

**COMBICLICK®**

Innovative quick-change system for angle grinders



**TRUST BLUE**

- Fibre discs, non-woven and felt tools with patented cooling and quick-mounting system
  - Smooth handling from rough grinding to mirror polishing
  - Many applications for working on different materials
-

# COMBICLICK® quick-mounting system

## General information

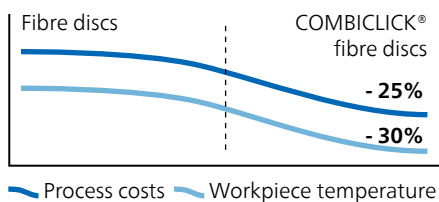
### The patented quick-mounting and cooling system is recommended with fibre, non-woven and felt discs.

The COMBICLICK® system consists of a specially developed backing pad and a rugged mounting system at the back of the disc. The backing pad allows COMBICLICK® discs to be used on most available angle grinders.

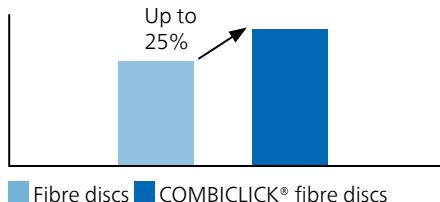
The special geometry of the cooling slots ensures high air throughput, which considerably reduces the thermal load on the abrasive material and the workpiece.

The quick-mounting system, rugged fixture, secure attachment of the disc and optimized cooling system help to provide up to 30% lower workpiece temperature, up to 25% increased stock removal, up to 30% longer disc life and improved utilization of the abrasive.

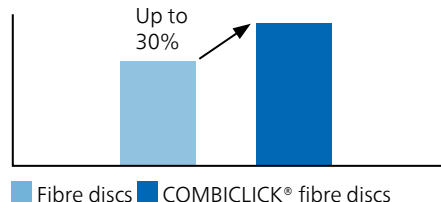
#### Lower process costs and workpiece temperature



#### Higher stock removal rate



#### Longer service life



### Advantages:

#### System



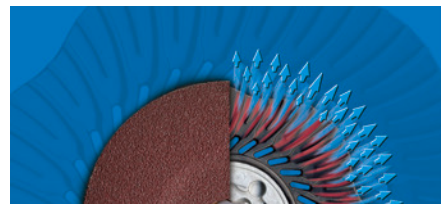
Very easy and comfortable.

#### Clamping mounting system



Extremely fast and easy disc changing reduces process costs.

#### Cooling effect



Very good cooling of the disc and workpiece.

#### Flexible grinding



Soft and flexible grinding performance in face-down grinding with 5 inch diameter fibre discs.

#### COMBICLICK® allows a very flat grinding angle!



With COMBICLICK®, scratches caused by protruding clamping parts are prevented and very high utilization of the available abrasive is attained.



### PFERDVALUE®

**PFERDERGONOMICS** recommends COMBICLICK® as an innovative product solution to sustainably reduce vibration, noise and dust levels produced by discs, and to improve working comfort.



**PFERDEFFICIENCY**® recommends COMBICLICK® for long, fatigue-free and resource-saving work in the shortest possible time. The patented quick-mounting system reduces disc changes and setup times.



# COMBICLICK® quick-mounting system

## Fibre discs

The wide range of COMBICLICK® fibre discs offers the best product for any grinding application, from coarse to fine.

### Advantages:

- Innovative quick-mounting system guarantees convenient handling and cool grinding.
- High productivity due to long service life and very high stock removal rate.
- Consistent surface finish resulting from high-quality abrasives.

### Applications:

- Leveling
- Deburring
- Surface work
- Work on edges
- Work on weld seams
- Step-by-step fine grinding

### Recommendations for use:

- Use COMBICLICK® fibre discs with CCOMBICLICK® backing pads on commercially available angle grinders.

### Compatible power tools:

- Angle grinders
- Cordless angle grinders

### Ordering notes:

- Order COMBICLICK® backing pads separately. Detailed information and ordering data for backing pads can be found on page 12.

### Safety notes:

- The maximum permitted peripheral speed is 15,800 SFPM.
- For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times.



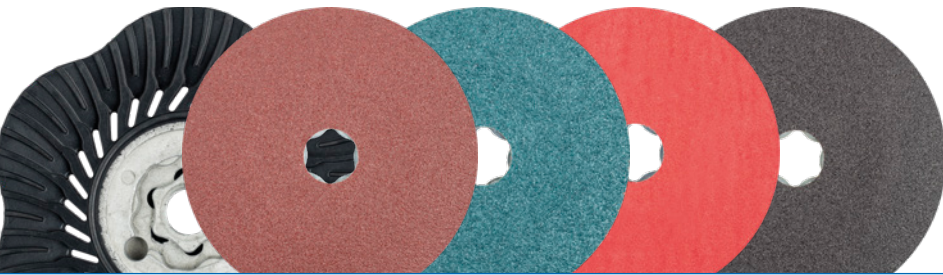
### Accessories:

- COMBICLICK® backing pads



### PFERDVIDEO:

Learn more about the advantages of using COMBICLICK® products.



### Quick product selection guide

Material group ▼			Abrasive ►	Aluminum oxide A	Zirconia Alumina Z	Ceramic oxide CO	VICTO-GRAIN®	VICTO-GRAIN® COOL	Silicon carbide SiC	Aluminum oxide A-COOL	Ceramic oxide CO-COOL	Ceramic oxide grain CO-ALU
Steel, cast steel	Non-hardened, non-heat-treated steels	Construction steels, carbon steels, tool steels, non-alloyed steels, cast steel	●	○	●	●	●	●				
	Hardened, heat-treated steels	Tool steels, tempering steels, alloyed steels, cast steel	○	●	●	●	●					
Stainless steel (INOX)	Rust- and acid-resistant steels	Austenitic and ferritic stainless steels		○		○	●			●	●	
Non-ferrous metals	Soft non-ferrous metals, non-ferrous metals	Soft aluminum alloys	○							●	○	●
		Brass, copper, zinc	○	○	○							
	Hard non-ferrous metals	Hard aluminum alloys Bronze, titanium	○	○	○		●	●			●	
	High-temperature-resistant materials	Nickel-based and cobalt-based alloys		○	○		●				●	
Cast iron	Grey cast iron, white cast iron	Cast iron with flake graphite, with nodular graphite cast iron, white annealed cast iron, black cast iron	●	○	●	●						
Plastics, other materials		Fibre-reinforced plastics, thermoplastics, wood, chipboard, paintwork	●						●			

● = highly recommended ○ = recommended

# COMBICLICK® quick-mounting system

## Fibre discs

### Aluminum oxide A

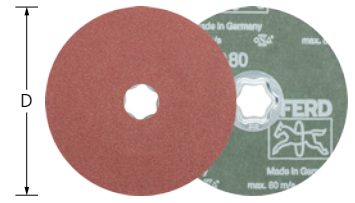
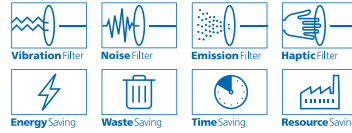
For universal grinding work from coarse to fine grinding in industry and professional trades.


**Abrasive:**  
Aluminum oxide A

**Ordering notes:**

- Please order COMBICLICK® backing pad separately.

**PFERDVALUE®:**



D [Inches]	Grit and EDP number						Max. RPM	
	24	36	50	60	80	120		
4-1/2	40091	40092	40093	40094	40095	40097	13,300	25
5	40099	40100	40101	40102	40103	40105	12,200	25

### Zirconia alumina Z

For coarse grinding work with a high stock removal rate and a long service life.

**Abrasive:**  
Zirconia alumina Z

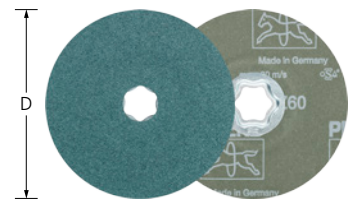
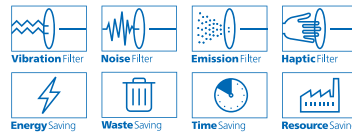
**Recommendations for use:**


- Use powerful angle grinders in the case of a higher contact pressure.

**Ordering notes:**

- Please order COMBICLICK® backing pad separately.

**PFERDVALUE®:**



D [Inches]	Grit and EDP number						Max. RPM	
	24	36	50	60	80	120		
4-1/2	-	40131	40132	40133	40134	40136	13,300	25
5	40137	40138	40139	40140	40141	40143	12,200	25

### Ceramic oxide CO

For aggressive grinding with a very high stock removal rate and very long service life. The ceramic oxide grain is specifically designed for work on hard materials and coatings.

**Abrasive:**  
Ceramic oxide CO

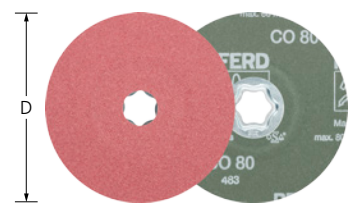
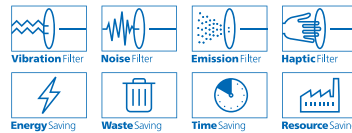
**Recommendations for use:**


- Use with high-powered angle grinders.

**Ordering notes:**

- Please order COMBICLICK® backing pad separately.

**PFERDVALUE®:**



D [Inches]	Grit and EDP number						Max. RPM	
	24	36	50	60	80	120		
4-1/2	40697	40698	40699	40700	40701	40703	13,300	25
5	40704	40705	40706	40707	40708	40710	12,200	25

# COMBICLICK® quick-mounting system

## Fibre discs

### Silicon carbide SiC

For universal grinding work on components made from aluminum, copper, bronze, titanium and fibre-reinforced plastics.

Recommended for use on titanium alloys.

Ideally suited for use in the aerospace industry, especially where SiC is the only approved abrasive, e.g. for use on engine components.

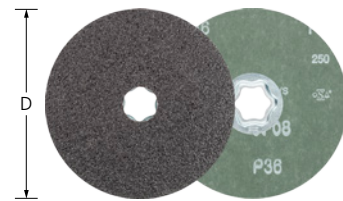
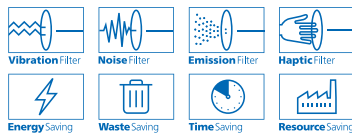
**Abrasive:**


Silicon carbide SiC

**Ordering notes:**

- Please order COMBICLICK® backing pad separately.

**PFERDVALUE®:**



D [Inches]	Grit and EDP number				Max. RPM	
	36	60	80	120		
4-1/2	40021	40022	40023	40024	13,300	25
5	40028	40029	40030	40031	12,200	25

### Ceramic oxide CO-ALU

For aggressive grinding with an excellent stock removal rate for machining non-ferrous metals. Consistently high performance due to self-sharpening ceramic oxide grain.

Adhesion-reducing additives in the coating significantly reduce the chip adhesion and therefore reduce clogging of the fibre discs.

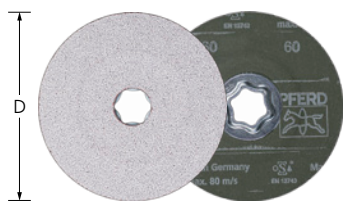
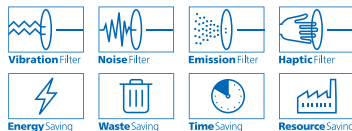
**Abrasive:**


Ceramic oxide CO-ALU

**Ordering notes:**

- Please order COMBICLICK® backing pad separately.

**PFERDVALUE®:**



D [Inches]	Grit and EDP number			Max. RPM	
	36	60	80		
4-1/2	40756	40757	40758	13,300	25
5	40759	40760	40761	12,200	25



# COMBICLICK® quick-mounting system

## Fibre discs

### Aluminum oxide A-COOL

For universal grinding work from fine to very fine grinding on materials that do not conduct heat well, e.g. stainless steel (INOX) and aluminum.

Active grinding additives in the coating substantially improve the stock removal rate, prevent loading and result in cooler grinding.

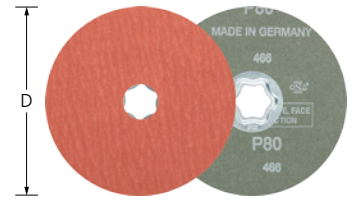
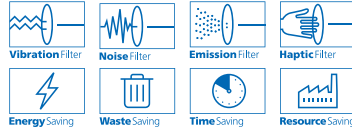
**Abrasive:**


Aluminum oxide A-COOL

**Ordering notes:**

- Please order COMBICLICK® backing pad separately.

**PFERDVALUE®:**



D [Inches]	Grit and EDP number							Max. RPM	
	50	60	80	120	150	180	220		
4-1/2	-	40302	40303	40305	40306	-	40308	13,300	25
5	40310	40311	40312	40314	40315	40316	40317	12,200	25

### Ceramic oxide CO-COOL

For aggressive grinding with maximum stock removal rate on hard materials that do not conduct heat well. Consistently high performance due to self-sharpening ceramic oxide grain.

Active grinding additives in the coating substantially improve the stock removal rate, prevent loading and result in cooler grinding.

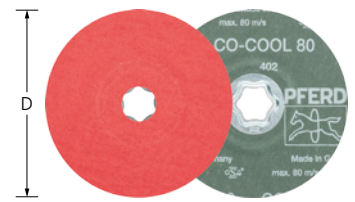
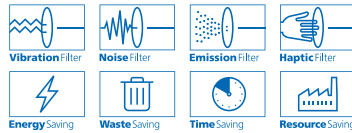
**Abrasive:**


Ceramic oxide CO-COOL

**Ordering notes:**

- Please order COMBICLICK® backing pad separately.

**PFERDVALUE®:**



D [Inches]	Grit and EDP number						Max. RPM	
	24	36	50	60	80	120		
4-1/2	40725	40726	40727	40728	40729	40731	13,300	25
5	40732	40733	40734	40735	40736	40738	12,200	25
7	40746	40747	40748	40749	-	-	8,500	25



# COMBICLICK® quick-mounting system

## VICTOGRAIN®

**VICTOGRAIN®** abrasive material is used to make some of the most effective grinding products in the world. PFERD's triangular, precision-formed grain achieves ultimate performance.



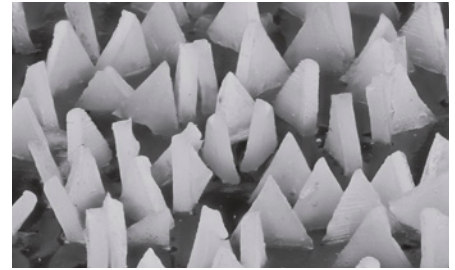
The **VICTOGRAIN®** abrasive grain triangles are identical in shape and size and their cutting edges are applied to the workpiece at the optimum angle, meaning the grain needs very little energy to penetrate the workpiece. As a result, the user experiences superior productivity due to:

- extremely high stock removal,
- a long service life,
- and reduced heat build-up in the workpiece.

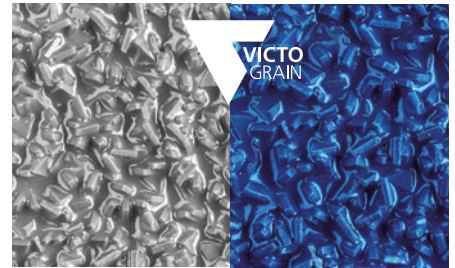
Each **VICTOGRAIN®** abrasive grain triangle is firmly fixed on one of its sides to the backing material. Due to the slim design, **VICTOGRAIN®** offers an extremely large chip space for maximum cutting efficiency.

The structure of the triangular **VICTOGRAIN®** is specially engineered to maximize results. The very fine crystalline structure ensures optimal wear characteristics as sharp cutting edges are always exposed, with the minimum amount of abrasive breaking off from the triangle.

By combining all these properties together, users benefit from optimal, consistent performance, cool grinding and an extremely long service life with uniform workpiece surface roughness.



The **VICTOGRAIN®** abrasive grain is optimally aligned



**VICTOGRAIN®** coated abrasive material



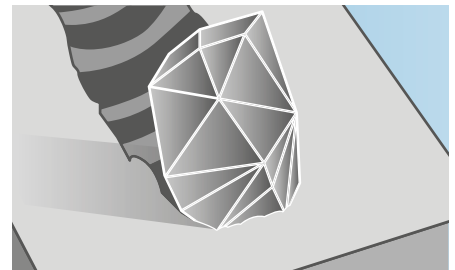
### PFERDVIDEO:

Learn more about the advantages of using **VICTOGRAIN®** products.

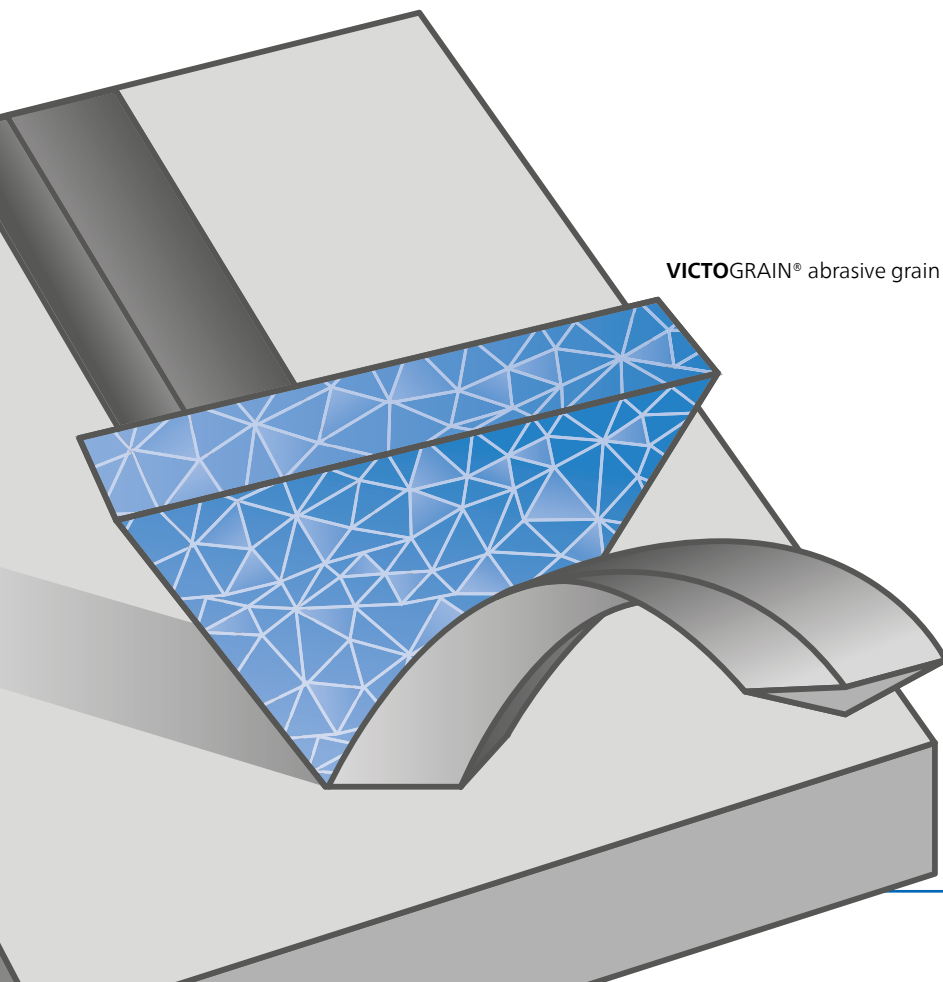


### PFERDVIDEO:

Learn more about the advantages of using COMBICLICK® products with **VICTOGRAIN®** abrasive grain.



Conventional abrasive grain



**VICTOGRAIN®** abrasive grain

### Applications:

- Levelling
- Deburring
- Surface work
- Work on edges
- Work on weld seams

### Compatible power tools:

- Angle grinders
- Cordless angle grinders
- Flexible shaft drives



For more detailed information about the **VICTOGRAIN®** products range, please refer to our brochure "**VICTOGRAIN®** – No surface is safe" at [www.pferd.com](http://www.pferd.com).

# COMBICLICK® quick-mounting system

## Fibre discs

### VICTOGRAIN®

For extremely aggressive grinding with an extremely high service life and an outstanding stock removal rate on steel and hard materials.

Outstanding, constant high performance due to the **VICTOGRAIN®** abrasive grain.

**Abrasive:**  
**VICTOGRAIN®**

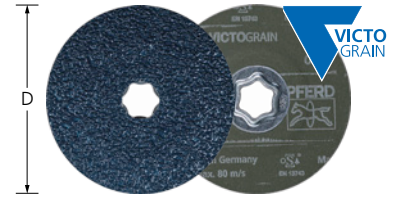
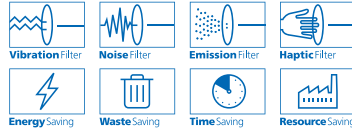
**Recommendations for use:**


- Use powerful angle grinders.

**Ordering notes:**

- Please order COMBICLICK® backing pad separately

**PFERDVALUE®:**



D [Inches]	Grit and EDP number	Max. RPM	
	36		
4-1/2	40371	13,300	25
5	40372	12,200	25
7	40373	8,500	25

### VICTOGRAIN®-COOL

For maximum removal rates with an extremely long service life on steel and materials which are hard or have poor heat-conducting properties.

Outstanding, consistent high performance due to the **VICTOGRAIN®** abrasive grain.

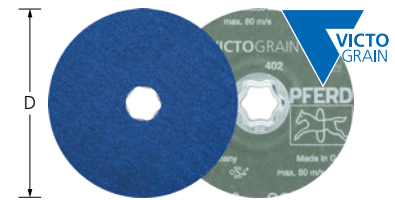
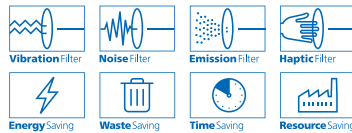
Active grinding additives in the coating substantially improve the stock removal rate, prevent loading and result in cooler grinding.


**Abrasive:**  
**VICTOGRAIN®-COOL**

**Recommendations for use:**

- Use with COMBICLICK® backing pads on commercially available angle grinders.

**PFERDVALUE®:**



D [Inches]	Grit and EDP number	Max. RPM	
	24		
4-1/2	40380	13,300	25
5	40381	12,200	25
7	40382	8,500	25





# COMBICLICK® quick-mounting system

## Non-woven discs

COMBICLICK® non-woven discs are used for face-down grinding. They are available in the following types: finishing-soft type, surface conditioning-hard type, and unitized.

### Advantages:

- Innovative quick-mounting system guarantees convenient handling and cool grinding.

### Workpiece materials:

- Can be used on nearly all materials.

### Applications:

- Roughing
- Deburring
- Surface work
- Cleaning
- Work on weld seams
- Structuring surfaces
- Step-by-step fine grinding

### Recommendations for use:

- Use COMBICLICK® non-woven discs with COMBICLICK® backing pads on variable speed angle grinders.

### Compatible power tools:

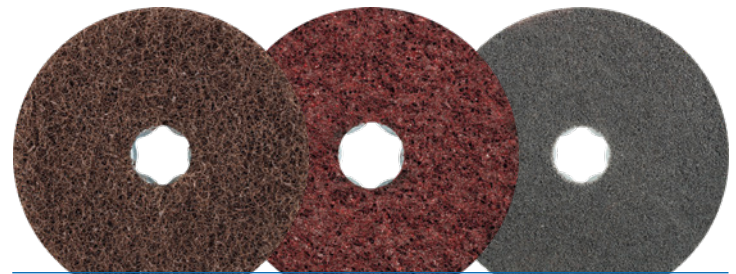
- Angle grinders
- Cordless angle grinders

### Ordering notes:

- Order COMBICLICK® backing pads separately. Detailed information and ordering data for backing pads can be found on page 12.

### Safety notes:

- For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times.



## Non-woven discs



### Surface conditioning, hard type

Recommended for universal work on small and medium-sized metal surfaces, e.g. removing rough grinding traces, removing oxidation and light deburring work. Achieve matte and satin-finished surfaces.

#### Advantages:

- Little wear due to high tear strength.
- The open structure of the non-woven material prevents loading.

#### Abrasive:

Aluminum oxide A

Available POLIVLIES® grit sizes:

100 C = coarse (yellow-brown)

180 M = medium (red-brown)

240 F = fine (blue)

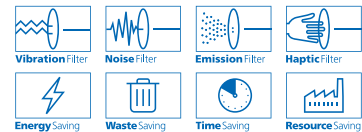
#### Recommendations for use:


- COMBICLICK® surface conditioning, hard type discs achieve their best performance at a recommended peripheral speed of 3,000–4,000 SFPM. This provides an ideal compromise between stock removal rate, surface quality, thermal load on the workpiece and disc wear.
- The addition of oil or water during grinding results in a finer finish, cooler grinding and longer service life.

#### Ordering notes:

- Please order COMBICLICK® backing pad separately.

#### PFERDVALUE®:



D [Inches]	Grit and EDP number			Opt. RPM	Max. RPM	
	100 C	180 M	240 F			
4-1/2	48100	48101	48103	3,300	10,500	10
5	48110	48111	48113	3,100	9,650	10

# COMBICLICK® quick-mounting system

## Non-woven discs

### Finishing, soft type

Recommended for very fine grinding on small and medium-sized surfaces and contours, and for cleaning metal and painted surfaces. Achieve matte and satin-finished surfaces. Highly open structure.

#### Advantages:

- Can be used for wet and dry grinding.
- The open structure and high flexibility of the non-woven material prevents loading.

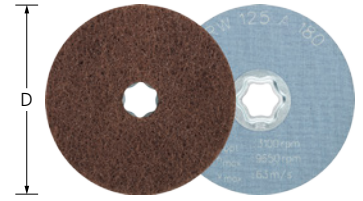
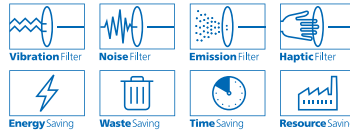
#### Abrasive:

Aluminum oxide A  
 Available POLINOX® grit sizes:  
 100 = medium  
 180 = fine  
 280 = very fine

#### Ordering notes:


- Please order COMBICLICK® backing pad separately.

#### PFERDVALUE®:



#### Recommendations for use:

- COMBICLICK® finishing, soft type discs achieve their best performance at a recommended peripheral speed of 3,000–4,000 SFPM. This provides an ideal compromise between stock removal rate, surface quality, thermal load on the workpiece and disc wear.

D [Inches]	Grit and EDP number			Opt. RPM	Max. RPM	
	100	180	280			
4-1/2	48131	48132	48133	3,300	10,500	10
5	48135	48136	48137	3,100	9,650	10

### Unitized discs

For achieving a very fine, uniform surface finish which, depending on requirements, is a sufficient preparation for high-gloss polishing. Recommended for work on larger surfaces on components made of stainless steel (INOX).

The different thicknesses/hardnesses of the non-woven material are colour-coded:  
 W (soft) = grey, MW (medium-soft) = light blue, MH (medium-hard) = dark blue, H (hard) = red

#### Advantages:

- High edge strength due to extreme durability.
- Can be profiled as desired, enabling optimal adjustment to the contour.

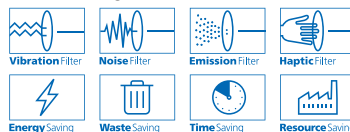
#### Abrasive:

Aluminum oxide A  
 Silicon carbide SiC

#### Ordering notes:


- Further information on unitized products can be found in our Tool Manual 23, catalog 4, on pages 85–86.

#### PFERDVALUE®:



#### Recommendations for use:

- COMBICLICK® unitized discs achieve their best performance at a recommended peripheral speed of 3,000–6,900 SFPM.

D [Inches]	Abrasives	Grit size	Hardness	Spec	EDP number	Opt. RPM	Max. RPM	
4-1/2	SiC	fine	W	2SF	48150	5,000	8,350	5
	SiC	fine	MW	3SF	48154	5,000	8,350	5
	SiC	fine	MH	6SF	48158	5,000	8,350	5
	A	fine	H	8AM	48162	5,000	8,350	5
5	SiC	fine	W	2SF	48166	4,500	7,650	5
	SiC	fine	MW	3SF	48170	4,500	7,650	5
	SiC	fine	MH	6SF	48174	4,500	7,650	5
	A	fine	H	8AM	48178	4,500	7,650	5

# COMBICLICK® quick-mounting system

## Felt discs

COMBICLICK® felt discs are used for face-down grinding on medium-sized and large surfaces. They are supplied in various diameters.

### Advantages:

- Innovative quick-mounting system guarantees convenient handling with fast disc changes.

### Workpiece materials:

- Can be used on nearly all materials.

### Applications:

- Polishing

### Recommendations for use:

- Use COMBICLICK® felt discs with COMBICLICK® backing pads on variable speed angle grinders.
- Felt discs achieve their best performance at a recommended peripheral speed of 1,000–2,000 SFPM. This provides an ideal compromise between polishing performance, thermal load on the workpiece and disc wear.
- When changing the polishing paste, employ a new, unused felt disc.

### Compatible power tools:

- Angle grinders
- Cordless angle grinders

### Ordering notes:

- Further information on felt products can be found in our Tool Manual 23, catalog section 4, on page 115.
- Please order COMBICLICK® backing pads separately. More detailed information and ordering data for backing pads can be found on page 12.
- Please order grinding and polishing pastes separately. Detailed information and ordering data for grinding and polishing pastes can be found in our Tool Manual 23, catalog 4, on pages 121–122.

### Safety notes:

- For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times.



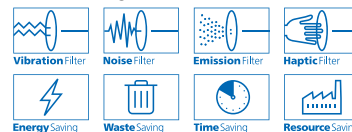
### Felt discs


Recommended for polishing with polishing paste bars, grinding pastes or diamond polishing pastes in face-down grinding on medium-sized and large surfaces.

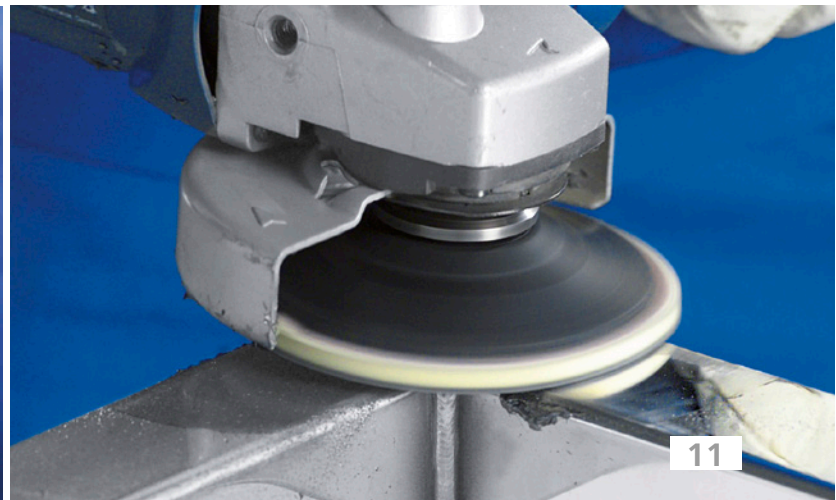
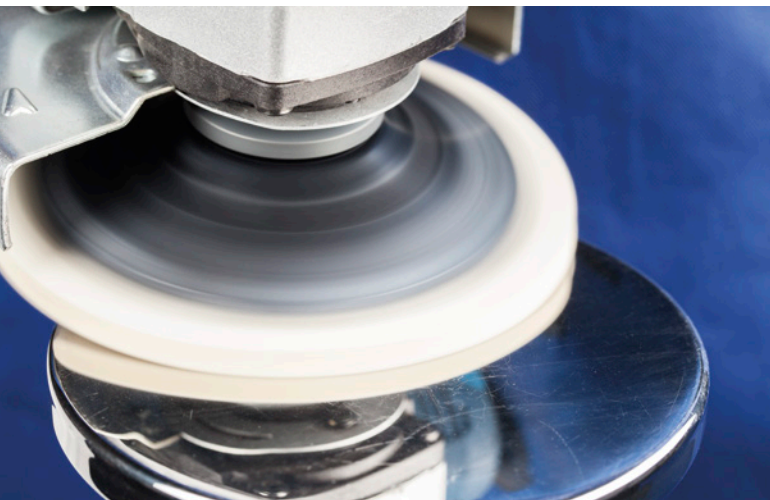
### Advantages:

- High productivity due to very long service life.
- Consistent performance over the entire lifespan due to high dimensional stability.

### PFERDVALUE®:



D [Inches]	EDP number	Opt. RPM	Max. RPM	
4-1/2	48705	1,900	10,500	5
5	48706	1,650	9,650	5



# COMBICLICK® quick-mounting system

## Backing pads

### Backing pads

With this backing pad, COMBICLICK® discs can be used on commercially available angle grinders.

The different hardnesses are colour-coded:  
 CC-GT (medium) = black  
 CC-H-GT (hard) = blue

#### Advantages:

- The geometry of the cooling slots significantly reduces the thermal load.
- High productivity due to minimized disc change times.

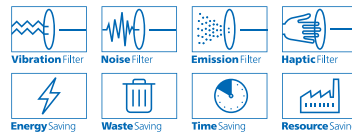
#### Recommendations for use:

- CC-H-GT backing pads is mainly used to work on stainless steel (INOX). It features very high edge strength, which enables a higher contact pressure.

#### Safety notes:

- The maximum approved peripheral speed is 15,800 SFPM.
- For backing pads with a 7 inch diameter, do not apply too high a contact pressure in order to prevent the backing pad from overstretching.

#### PFERDVALUE®:



Disc diameter [Inches]	Thread	Hardness	EDP number	Max. RPM	
4-1/2 and 5	5/8-11	medium	69470	13,300	1
		hard	69478	13,300	1
5	5/8-11	medium	69472	12,200	1
		hard	69473	12,200	1
7	5/8-11	medium	69474	8,500	1



# COMBICLICK® quick-mounting system

Sets



## COMBICLICK® sets

COMBICLICK® sets include a wide variety of coated and non-woven materials to test performance and surface finish results to help determine the right product selections for your applications prior to bulk purchases.

The included discs provide solutions for rough grinding, fine grinding, surface conditioning, prepolish and polishing to a mirror finish.

### Contents:

- 3 pcs. each of COMBICLICK® fibre discs:
  - CO-COOL 36 grit
  - CO-COOL 120 grit
  - A-COOL 220 grit
- 1 pc. each of COMBICLICK® non-woven disc:
  - Surface conditioning, hard type, 240 F fine
  - Surface conditioning, hard type, 180 M medium
  - Surface conditioning, hard type, 100 C coarse
  - Finishing, soft type, 280 very fine
  - Finishing, soft type, 180 fine
  - Finishing, soft type, 100 medium
  - Unitized disc SiC W soft
- 1 pc. each of:
  - Universal polishing paste
  - COMBICLICK® felt disc
  - COMBICLICK® backing pad
  - CC-GT 5/8-11

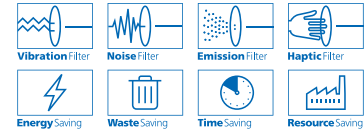
### Advantages:


- Getting to know and testing the comprehensive system.
- Coordinated selection of the most common products.

### Abrasive:

Aluminum oxide A  
Ceramic oxide CO-COOL  
Silicon carbide SiC

### PFERDVALUE®:



D [Inches]	Thread	EDP number	
4-1/2	5/8-11	48192	1
5	5/8-11	48194	1

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