Page | Thickness [mm] | Material applications | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Steel | Hardened steels | Tool steel | Stainless steel | High alloy steels | Corrosion and acid proof steels | Aluminium | Bronze | Cooper | Brass | Zinc die-casting | Cast iron | Stone / concrete |
| A 24 Extra | 207 | 2.0 – 3.2 | ● | ○ | ● | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | |
| A 24 R Supra | 207, 213 | 2.5 – 3.0 | ● | ● | ● | ○ | ○ | ○ | | | | | ○ | ○ | |
| A 24 N Supra INOX | 208 | 2.5 – 3.0 | ○ | ● | ○ | ● | ● | ● | ○ | ○ | ○ | ○ | | | |
| A 36 R Supra INOX | 209 | 2.0 – 2.5 | ○ | ○ | ● | ● | ● | ● | | ○ | ○ | ○ | | | |
| A 36 TZ Special INOX | 209 | 2.0 | ○ | ○ | ● | ● | ● | ● | | | | | | ○ | |
| A 24 R/36 Special INOX | 210 | 2.5 – 3.0 | ○ | ○ | ● | ● | ● | ● | | | | | | | |
| A 24 TZ Special | 210 | 2.5 – 3.0 | ○ | | ○ | ● | ● | ● | | | | | | ○ | |
| A 46 N Supra | 211 | 2,5 – 3,0 | | | | | | | ● | ● | ● | ● | ○ | | |
| A 24 S Supra | 211 | 3.0 | ○ | | | | | | | | | | | ● | |
| C 24 Extra | 212 | 2.5 – 3.0 | | | | | | | | | | | | | ● |
| C 24 R Supra | 212 | 2.5 – 3.0 | | | | | | | | | | | | ○ | ● |

● = main application ○ = possible applications

Cutting-off wheel

## A 24 Extra

**Advantages**

Proven a million times over ■ Standard wheel with outstanding price-performance ratio ■ For universal use in metalworking ■ Fast cutting off of solid material ■ High aggressiveness and long service life

**Applications:**

■ Metals

| Bond |
|---|
| Medium |
| **Quality class** |
| Extra |

| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 100 x 2,5 x 16 | | 80 m/s | 15,300 rpm | 25 | 188998 | | |
| 115 x 2,5 x 22,23 | | 80 m/s | 13,300 rpm | 25 | 242137 | | |
| 115 x 2,5 x 22,23 | | 80 m/s | 13,300 rpm | 25 | 188461 | | |
| 115 x 3,2 x 22,23 | | 80 m/s | 13,300 rpm | 25 | 209014 | | |
| 125 x 2,5 x 22,23 | | 80 m/s | 12,200 rpm | 25 | 242138 | | |
| 125 x 2,5 x 22,23 | | 80 m/s | 12,200 rpm | 25 | 188463 | | |
| 125 x 3,2 x 22,23 | | 80 m/s | 12,200 rpm | 25 | 209016 | | |
| 150 x 2,5 x 22,23 | | 80 m/s | 10,200 rpm | 25 | 235375 | | |
| 150 x 2,5 x 22,23 | | 80 m/s | 10,200 rpm | 25 | 235374 | | |
| 180 x 2 x 22,23 | | 80 m/s | 8,500 rpm | 25 | 286455 | | |
| 180 x 3 x 22,23 | | 80 m/s | 8,500 rpm | 25 | 13490 | | |
| 180 x 3 x 22,23 | | 80 m/s | 8,500 rpm | 25 | 189000 | | |
| 230 x 2 x 22,23 | | 80 m/s | 6,600 rpm | 25 | 286456 | | |
| 230 x 3 x 22,23 | | 80 m/s | 6,600 rpm | 25 | 13492 | | |
| 230 x 3 x 22,23 | | 80 m/s | 6,600 rpm | 25 | 189002 | | |

Cutting-off wheel

## A 24 R Supra

**Advantages**

Optimized combination for use on steel ■ Can be used on stainless steel ■ Good cutting properties ■ High aggressiveness and long service life

**Applications:**

■ Steel
☐ Stainless steel
☐ Castings

| Bond |
|---|
| Medium |
| **Quality class** |
| Supra |

| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 100 x 2,5 x 16 | | 80 m/s | 15,300 rpm | 25 | 13754 | | |
| 115 x 2,5 x 22,23 | | 80 m/s | 13,300 rpm | 25 | 13297 | | |
| 115 x 2,5 x 22,23 | | 80 m/s | 13,300 rpm | 25 | 13466 | | |
| 125 x 2,5 x 22,23 | | 80 m/s | 12,200 rpm | 25 | 13295 | | |

**Continuation ➔**

**Please observe: Please see Applications Guide on page 198 - 205, 206.**

### Continuation of A 24 R Supra, Cutting-off wheel

| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 125 x 2,5 x 22,23 | | 80 m/s | 12,200 rpm | 25 | 13738 | | |
| 150 x 2,5 x 22,23 | | 80 m/s | 10,200 rpm | 25 | 6667 | | |
| 180 x 3 x 22,23 | | 80 m/s | 8,500 rpm | 25 | 13456 | | |
| 180 x 3 x 22,23 | | 80 m/s | 8,500 rpm | 25 | 13470 | | |
| 180 x 3,5 x 22,23 | | 80 m/s | 8,500 rpm | 25 | 13474 | | |
| 230 x 3 x 22,23 | | 80 m/s | 6,600 rpm | 25 | 13464 | | |
| 230 x 3 x 22,23 | | 80 m/s | 6,600 rpm | 25 | 13478 | | |

### Cutting-off wheel INOX

## A 24 N Supra

**Advantages**

Special recipe prevents smearing and clogging ■ High removal rate on stainless steel due to hardened aluminum oxide ■ Very high aggressiveness and long service life

**Applications:**

■ Stainless steel
☐ Aluminium

| Bond |
|---|
| Soft |
| **Quality class** |
| Supra |

| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 115 x 2,5 x 22,23 | | 80 m/s | 13,300 rpm | 25 | 3020 | | |
| 125 x 2,5 x 22,23 | | 80 m/s | 12,200 rpm | 25 | 2951 | | |
| 150 x 2,5 x 22,23 | | 80 m/s | 10,200 rpm | 25 | 235377 | | |
| 180 x 3 x 22,23 | | 80 m/s | 8,500 rpm | 25 | 13455 | | |
| 180 x 3 x 22,23 | | 80 m/s | 8,500 rpm | 25 | 13469 | | |
| 230 x 3 x 22,23 | | 80 m/s | 6,600 rpm | 25 | 13463 | | |
| 230 x 3 x 22,23 | | 80 m/s | 6,600 rpm | 25 | 13477 | | |

**Please observe: Please see Applications Guide on page 198 - 205, 206.**

**Cutting-off wheel INOX**

## A 36 R Supra

**Advantages**

Excellent cutting performance ■ High aggressiveness and long service life

**Applications:**

■ Stainless steel

| Bond |
|---|
| Medium |
| **Quality class** |
| Supra |

| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 115 x 2 x 22,23 | | 80 m/s | 13,300 rpm | 25 | 123208 | | |
| 125 x 2 x 22,23 | | 80 m/s | 12,200 rpm | 25 | 126849 | | |
| 150 x 2 x 22,23 | | 80 m/s | 10,200 rpm | 25 | 251752 | | |
| 180 x 2,5 x 22,23 | | 80 m/s | 8,500 rpm | 25 | 123209 | | |
| 230 x 2,5 x 22,23 | | 80 m/s | 6,600 rpm | 25 | 123833 | | |

**Cutting-off wheel INOX**

## A 36 TZ Special

**Advantages**

Very good cutting performance, even with low grinding pressure ■ Maximum aggressiveness and long service life

**Applications:**

■ Stainless steel

☐ Steel

| Bond |
|---|
| Hard |
| **Quality class** |
| Special |

| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 115 x 2 x 22,23 | | 80 m/s | 13,300 rpm | 25 | 136549 | | |
| 125 x 2 x 22,23 | | 80 m/s | 12,200 rpm | 25 | 136550 | | |
| 180 x 2 x 22,23 | | 80 m/s | 8,500 rpm | 25 | 136551 | | |
| 230 x 2 x 22,23 | | 80 m/s | 6,600 rpm | 25 | 136552 | | |



**Please observe: Please see Applications Guide on page 198 - 205, 206.**

Cutting-off wheel INOX

## A 24 TZ Special

**Advantages**

Optimized combination for use on stainless steel ■ Maximum aggressiveness and service life

**Applications:**

■ Stainless steel
☐ Steel

| Bond |
|---|
| Hard |
| **Quality class** |
| Special |

| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 115 x 2,5 x 22,23 | | 80 m/s | 13,300 rpm | 25 | 136554 | | |
| 125 x 2,5 x 22,23 | | 80 m/s | 12,200 rpm | 25 | 136555 | | |
| 180 x 3 x 22,23 | | 80 m/s | 8,500 rpm | 25 | 136558 | | |
| 230 x 3 x 22,23 | | 80 m/s | 6,600 rpm | 25 | 136559 | | |

Cutting-off wheel INOX

## A 24 R/36 Special

**Advantages**

Special wheel for the nuclear industry ■ Free of iron, sulfur and chlorine ■ Maximum aggressiveness and service life

**Applications:**

■ Stainless steel

| Bond |
|---|
| Medium |
| **Quality class** |
| Special |

| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 100 x 2,5 x 16 | | 80 m/s | 15,300 rpm | 25 | 60533 | | |
| 115 x 2,5 x 22,23 | | 80 m/s | 13,300 rpm | 25 | 60534 | | |
| 125 x 2,5 x 22,23 | | 80 m/s | 12,200 rpm | 25 | 2825 | | |
| 180 x 3 x 22,23 | | 80 m/s | 8,500 rpm | 25 | 60537 | | |
| 230 x 3 x 22,23 | | 80 m/s | 6,600 rpm | 25 | 60061 | | |

**Please observe: Please see Applications Guide on page 198 - 205, 206.**

**Cutting-off wheel**

## A 46 N Supra

**Advantages**

Special combination prevents smearing and clogging ■ Optimized cutting off performance on non-ferrous metals ■ Very high aggressiveness and long service life

**Applications:**

■ Aluminium

| Bond |
|---|
| Soft |
| **Quality class** |
| Supra |

| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 115 x 2,5 x 22,23 | | 80 m/s | 13,300 rpm | 25 | 170707 | | |
| 125 x 2,5 x 22,23 | | 80 m/s | 12,200 rpm | 25 | 170708 | | |
| 180 x 3 x 22,23 | | 80 m/s | 8,500 rpm | 25 | 170709 | | |
| 230 x 3 x 22,23 | | 80 m/s | 6,600 rpm | 25 | 170710 | | |

**Cutting-off wheel**

## A 24 S Supra

**Advantages**

Optimized cutting off performance on cast and steel materials ■ Very high aggressiveness and service life

**Applications:**

■ Castings

☐ Steel

| Bond |
|---|
| Hard |
| **Quality class** |
| Supra |

| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 180 x 3 x 22,23 | | 80 m/s | 8,500 rpm | 25 | 13468 | | |
| 230 x 3 x 22,23 | | 80 m/s | 6,600 rpm | 25 | 13462 | | |




**Please observe: Please see Applications Guide on page 198 - 205, 206.**

Cutting-off wheel

## C 24 Extra

**Advantages**

Maximum ease of handling ■ Optimal for all mineral materials due to sharp, coarse SiC grit ■ High aggressiveness and long service life

**Applications:**

■ Stone/Concrete

**Bond**
Medium

**Quality class**
Extra

| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 100 x 2,5 x 16 | | 80 m/s | 15,300 rpm | 25 | 188999 | | |
| 115 x 2,5 x 22,23 | | 80 m/s | 13,300 rpm | 25 | 242143 | | |
| 115 x 2,5 x 22,23 | | 80 m/s | 13,300 rpm | 25 | 188462 | | |
| 125 x 2,5 x 22,23 | | 80 m/s | 12,200 rpm | 25 | 242144 | | |
| 125 x 2,5 x 22,23 | | 80 m/s | 12,200 rpm | 25 | 188464 | | |
| 180 x 3 x 22,23 | | 80 m/s | 8,500 rpm | 25 | 13489 | | |
| 180 x 3 x 22,23 | | 80 m/s | 8,500 rpm | 25 | 189001 | | |
| 230 x 3 x 22,23 | | 80 m/s | 6,600 rpm | 25 | 13491 | | |
| 230 x 3 x 22,23 | | 80 m/s | 6,600 rpm | 25 | 189003 | | |

Cutting-off wheel

## C 24 R Supra

**Advantages**

Optimal for all mineral materials due to sharp, coarse SiC grit ■ Very high aggressiveness and long service life

**Applications:**

■ Stone/Concrete

☐ Castings

**Bond**
Medium

**Quality class**
Supra

| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 115 x 2,5 x 22,23 | | 80 m/s | 13,300 rpm | 25 | 13465 | | |
| 125 x 2,5 x 22,23 | | 80 m/s | 12,200 rpm | 25 | 13739 | | |
| 150 x 2,5 x 22,23 | | 80 m/s | 10,200 rpm | 25 | 6668 | | |
| 180 x 3 x 22,23 | | 80 m/s | 8,500 rpm | 25 | 13453 | | |
| 230 x 3 x 22,23 | | 80 m/s | 6,600 rpm | 25 | 13461 | | |
| 230 x 3 x 22,23 | | 80 m/s | 6,600 rpm | 25 | 13475 | | |

**Please observe: Please see Applications Guide on page 198 - 205, 206.**

**Small abrasive wheel**

## A 24 R Supra

**Advantages**

For universal use in hard-to-reach areas ■ Very high aggressiveness and long service life

**Applications:**

- ■ Steel
- ☐ Stainless steel
- ☐ Castings

| Bond |
|---|
| Medium |
| **Quality class** |
| Supra |

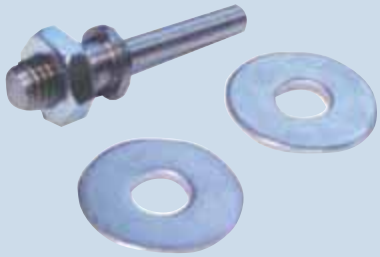
| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 40 x 2 x 6 | | 80 m/s | 38,200 rpm | 100 | 130536 | | |
| 50 x 2 x 6 | | 80 m/s | 30,600 rpm | 100 | 130537 | | |
| 70 x 2 x 6 | | 80 m/s | 21,800 rpm | 100 | 134234 | | |
| 70 x 2 x 10 | | 80 m/s | 21,800 rpm | 100 | 130540 | | |

**Fixing spindle**

## Fixing spindle

**Advantages**

Secure clamping of the small abrasive wheel A 24 R Supra



| Mounting | Thread diameter | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|
| 6 mm | 6 mm | 1 | 2790 | | |
| 10 mm | 6 mm | 1 | 2789 | | |



**Please observe: Please see Applications Guide on page 198 - 205, 206.**

## Kronenflex® cutting-off wheels 1.6 – 2.0 mm

KLINGSPOR Kronenflex® cutting-off wheels with disc thickness of 1.6 to 2.0 mm combine excellent cutting properties with a high degree of lateral stability.

These wheels provide convincing arguments especially in day-to-day applications when working on materials with medium-strength cross sections. They are known for their short cutting time, good stability and minimal burr formation.

These advantages in connection with the wide range of applications make KLINGSPOR Kronenflex cutting wheels of the 1.6 to 2.0 mm class the highest performing universal-wheel for daily use in metalworking.

## Typical materials for these products

- Steel
- Stainless steel
- Construction steel
- NF-metals
- Cast materials
- Solid materials
- Flat iron
- Tins
- Pipes

## Typical applications for these products

- Locksmiths
- Shipyards
- Steelwork
- Plant construction
- Metal works
- Vehicle construction

| Type | Page | Thickness [mm] | Material applications | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Steel | Hardened steels | Tool steel | Stainless steel | High-alloy steels | Corrosion and acid proof steels | Aluminium | Bronze | Cooper | Brass | Zinc die-casting |
| A 46 Extra | 215 | 1.6 | ● | ○ | ○ | ● | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| A 46 R Supra | 215 | 1.6 | ● | ● | ○ | ● | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| A 46 TZ Special INOX | 216 | 1.6 – 1.9 | ● | ● | ● | ● | ● | ● | ○ | ○ | ○ | ○ | ● |
| A 46 VZ Special INOX | 217 | 2 | ○ | ○ | ● | ● | ● | ● | | | | | ○ |

● = main application ○ = possible applications

**Cutting-off wheel**

## A 46 Extra

**Advantages**

Minimal burr formation ■ High aggressiveness and long service life


**Applications:**

- Stainless steel
- Metals

| Bond |
|---|
| Hard |
| **Quality class** |
| Extra |

| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 115 x 1,6 x 22,23 | | 80 m/s | 13,300 rpm | 25 | 263247 | | |
| 125 x 1,6 x 22,23 | | 80 m/s | 12,200 rpm | 25 | 263248 | | |

**Cutting-off wheel INOX**

## A 46 R Supra

**Advantages**

Minimal burr formation ■ Very high aggressiveness and long service life


**Applications:**

- Stainless steel
- Steel

| Bond |
|---|
| Hard |
| **Quality class** |
| Supra |

| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 125 x 1,6 x 22,23 | | 80 m/s | 12,200 rpm | 25 | 222954 | | |



**Please observe: Please see Applications Guide on page 198 - 205, 214.**

Cutting-off wheel INOX

## A 46 TZ Special

**Advantages**

Minimal burr formation ■ Maximum aggressiveness and service life

**Applications:**

■ Stainless steel
☐ Steel

| Bond |
|---|
| Hard |
| **Quality class** |
| Special |

| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 100 x 1,6 x 16 | | 80 m/s | 15,300 rpm | 25 | 194071 | | |
| 115 x 1,6 x 22,23 | | 80 m/s | 13,300 rpm | 25 | 187170 | | |
| 115 x 1,6 x 22,23 | | 80 m/s | 13,300 rpm | 25 | 235378 | | |
| 125 x 1,6 x 22,23 | | 80 m/s | 12,200 rpm | 25 | 187171 | | |
| 125 x 1,6 x 22,23 | | 80 m/s | 12,200 rpm | 25 | 235379 | | |
| 150 x 1,6 x 22,23 | | 80 m/s | 10,200 rpm | 25 | 241472 | | |
| 180 x 1,6 x 22,23 | | 80 m/s | 8,500 rpm | 25 | 221161 | | |
| 230 x 1,9 x 22,23 | | 80 m/s | 6,600 rpm | 25 | 224084 | | |
| 230 x 1,9 x 22,23 | | 80 m/s | 6,600 rpm | 25 | 265044 | | |

Wheel flange

## FL 76

**Advantages**

Use of the wheel flange increases lateral stability with thin cutting-off wheels having a flat form and diameters of 180 and 230 mm

| Suitable for | Diameter | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|
| A 46 TZ | 76 | 1 | 236130 | | |

**Please observe: Please see Applications Guide on page 198 - 205, 214.**

**Thin cutting-off wheel & grinding disc**

## A 46 VZ Special

**Advantages**

Long service life ■ Multi-purpose: cutting off and light rough grinding with one wheel ■ Very high aggressiveness in cutting ■ No change of wheel necessary


**Applications:**

- ■ Stainless steel
- ■ NF metals
- ☐ Steel

| Bond |
|---|
| Hard |
| **Quality class** |
| Special |

| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 115 x 2 x 22,23 | | 80 m/s | 13,300 rpm | 25 | 298176 | | |
| 125 x 2 x 22,23 | | 80 m/s | 12,200 rpm | 25 | 298177 | | |



**Please observe: Please see Applications Guide on page 198 - 205, 214.**

## Kronenflex® cutting-off wheels 0.8 – 1.0 mm

KLINGSPOR Kronenflex® cutting-off wheels with disc thickness of 0.8 to 1.0 mm are very thin cutting-off wheels with very short cutting times and minimal burr formation.

These cutting-off wheels develop their full power when working on thin-walled materials and are known for their precise, accurate and fast cuts at lowest thermal loads. Due to the cutting-off wheels' excellent cutting properties the weight of the machine itself provides suitable grinding pressure.

KLINGSPOR Kronenflex® cutting-off wheels of the 0.8 to 1.0 mm class are known for their high level of safety, efficiency and productivity.

## Typical materials for these products

- Steel
- Stainless steel
- Construction steel
- NF-metals
- Cast materials
- Thin-walled profiles
- Thin tins
- Thin pipes
- Trapezoidal sheeting
- Flat irons
- Cable ducts
- Steel cables

## Typical applications for these products

- Bodywork
- Maintenance and repair work
- Locksmiths
- Steelwork
- Plant construction
- Container construction
- Upkeep
- Metal works
- Vehicle construction

| Type | Page | Thickness [mm] | Material applications | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Steel | Hardened steel | Tool steel | Stainless steel | High-alloy steel | Corrosion and acid proof steels | Aluminium | Bronze | Cooper | Brass | Zinc die-casting | Cast iron |
| A 60 Extra | 219, 220 | 1.0 | ● | ○ | ○ | ● | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| A 60 R Supra INOX | 221 | 1.0 | ● | ● | ● | ● | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| A 60 TZ Special INOX | 221, 222 | 1.0 | ● | ● | ● | ● | ● | ● | ○ | ○ | ○ | ○ | ● | ○ |
| T 60 AZ Special INOX | 222 | 1.0 | ● | ● | ● | ● | ● | ● | ○ | ○ | ○ | ○ | ● | ○ |
| A 80 TZ Special INOX | 219 | 0.8 | ● | ● | ● | ● | ● | ● | ● | ○ | ○ | ○ | ○ | ○ |
| A 60 N Supra | 223 | 1.0 | ○ | ○ | ○ | ○ | ○ | ○ | ● | ● | ● | ● | ○ | ○ |

● = main application ○ = possible applications

**Cutting-off wheel**

## A 80 TZ Special

**Advantages**

Minimal burr formation ■ Low thermal load ■ Maximum aggressiveness and service life

**Applications:**

- ■ Stainless steel
- ■ NF metals
- ☐ Steel

| Bond |
|---|
| Hard |
| **Quality class** |
| Special |

| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 115 x 0,8 x 22,23 | | 80 m/s | 13,300 rpm | 25 | 260265 | | |
| 125 x 0,8 x 22,23 | | 80 m/s | 12,200 rpm | 25 | 260266 | | |

**Cutting-off wheel**

## A 60 Extra

**Advantages**

Minimal burr formation ■ Low thermal load ■ High aggressiveness and long service life


**Applications:**

- ■ Stainless steel
- ■ Metals

| Bond |
|---|
| Hard |
| **Quality class** |
| Extra |

| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 115 x 1 x 22,23 | | 80 m/s | 13,300 rpm | 25 | 262936 | | |
| 125 x 1 x 22,23 | | 80 m/s | 12,200 rpm | 25 | 262937 | | |




**Please observe: Please see Applications Guide on page 198 - 205, 218.**

Cutting-off wheel

## A 60 Extra

**Advantages**

Minimal burr formation ■ Low thermal load ■ High aggressiveness and long service life ■ 10 pieces in a tin with viewing window

**Applications:**

- Stainless steel
- Metals

**Bond**
Hard

**Quality class**
Extra

| Diameter x Width Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/Tin | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 125 x 1 x 22,23 | | 80 m/s | 12,200 rpm | 10 discs | 310500 | | |

Minimum order quantity = 5 tins

Cutting-off wheel

## A 60 Extra

**Advantages**

Minimal burr formation ■ Low thermal load ■ High aggressiveness and long service life ■ 5 tins in a sales display

**Applications:**

- Stainless steel
- Metals

**Bond**
Hard

**Quality class**
Extra

| Diameter x Width Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/Display | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 125 x 1 x 22,23 | | 80 m/s | 12,200 rpm | 5 tins with 10 discs | 312031 | | |

**Please observe: Please see Applications Guide on page 198 - 205, 218.**

**Cutting-off wheel INOX**

## A 60 R Supra

**Advantages**

Minimal burr formation ■ Low thermal load ■ Very high aggressiveness and long service life


**Applications:**

- ■ Stainless steel
- ■ Steel
- ☐ NF metals

| Bond |
|---|
| Hard |
| **Quality class** |
| Supra |

| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 115 x 1 x 22,23 | | 80 m/s | 13,300 rpm | 25 | 249512 | | |
| 125 x 1 x 22,23 | | 80 m/s | 12,200 rpm | 25 | 249513 | | |

**Cutting-off wheel**

## A 60 TZ Special

**Advantages**

Free of iron, sulfur and chlorine ■ Fast cutting ■ Minimal burr formation ■ Low thermal load ■ Maximum aggressiveness and service life


**Applications:**

- ■ Stainless steel
- ■ NF metals
- ☐ Steel

| Bond |
|---|
| Hard |
| **Quality class** |
| Special |

| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 100 x 1 x 16 | | 80 m/s | 15,300 rpm | 25 | 202402 | | |
| 115 x 1 x 22,23 | | 80 m/s | 13,300 rpm | 25 | 202400 | | |
| 115 x 1 x 22,23 | | 80 m/s | 13,300 rpm | 25 | 233741 | | |
| 125 x 1 x 22,23 | | 80 m/s | 12,200 rpm | 25 | 202401 | | |
| 125 x 1 x 22,23 | | 80 m/s | 12,200 rpm | 25 | 233742 | | |



**Please observe: Please see Applications Guide on page 198 - 205, 218.**

Cutting-off wheel

## A 60 TZ Special

**Advantages**

Free of iron, sulfur and chlorine ■ Fast cutting ■ Minimal burr formation ■ Low thermal load ■ Maximum aggressiveness and service life ■ 10 pieces in a tin with viewing window

**Applications:**

- ■ Stainless steel
- ■ NF metals
- ☐ Steel

| Bond |
|---|
| Hard |
| **Quality class** |
| Special |

| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/Tin | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 115 x 1 x 22,23 | | 80 m/s | 13,300 rpm | 10 discs | 310503 | | |
| 125 x 1 x 22,23 | | 80 m/s | 12,200 rpm | 10 discs | 310504 | | |

Minimum order quantity = 5 tins

Cutting-off wheel INOX

## T 60 AZ Special

**Advantages**

Free of iron, sulfur and chlorine ■ Minimal burr formation ■ Low thermal load ■ Maximum aggressiveness and service life


**Applications:**

- ■ Stainless steel
- ■ NF metals
- ■ Steel

| Bond |
|---|
| Hard |
| **Quality class** |
| Special |

| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 115 x 1 x 22,23 | | 80 m/s | 13,300 rpm | 25 | 314675 | | |
| 125 x 1 x 22,23 | | 80 m/s | 12,200 rpm | 25 | 313800 | | |

**Please observe: Please see Applications Guide on page 198 - 205, 218.**

**Cutting-off wheel**

## A 60 N Supra

**Advantages**

Special combination prevents smearing and clogging ■ Minimal burr formation ■ Very high aggressiveness and long service life


**Applications:**

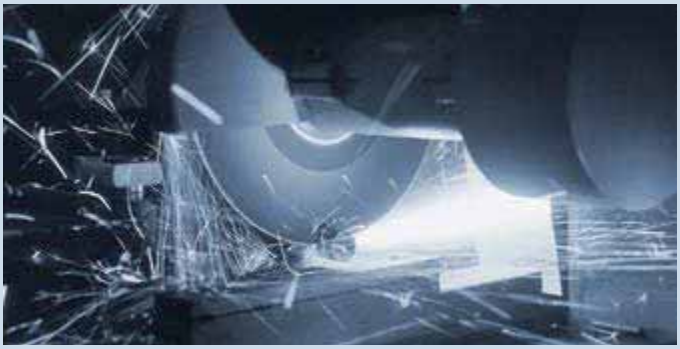
■ Aluminium
☐ Steel

| Bond |
|---|
| Soft |
| **Quality class** |
| Supra |

| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 115 x 1 x 22,23 | | 80 m/s | 13,300 rpm | 25 | 264297 | | |
| 125 x 1 x 22,23 | | 80 m/s | 12,200 rpm | 25 | 264298 | | |




**Please observe: Please see Applications Guide on page 198 - 205, 218.**



## Kronenflex® large cutting-off wheels

KLINGSPOR Kronenflex large cutting-off wheels are high-performance, robust wheels for special uses with an outer diameter of 300 mm and more.

Its high lateral stability ensures safe operation also in connection with hard cutting applications. The optimized grits and resins are specifically created for the specific application areas. The cutting-off wheels are known for their fast cuts and low thermal material loads, as well as their long service life.

KLINGSPOR Kronenflex large cutting-off wheels uses range from bench cutting to hand-held machines, from railway construction to industrial uses on stationary machines, this product is the ideal solution if outstanding performance and a high degree of safety is what is needed.

## Cutting-off wheels for different types of machines:

- Hand held machines 80m/s
- Hand held machines with a clamping device for vigonole rails 100m/s
- Transportable bench chop saws < 3KW
- Stationary saws / cutters up to 5KW
- Stationary saws / cutters > 5KW

**ATTENTION! Stationary cutting-off wheels may not be used with free-hand machines!**

| | | | Material applications | | | | | | | | | | | | | | Machines | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Type** | **Page** | **Thickness [mm]** | Steel | Hardened steels | Tool steel | Stainless steel | High-alloy steels | Corrosion and acid proof steels | Aluminium | Bronze | Cooper | Brass | Zinc die-casting | Cast iron | Stone / concrete | Asphalt | Bench chop saws | Hand held machines 80m/s | Hand held machines 100m/s | Stationary < 5KW |
| A 24 Extra | 227 | 3.5 | ● | ○ | ● | ○ | ○ | ○ | | | | | | ○ | | | | ● | | |
| C 24 Extra | 227 | 3.5 | | | | | | | | | | | | ○ | ● | ○ | | ● | | |
| A 24 R Supra | 231 | 3.0 – 4.5 | ● | ● | ● | ○ | ○ | ○ | | | | | | ○ | | | | | | ● |
| A 24 N Supra INOX | 231 | 3.5 | ○ | ● | ● | ● | ● | ● | ○ | ○ | ○ | ○ | ○ | | | | | | | ● |
| A 24 R Special | 228 | 3.5 – 4.0 | ● | ● | ● | ● | ● | ● | | | | | | ○ | | | | ● | | |
| T 24 AX Special | 230 | 3.5 – 4.0 | ● | ● | | | | | | | | | | | | | | | ● | |
| C 24 RA Supra | 229 | 3.5 – 4.0 | | | | | | | | | | | | | ○ | ● | | ● | | |
| C 24 RT Special | 229 | 3.5 | | | | | | | | | | | | | ● | | | ● | | |
| C 24 RT/ 34 Special | 228 | 3.5 | ● | | | | | | | | | | | ○ | ○ | | | ● | | |
| A 30 N Special | 232 | 2.5 – 3.5 | ● | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | | | ● | | | |

● = main application ○ = possible applications

## Products for hand held machines

These products were developed for use with hand held machines (petrol, electric, high-frequency).

Please note that it is very important that the maximum operating speed setting on the machines and the maximum operating speed setting on the products match. 80 m/s and 100 m/s machines are available on the market. KLINGSPOR large cutting-off wheels for hand held machines are certified for 80 m/s hand held machines.

Products for railway construction with a clamping device are certified up to 100 m/s.

## Products for transportable bench chop saws

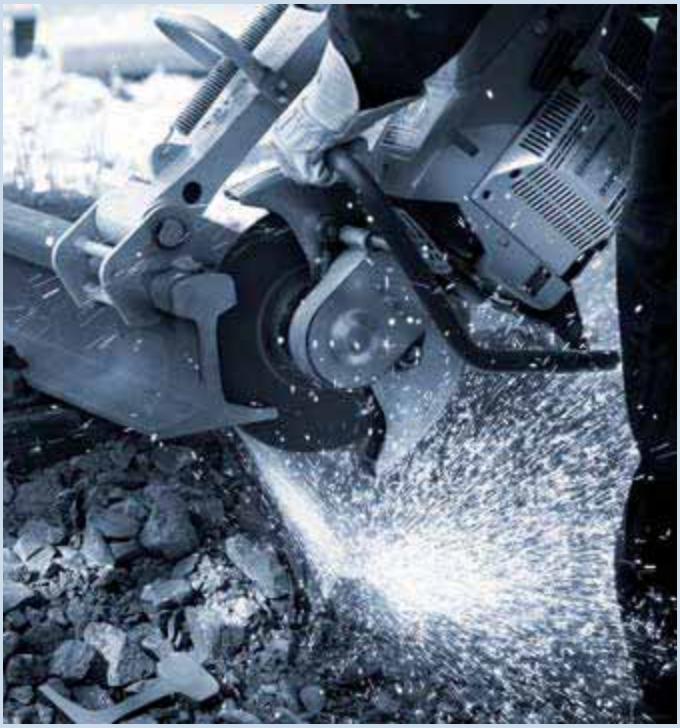
Cutting-wheels for this product group are suitable for low-power bench chop saws. These products may not be used with large stationary and / or hand held machines.

They are known for their high cutting rate, which ensures fast and cool cutting.

## Products for stationary saws / cutters

Stationary machines are best suited for economical and safe cutting of large cross-sections and heavy work pieces.

Products in this segment with their outstanding performance and long service life fulfil the most demanding requirements of stationary cutting. Good aggressiveness ensures low thermal loads when working on large cross sections.



## Which cutting-off wheel is used with which machine?

Large cutting-off wheels for stationary machines and large cutting-off wheels for hand held machines are designed differently and their build is optimized for the respective machine type. For safety reasons large cutting-off wheels for stationary machines may never be used with hand held machines.

The bore diameter of a large cutting-off wheel does not indicate if it is a wheel that can be used with a stationary machine or if it is a wheel that can be used with a hand held machine.

A binding overview regarding which KLINGSPOR wheel type is to be used with which machine type is provided in the table below.

| Type | Ø [mm] | Thick-ness [mm] | Bore Ø [mm] | Machines | Safety | | |
|---|---|---|---|---|---|---|---|
| | | | | | Max. operating speed | Application type (EN12413) | |
| A 24 Extra | 300 | 3.5 | 20 / 22.23 | general hand held machines (petrol, electric, high-frequency) | 80 m/s | free-hand grinding | |
| C 24 Extra | 300 | 3.5 | 20 / 22.23 | | 80 m/s | | |
| A 24 R Supra | 250 | 3 | 32 | stationary saws / cutters | 100 m/s | stationary guided grinding | >3 KW |
| | 300 | 3 | 22.23 / 25.4 / 30 / 32 | | 100 m/s | | >3 KW |
| | 350 | 3.5 | 25.4 / 32 | | 100 m/s | | >3 KW |
| | 400 | 4.5 | 25.4 / 32 / 40 | | 100 m/s | | >3 KW |
| A 24 N Supra | 350 | 3.5 | 25.4 | | 100 m/s | | >3 KW |
| A 24 R/06 Supra | 400 | 4 | 25.4 | | 100 m/s | | >5 KW |
| A 24 R Special | 300 | 3.5 | 20 / 22.23 / 25.4 | general hand held machines (petrol, electric, high-frequency) | 80 m/s | free-hand grinding | |
| | 350 | 4 | 20 / 22.23 / 25.4 | | 80 m/s | | |
| T 24 AX Special | 300 | 3.5 | 22.23 | general hand held machines (petrol, electric, high-frequency, hydraulic) with a clamping device | 100 m/s | stationary guided grinding | |
| | 350 | 4 | 22.23 / 25.4 | | 100 m/s | | |
| | 400 | 4.5 | 25.4 | | 100 m/s | | |
| C 24 RA Special | 300 | 3.5 | 20 | general hand held machines, joint cutters (petrol, electric, high-frequency) | 80 m/s | free-hand grinding | |
| | 350 | 4 | 20 / 25.4 | | 80 m/s | | |
| A 30 N Special | 300 | 2.5 | 25.4 | transportable bench chop saws, chop saws | 80 m/s | stationary guided grinding | <3 KW |
| | 350 | 3 | 25.4 | | 80 m/s | | <3 KW |
| | 400 | 3.5 | 25.4 | | 80 m/s | | <3 KW |
| C 24 RT Special | 300 | 3.5 | 20 | general hand held machines (petrol, electric, high-frequency) | 80 m/s | free-hand grinding | |
| C 24 RT/34 Special | 300 | 3.5 | 20 | | 80 m/s | | |

**Cutting-off wheel**

## A 24 Extra

**Advantages**

Standard wheel with outstanding price-performance ratio ■ For universal use in metalworking ■ For use on gas-powered 80 m/s free-hand machines ■ High aggressiveness and long service life

**Applications:**

■ Metals

| Bond |
|---|
| Medium |
| **Quality class** |
| Extra |

| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 300 x 3,5 x 20 | | 80 m/s | 5,100 rpm | 10 | 288221 | | |
| 300 x 3,5 x 22,23 | | 80 m/s | 5,100 rpm | 10 | 288222 | | |

**Cutting-off wheel**

## C 24 Extra

**Advantages**

Optimal for all mineral materials due to sharp, coarse SiC grain ■ Fast cutting ■ For use on gas-powered free-hand machines with a cutting speed of 80 m/s ■ High aggressiveness and long service life

**Applications:**

■ Stone/Concrete

| Bond |
|---|
| Medium |
| **Quality class** |
| Extra |

| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 300 x 3,5 x 20 | | 80 m/s | 5,100 rpm | 10 | 288223 | | |
| 300 x 3,5 x 22,23 | | 80 m/s | 5,100 rpm | 10 | 288224 | | |



**Please observe: Please see Applications Guide on page 198 - 205, 224 - 226.**

Cutting-off wheel

## A 24 R Special

**Advantages**

Fast cutting, also of solid material ■ Optimized combination for use on steel ■ Can be also used on stainless steel ■ For use on gas-powered 80 m/s free-hand machines ■ Maximum aggressiveness and service life

**Applications:**

■ Steel
☐ Stainless steel
☐ Castings

**Bond**
Medium

**Quality class**
Special

| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 300 x 3,5 x 20 | | 80 m/s | 5,100 rpm | 10 | 288245 | | |
| 300 x 3,5 x 22,23 | | 80 m/s | 5,100 rpm | 10 | 288246 | | |
| 300 x 3,5 x 25,4 | | 80 m/s | 5,100 rpm | 10 | 288247 | | |
| 350 x 4 x 20 | | 80 m/s | 4,400 rpm | 10 | 288248 | | |
| 350 x 4 x 22,23 | | 80 m/s | 4,400 rpm | 10 | 288249 | | |
| 350 x 4 x 25,4 | | 80 m/s | 4,400 rpm | 10 | 288250 | | |

Cutting-off wheel

## C 24 RT/34 Special

**Advantages**

Special combination for concrete/castings ■ For use on gas-powered free-hand machines with a cutting speed of 80 m/s ■ Maximum aggressiveness and service life

**Applications:**

■ Steel
☐ Castings
☐ Stone/Concrete

**Bond**
Medium

**Quality class**
Special

| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 300 x 3,5 x 20 | | 80 m/s | 5,100 rpm | 10 | 288256 | | |

**Please observe: Please see Applications Guide on page 198 - 205, 224 - 226.**

**Cutting-off wheel**

## C 24 RA Special

**Advantages**

Special combination for asphalt ■ No clogging ■ For use on gas-powered free-hand machines with a cutting speed of 80 m/s ■ Maximum aggressiveness and service life

**Applications:**

■ Asphalt
☐ Stone/Concrete

| Bond |
|---|
| Hard |
| **Quality class** |
| Special |

| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 300 x 3,5 x 20 | | 80 m/s | 5,100 rpm | 10 | 288251 | | |
| 350 x 4 x 20 | | 80 m/s | 4,400 rpm | 10 | 288252 | | |
| 350 x 4 x 25,4 | | 80 m/s | 4,400 rpm | 10 | 288253 | | |

**Cutting-off wheel**

## C 24 RT Special

**Advantages**

For all mineral materials ■ Excellent cutting performance ■ For use on gas-powered free-hand machines with a cutting speed of 80 m/s ■ Maximum aggressiveness and service life

**Applications:**

■ Stone/Concrete

| Bond |
|---|
| Medium |
| **Quality class** |
| Special |

| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 300 x 3,5 x 20 | | 80 m/s | 5,100 rpm | 10 | 288254 | | |



**Please observe: Please see Applications Guide on page 198 - 205, 224 - 226.**

Cutting-off wheel

# T 24 AX Special

**Advantages**

For universal use on all rail types ■ Very fast cutting ■ For use on gas-powered cutting-off machines with a cutting speed of 100 m/s and clamping device ■ Maximum aggressiveness and service life due to hardened special aluminum oxide

**Applications:**

■ Steel

| Bond |
|---|
| Hard |
| **Quality class** |
| Special |

| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 300 x 3,5 x 22,23 | | 100 m/s | 6,400 rpm | 10 | 314012 | | |
| 350 x 4 x 22,23 | | 100 m/s | 5,500 rpm | 10 | 314013 | | |
| 350 x 4 x 25,4 | | 100 m/s | 5,500 rpm | 10 | 314014 | | |
| 400 x 4 x 25,4 | | 100 m/s | 4,800 rpm | 10 | 314035 | | |

**Please observe: Please see Applications Guide on page 198 - 205, 224 - 226.**

**Cutting-off wheel**

## A 24 R Supra

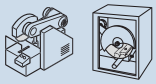
**Advantages**

Optimized combination for use on steel ■ Can be used on stainless steel ■ Good cutting properties ■ Optimal for stationary 3 - 5 kW cutting-off machines ■ High aggressiveness and long service life

**Applications:**

- ■ Steel
- ☐ Stainless steel
- ☐ Castings

| Bond |
|---|
| Medium |
| **Quality class** |
| Supra |



| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 250 x 3 x 32 | | 100 m/s | 7,600 rpm | 10 | 2465 | | |
| 300 x 3 x 22,23 | | 100 m/s | 6,400 rpm | 10 | 71365 | | |
| 300 x 3 x 25,4 | | 100 m/s | 6,400 rpm | 10 | 6793 | | |
| 300 x 3 x 30 | | 100 m/s | 6,400 rpm | 10 | 13524 | | |
| 300 x 3 x 32 | | 100 m/s | 6,400 rpm | 10 | 6807 | | |
| 350 x 3,5 x 25,4 | | 100 m/s | 5,500 rpm | 10 | 13528 | | |
| 350 x 3,5 x 32 | | 100 m/s | 5,500 rpm | 10 | 13536 | | |
| 400 x 4,5 x 25,4 | | 100 m/s | 4,800 rpm | 10 | 292933 | | |
| 400 x 4,5 x 32 | | 100 m/s | 4,800 rpm | 10 | 292932 | | |
| 400 x 4,5 x 40 | | 100 m/s | 4,800 rpm | 10 | 296567 | | |

**Cutting-off wheel INOX**

## A 24 N Supra

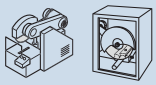
**Advantages**

Hardened aluminum oxide ■ Special combination prevents smearing and clogging ■ Optimal for stationary 3 - 5 kW cutting-off machines ■ High aggressiveness and long service life

**Applications:**

- ■ Stainless steel
- ☐ Steel
- ☐ Aluminium

| Bond |
|---|
| Soft |
| **Quality class** |
| Supra |



| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 350 x 3,5 x 25,4 | | 100 m/s | 5,500 rpm | 10 | 13527 | | |



**Please observe: Please see Applications Guide on page 198 - 205, 224 - 226.**

Cutting-off wheel

# A 30 N Special

**Advantages**

For universal use on chop saws ■ Minimal burr formation ■ Can be used on table cutting-off machines < 3 kW ■ Maximum aggressiveness and service life

**Applications:**

- ■ Steel
- ☐ Stainless steel
- ☐ Aluminium
- ☐ Castings

| Bond |
| --- |
| Soft |
| **Quality class** |
| Special |

| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 300 x 2,5 x 25,4 | | 80 m/s | 5,100 rpm | 10 | 119627 | | |
| 350 x 3 x 25,4 | | 80 m/s | 4,400 rpm | 10 | 119628 | | |
| 400 x 3,5 x 25,4 | | 80 m/s | 3,800 rpm | 10 | 119629 | | |

**Please observe: Please see Applications Guide on page 198 - 205, 224 - 226.**

## Kronenflex® grinding discs

Kronenflex® grinding discs are characterised by their permanent high level of attack and maximum stock removal. The optimum relationship between performance and service life is guaranteed up to the complete use of the disc.

Kronenflex® grinding discs are used in all major surface grinding applications, as well as for edge bevelling and burr removal. KLINGSPOR offers professional advice in selecting the right grinding disc for you.

From general metalworking to material-related applications in steel, stainless steel and NF-metals, to the more specialised requirements of the nuclear industry, KLINGSPOR has the products you need. Discs for stone grinding and cup grinding wheels round off our programme.

Our engineers are standing by to help you, should you have specific problems or technical questions. You may take advantage of our technical consulting services whether at KLINGSPOR or directly on site.

## Practical tips

The “rule of thumb” also applies to grinding discs: the harder the material, the softer the bond of the grinding disc.

In addition, the application plays a very decisive role.

Corners and burrs have very sharp edges and easily tear the grit out of the bond. We recommend the use of a hard bond.

If on the other hand one is working on surfaces i.e. small welded seams, a disc that is too hard would easily become dull and no longer grip the material. The disc would achieve a good service life, but this would result in a low stock removal rate and high work costs.

For finish grinding the best disc bond is a medium or soft disc bond.

| Type | Page | Thickness [mm] | Material applications | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Steel | Hardened steels | Tool steel | Stainless steel | High-alloy steels | Corrosion and acid proof steels | Aluminium | Bronze | Cooper | Brass | Zinc die-casting | Cast iron | Stone / concrete |
| A 24 Extra | 235 | 6.0 - 8.0 | ● | ○ | ○ | ○ | ○ | ○ | | | | | ○ | ○ | |
| A 24 Extra T | 235 | 6.0 - 8.0 | ● | ○ | ○ | ○ | ○ | ○ | | | | | | ○ | |
| A 24 R Supra | 236 | 4.0 - 10 | ● | ● | ● | ○ | ○ | ○ | | | | | | ○ | |
| A 24 R/01 Special | 236 | 4 | ● | ● | ● | ○ | ○ | ○ | | | | | | | |
| A 24 N Supra INOX | 237 | 6.0 - 8.0 | ○ | ● | ○ | ● | ● | ● | | | | | | | |
| A 24 R/36 Special | 237 | 6 | ○ | ○ | ○ | ● | ● | ● | | | | | | | |
| A 46 N Supra | 238 | 6.0 - 8.0 | | | | | | | ● | ○ | ○ | ○ | ○ | | |
| A 24 S Supra | 238 | 7 | ○ | | | | | | | | | | | ● | |
| AC 24 R Supra | 239 | 8 | | | | | | | | | | | | ● | |
| A 24 TX Special | 239 | 6 | ○ | ○ | ○ | ○ | ○ | ○ | | | | | | ● | |
| C 24 R Supra | 240 | 6 | | | | | | | | | | | | ○ | ● |

● = main application ○ = possible applications

**Grinding disc**

## A 24 Extra

**Advantages**

Standard disc with excellent price-performance ratio ■ For universal use in metalworking ■ Excellent results on all standard angle grinders ■ High aggressiveness and long service life

**Applications:**

■ Metals

| Bond |
|---|
| Medium |
| **Quality class** |
| Extra |

| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 100 x 6 x 16 |  | 80 m/s | 15,300 rpm | 10 | 189004 | | |
| 115 x 6 x 22,23 |  | 80 m/s | 13,300 rpm | 10 | 188465 | | |
| 125 x 6 x 22,23 |  | 80 m/s | 12,200 rpm | 10 | 188466 | | |
| 150 x 6 x 22,23 |  | 80 m/s | 10,200 rpm | 10 | 235371 | | |
| 180 x 6 x 22,23 |  | 80 m/s | 8,500 rpm | 10 | 13444 | | |
| 180 x 8 x 22,23 |  | 80 m/s | 8,500 rpm | 10 | 13446 | | |
| 230 x 6 x 22,23 |  | 80 m/s | 6,600 rpm | 10 | 13447 | | |
| 230 x 8 x 22,23 |  | 80 m/s | 6,600 rpm | 10 | 13448 | | |

**Grinding disc**

## A 24 Extra T

**Advantages**

Optimal for edge work and for removal of stubborn burrs ■ High aggressiveness and long service life

**Applications:**

■ Metals

| Bond |
|---|
| Hard |
| **Quality class** |
| Extra |

| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 180 x 6 x 22,23 |  | 80 m/s | 8,500 rpm | 10 | 13794 | | |
| 180 x 8 x 22,23 |  | 80 m/s | 8,500 rpm | 10 | 13445 | | |



**Please observe: Please see Applications Guide on page 198 - 205, 234.**

Grinding disc

## A 24 R Supra

**Advantages**

With optimized recipe for use on steel ■ Also suitable for use on stainless steel ■ Large product range ■ Very high aggressiveness and long service life

**Applications:**

■ Steel
☐ Stainless steel
☐ Castings

| Bond |
|---|
| Medium |
| **Quality class** |
| Supra |

| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 100 x 4 x 16 | | 80 m/s | 15,300 rpm | 10 | 13400 | | |
| 100 x 6 x 16 | | 80 m/s | 15,300 rpm | 10 | 6578 | | |
| 115 x 4 x 22,23 | | 80 m/s | 13,300 rpm | 10 | 13746 | | |
| 115 x 6 x 22,23 | | 80 m/s | 13,300 rpm | 10 | 13401 | | |
| 125 x 4 x 22,23 | | 80 m/s | 12,200 rpm | 10 | 240831 | | |
| 125 x 6 x 22,23 | | 80 m/s | 12,200 rpm | 10 | 13402 | | |
| 150 x 6 x 22,23 | | 80 m/s | 10,200 rpm | 10 | 13403 | | |
| 180 x 4 x 22,23 | | 80 m/s | 8,500 rpm | 10 | 13408 | | |
| 180 x 7 x 22,23 | | 80 m/s | 8,500 rpm | 10 | 13413 | | |
| 180 x 8 x 22,23 | | 80 m/s | 8,500 rpm | 10 | 13418 | | |
| 180 x 10 x 22,23 | | 80 m/s | 8,500 rpm | 10 | 13423 | | |
| 230 x 4 x 22,23 | | 80 m/s | 6,600 rpm | 10 | 13428 | | |
| 230 x 6 x 22,23 | | 80 m/s | 6,600 rpm | 10 | 13433 | | |
| 230 x 8 x 22,23 | | 80 m/s | 6,600 rpm | 10 | 13438 | | |

Grinding disc

## A 24 R/01 Special

**Advantages**

Special disc for pipeline and tank construction ■ Suitable for root seams ■ For repair of weld seams ■ Maximum aggressiveness and service life

**Applications:**

■ Steel
☐ Stainless steel

| Bond |
|---|
| Medium |
| **Quality class** |
| Special |

| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 125 x 4 x 22,23 | | 80 m/s | 12,200 rpm | 10 | 130825 | | |
| 180 x 4 x 22,23 | | 80 m/s | 8,500 rpm | 10 | 13756 | | |

**Please observe: Please see Applications Guide on page 198 - 205, 234.**

**Grinding disc INOX**

## A 24 N Supra

**Advantages**

High removal rate on stainless steel ■ Optimal ratio between removal and wear ■ Very high aggressiveness and long service life

**Applications:**

■ Stainless steel
☐ Aluminium

| Bond |
|---|
| Soft |
| **Quality class** |
| Supra |

| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 115 x 6 x 22,23 | | 80 m/s | 13,300 rpm | 10 | 2923 | | |
| 125 x 6 x 22,23 | | 80 m/s | 12,200 rpm | 10 | 2922 | | |
| 180 x 4 x 22,23 | | 80 m/s | 8,500 rpm | 10 | 13407 | | |
| 180 x 6 x 22,23 | | 80 m/s | 8,500 rpm | 10 | 13412 | | |
| 180 x 8 x 22,23 | | 80 m/s | 8,500 rpm | 10 | 13417 | | |
| 230 x 6 x 22,23 | | 80 m/s | 6,600 rpm | 10 | 13432 | | |

**Grinding disc**

## A 24 R/36 Special

**Advantages**

Special wheel for the nuclear industry ■ Free of iron, sulfur and chlorine ■ Optimal ratio between removal and wear ■ Maximum aggressiveness and service life

**Applications:**

■ Stainless steel

| Bond |
|---|
| Medium |
| **Quality class** |
| Special |

| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 115 x 6 x 22,23 | | 80 m/s | 13,300 rpm | 10 | 2488 | | |
| 125 x 6 x 22,23 | | 80 m/s | 12,200 rpm | 10 | 2830 | | |
| 180 x 6 x 22,23 | | 80 m/s | 8,500 rpm | 10 | 2463 | | |



**Please observe: Please see Applications Guide on page 198 - 205, 234.**

Grinding disc

## A 46 N Supra

**Advantages**

No clogging when used on non-ferrous metals ■ Optimal ratio between removal and wear ■ Very high aggressiveness and long service life


**Applications:**

■ Aluminium

| Bond |
|---|
| Soft |
| **Quality class** |
| Supra |

| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 115 x 6 x 22,23 |  | 80 m/s | 13,300 rpm | 10 | 6622 | | |
| 125 x 6 x 22,23 |  | 80 m/s | 12,200 rpm | 10 | 2226 | | |
| 180 x 6 x 22,23 |  | 80 m/s | 8,500 rpm | 10 | 13410 | | |
| 180 x 8 x 22,23 |  | 80 m/s | 8,500 rpm | 10 | 13415 | | |

Grinding disc

## A 24 S Supra

**Advantages**

For deburring work on cast materials ■ Very high aggressiveness and long service life


**Applications:**

■ Castings
☐ Steel

| Bond |
|---|
| Hard |
| **Quality class** |
| Supra |

| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 180 x 7 x 22,23 |  | 80 m/s | 8,500 rpm | 10 | 13411 | | |

**Please observe: Please see Applications Guide on page 198 - 205, 234.**

Grinding disc

## AC 24 R Supra

**Advantages**

High removal rate on steel and gray cast iron ■ Ideal for workpieces with sand inclusions due to the grit mixture of silicon carbide and aluminum oxide ■ Very high aggressiveness and long service life

**Applications:**

■ Castings

| Bond |
|---|
| Hard |
| **Quality class** |
| Supra |

| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 230 x 8 x 22,23 |  | 80 m/s | 6,600 rpm | 10 | 252871 | | |

Grinding disc

## A 24 TX Special

**Advantages**

Ideal for use on cast parts ■ Maximum aggressiveness and service life due to hardened aluminum oxide

**Applications:**

■ Castings
☐ Stainless steel
☐ Steel

| Bond |
|---|
| Hard |
| **Quality class** |
| Special |

| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 125 x 6 x 22,23 |  | 80 m/s | 12,200 rpm | 10 | 231251 | | |
| 230 x 6 x 22,23 |  | 80 m/s | 6,600 rpm | 10 | 231254 | | |



**Please observe: Please see Applications Guide on page 198 - 205, 234.**

Grinding disc

# C 24 R Supra

**Advantages**

Ideal for use on stone and mineral materials ■ High removal rate ■ Very good aggressiveness and very long service life due to sharp, coarse silicon carbide


**Applications:**

■ Stone/Concrete
☐ Castings

| Bond |
|---|
| Medium |
| **Quality class** |
| Supra |

| Diameter x Width x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 115 x 6 x 22,23 | | 80 m/s | 13,300 rpm | 10 | 6664 | | |
| 125 x 6 x 22,23 | | 80 m/s | 12,200 rpm | 10 | 6665 | | |
| 180 x 6 x 22,23 | | 80 m/s | 8,500 rpm | 10 | 13409 | | |

**Please observe: Please see Applications Guide on page 198 - 205, 234.**

Cup grinding wheel

## A 16 R Supra

**Advantages**

For surface grinding and finish grinding of weld seams ■ Very high aggressiveness due to coarse grit

**Applications:**

■ Steel
☐ Castings

**Bond**
Medium

**Quality class**
Supra

| Diameter x Height x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 110 x 55 x 22,23 |  | 50 m/s | 8,600 rpm | 6 | 13729 | | |

Cup grinding wheel

## A 30 R Supra

**Advantages**

For surface grinding and finish grinding of weld seams ■ High aggressiveness and very long service life

**Applications:**

■ Steel

**Bond**
Medium

**Quality class**
Supra

| Diameter x Height x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 110 x 55 x 22,23 |  | 50 m/s | 8,600 rpm | 6 | 13728 | | |



Please observe: **Use only on angle grinders with cup grinding wheel guard!** **Please see Applications Guide on page 198 - 205, 234.**

Cup grinding wheel

## C 16 R Supra

**Advantages**

For use on surfaces and edges ■ For stone and mineral materials ■ Very good aggressiveness and very long service life due to sharp, coarse silicon carbide

**Applications:**

■ Stone/Concrete
☐ Castings

| Bond |
|---|
| Medium |
| **Quality class** |
| Supra |

| Diameter x Height x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 110 x 55 x 22,23 |  | 50 m/s | 8,600 rpm | 6 | 13727 | | |

Cup grinding wheel

## C 30 R Supra

**Advantages**

For use on surfaces and edges ■ For stone and mineral materials ■ Very good aggressiveness and very long service life

**Applications:**

■ Stone/Concrete
☐ Castings

| Bond |
|---|
| Medium |
| **Quality class** |
| Supra |

| Diameter x Height x Bore in mm | Form | Max. operating speed | Max. RPM | Packing unit/pcs. | Cat. number | | |
|---|---|---|---|---|---|---|---|
| 110 x 55 x 22,23 |  | 50 m/s | 8,600 rpm | 6 | 13726 | | |

Please observe: **Use only on angle grinders with cup grinding wheel guard!** **Please see Applications Guide on page 198 - 205, 234.**