

COMBICLICK®

Perfect results thanks to a well-designed system



TRUST BLUE

- Fibre discs, non-woven and felt tools with patented cooling and quick-mounting system
- For very high stock removal and very fine finishes
- Working systematically on many materials

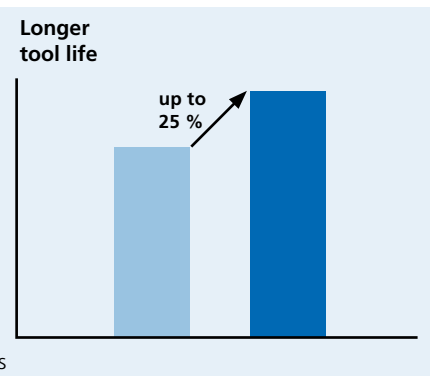
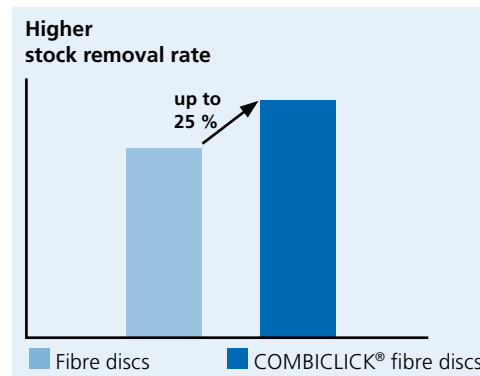
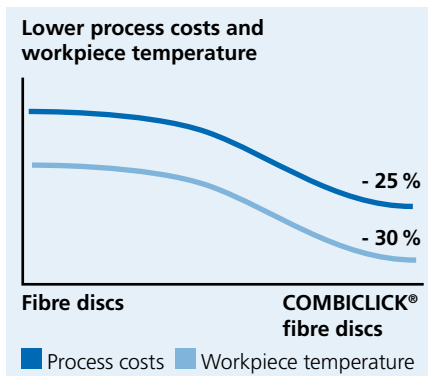
The patented cooling and quick-mounting system from PFERD is suitable for use with fibre, non-woven and felt discs.

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

The special geometry of the cooling slots ensures a high throughput of air, thus significantly reducing the thermal load on the abrasive material and workpiece.

The quick-mounting system, rugged fixture, secure attachment of the tool and optimized cooling system help to provide

- up to 30 % lower workpiece temperature,
- up to 25 % increased stock removal,
- up to 30 % longer tool life and improved utilization of the abrasive.



Advantages:

System



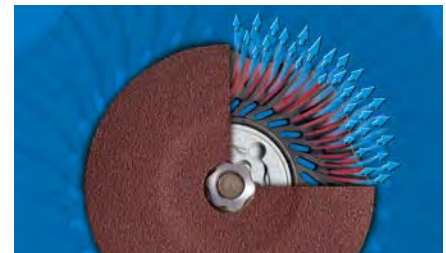
Very easy and comfortable to use.

Mounting principle



Extremely fast and easy tool change reduces process costs.

Cooling effect



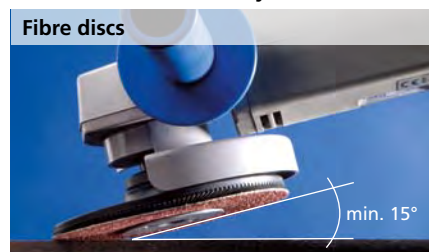
Very good cooling of tool and workpiece.

Flexible grinding



Soft and particularly flexible grinding performance in face-down grinding.

COMBICLICK® allows very flat use!



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



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

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



PFERDEFFICIENCY® recommends COMBICLICK® for long, fatigue-free and resource-saving work, with perfect results in the shortest possible time. The patented quick-mounting system reduces tool change and setup times.



PFERDVIDEO

You will receive more information here or at www.pferd.com

The extensive range of COMBICLICK® fibre discs provides the optimum tool for any machining application from coarse to fine grinding. PFERD provides COMBICLICK® fibre discs with various

- grit sizes,
- abrasives and
- dimensions.

Advantages:

- Long tool life
- Uniform grinding pattern
- Very high stock removal
- High flexibility
- Very good grain adhesion

Application examples:

- Working on weld seams
- Deburring of steel components
- Rough grinding work
- Fine grinding of stainless steel (INOX) components
- Removal of mill and casting skins
- Working on narrow, hard-to-reach areas (e.g. cooling ribs)

Recommendations for use:

- Use COMBICLICK® fibre discs in combination with the COMBICLICK® backing pad on commercially available angle grinders
- Use grinding oil that is suitable for the tool in order to significantly increase the tool life and the abrasive performance of the tools. More detailed information and ordering data for grinding oils can be found in catalogue 204, page 120.

Safety notes:

- The maximum permitted peripheral speed is 80 m/s
- For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times



= Wear eye protection!



= Wear a dust mask!



= Wear hearing protection!



= Only use with backing pad!



= Please read the safety instructions!



= Not permitted for wet grinding!

Ordering note:

Please order COMBICLICK® backing pad separately. More detailed information and ordering data for backing pads can be found on page 10.



Ordering instructions:

When ordering, please state the EAN or the complete description. Please complete the description with the desired grit size.

Ordering example:

EAN 4007220722411
CC-FS 180 A-COOL 60

Ordering example explanation:

CC-FS = COMBICLICK® fibre discs
180 = Outer diameter D [mm]
A = Abrasive
COOL = Bond type
60 = Grit size

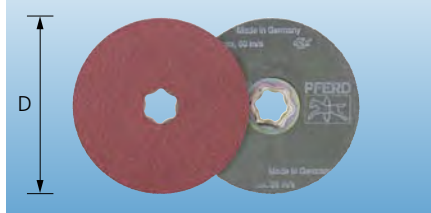
The fast way to the best tool

Material group ▼			Abrasives ►	Alum. oxide A	Alum. oxide A-COOL	Zirconia alum. Z	Zirconia alum. Z-COOL	Ceramic oxide CO	Ceramic oxide CO-COOL	Silicon carbide SiC
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 aluminium alloys	○	●			○		○	
		Brass, copper, zinc	●			○		○		
	Hard non-ferrous metals	Hard aluminium alloys	●			○		○		○
		Bronze, titanium				○	●	○	●	●
	High-temperature-resistant materials	Nickel- and cobalt-based alloys				○	●	○	●	
Cast iron	Grey cast iron, white cast iron	Cast iron with flake graphite EN-GJL (GG), with nodular graphite/nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black cast iron EN-GJMB (GTS)	●			○		●		
Plastics, other materials		Fibre-reinforced plastics, thermoplastics, wood, chipboard, paint	●							●

● = highly suitable

○ = suitable

COMBICLICK® fibre discs
Aluminium oxide A type




For general-purpose grinding work from coarse to fine grinding in industry and crafts.

Abrasive: Aluminium oxide A

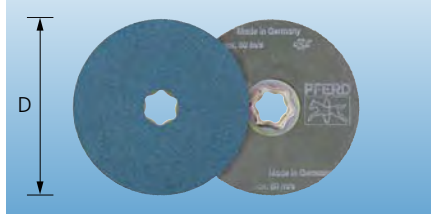
Ordering example:
EAN 4007220722138

CC-FS 180 A **60**

Please complete the description with the desired grit size.

Description	Grit size						D [mm]	Max. perm. speed [RPM]	
	24	36	50	60	80	120			
	EAN 4007220								
CC-FS 100 A	-	836095	836101	836118	836125	836132	100	15,300	25
CC-FS 115 A	763179	763186	763193	763209	763216	763223	115	13,300	25
CC-FS 125 A	721988	721995	722008	722039	722060	722077	125	12,200	25
CC-FS 180 A	722091	722107	722121	722138	722145	722152	180	8 500	25

COMBICLICK® fibre discs
Zirconia alumina Z type



For coarse grinding with high stock removal and long tool life.


The high-performance abrasive zirconia alumina delivers best results on high-power angle grinders at increased contact pressure.

Abrasive: Zirconia alumina Z

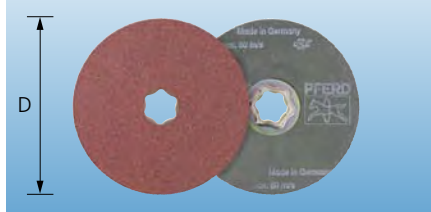
Ordering example:
EAN 4007220722732

CC-FS 180 Z **60**

Please complete the description with the desired grit size.

Description	Grit size						D [mm]	Max. perm. speed [RPM]	
	24	36	50	60	80	120			
	EAN 4007220								
CC-FS 115 Z	-	722572	722596	763230	722619	722633	115	13,300	25
CC-FS 125 Z	722640	722657	722664	722671	722688	722695	125	12,200	25
CC-FS 180 Z	722701	722718	722725	722732	722749	722756	180	8,500	25

COMBICLICK® fibre discs
Ceramic oxide grain CO type



For aggressive grinding with maximum stock removal and very long tool life.


The ceramic oxide grain is especially designed for work on hard materials and layers, and delivers best results on high-power angle grinders.

Abrasive: Ceramic oxide grain CO

Ordering example:
EAN 4007220722350

CC-FS 180 CO **60**

Please complete the description with the desired grit size.

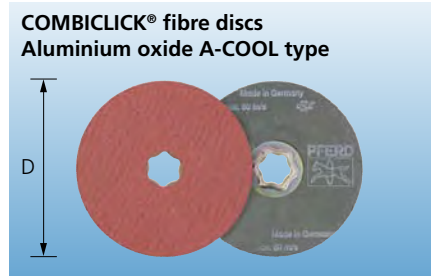
Description	Grit size						D [mm]	Max. perm. speed [RPM]	
	24	36	50	60	80	120			
	EAN 4007220								
CC-FS 115 CO	763247	763254	763261	763278	763285	763292	115	13,300	25
CC-FS 125 CO	722084	722169	722183	722206	722237	722268	125	12,200	25
CC-FS 180 CO	722282	722305	722336	722350	722374	722428	180	8.500	25


For general-purpose grinding work from fine to very fine grinding of materials which do not conduct heat well, e.g. stainless steel (INOX).

Active grinding additives in the coating significantly improve stock removal, prevent clogging and allow cooler grinding.

Abrasive: Aluminium oxide A-COOL

Ordering example:
EAN 40072207**22411**
CC-FS 180 A-COOL **60**
Please complete the description with the desired grit size.



Description	Grit size							D [mm]	Max. perm. speed [RPM]	
	50	60	80	120	150	180	220			
	EAN 4007220									
CC-FS 115 A-COOL	-	722176	722190	722213	722220	-	722244	115	13,300	25
CC-FS 125 A-COOL	722251	722275	722299	722312	722329	722343	722367	125	12,200	25
CC-FS 180 A-COOL	722398	722411	722435	722459	722466	722527	722541	180	8,500	25

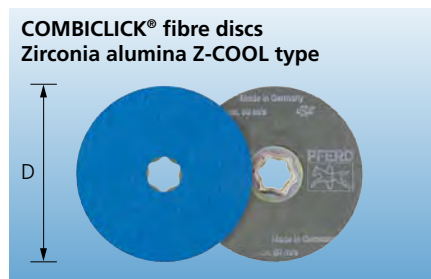
For coarse grinding work with high stock removal and cool grinding.


The high-performance abrasive zirconia alumina delivers best results on high-power angle grinders at increased contact pressure.

Active grinding additives in the coating significantly improve stock removal, prevent clogging and result in cooler grinding.

Abrasive: Zirconia alumina Z-COOL

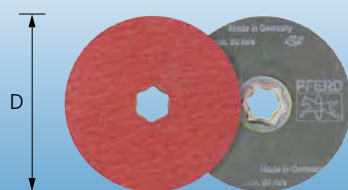
Ordering example:
EAN 40072207**22114**
CC-FS 180 Z-COOL **60**
Please complete the description with the desired grit size.



Description	Grit size				D [mm]	Max. perm. speed [RPM]	
	36	50	60	80			
	EAN 4007220						
CC-FS 125 Z-COOL	722763	722770	722787	722015	125	12,200	25
CC-FS 180 Z-COOL	722022	722046	722114	722053	180	8,500	25



COMBICLICK® fibre discs Ceramic oxide grain CO-COOL type



For aggressive grinding with maximum stock removal on hard materials which do not conduct heat well.

Active grinding additives in the coating significantly improve stock removal, prevent clogging and result in cooler grinding.


Abrasive: Ceramic oxide grain CO-COOL

Ordering example:

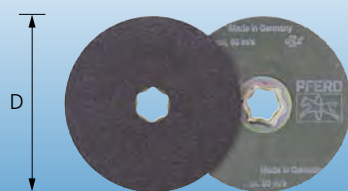
EAN 4007220722589

CC-FS 180 CO-COOL 60

Please complete the description with the desired grit size.

Description	Grit size						D [mm]	Max. perm. speed [RPM]	
	24	36	50	60	80	120			
	EAN 4007220								
CC-FS 100 CO-COOL	-	836149	836163	836187	836194	892442	100	15,300	25
CC-FS 115 CO-COOL	763308	763315	763322	763339	763346	763353	115	13,300	25
CC-FS 125 CO-COOL	722442	722473	722480	722497	722503	722510	125	12,200	25
CC-FS 180 CO-COOL	722534	722558	722565	722589	722602	722626	180	8.500	25

COMBICLICK® fibre discs Silicon carbide SiC type



Suitable for work on aluminium, copper, bronze, titanium, high-alloy steels and fibre-reinforced plastics.

Particularly recommended for use on titanium alloys.

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


Abrasive: Silicon carbide (SiC)

Ordering example:

EAN 4007220898895

CC-FS 115 SiC 60

Please complete the description with the desired grit size.

Description	Grit size				D [mm]	Max. perm. speed [RPM]	
	36	60	80	120			
	EAN 4007220						
CC-FS 115 SiC	898888	898895	898901	898918	115	13,300	25
CC-FS 125 SiC	898925	898932	898949	898956	125	12,200	25



PFERD provides COMBICLICK® non-woven discs in the following types:

- PNER
- VRH (hard) and
- VRW (soft).

COMBICLICK® non-woven discs are used in face-down grinding on speed-adjustable angle grinders.

Recommendations for use:

- Use COMBICLICK® non-woven discs in combination with the COMBICLICK® backing pad on speed-adjustable angle grinders

Ordering note:

Please order COMBICLICK® backing pad separately. More detailed information and ordering data for backing pads can be found on page 10.

Ordering instructions:

When ordering, please state the EAN or the complete description. In the case of the VRH (hard) and VRW (soft) types, please complete the description with the desired grit size.

Ordering example:

EAN 4007220**935873**
CC-VRH 115 A **180 M**

Achieves a very fine, uniform surface finish which, depending on requirements, is a sufficient preparation for high-gloss polishing. Especially suitable for work on large surfaces on components made of stainless steel (INOX).

Abrasive:

- A** = Aluminium oxide
- SiC** = Silicon carbide

Ordering note:

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

Ordering example explanation:

- CC-VRH = COMBICLICK® non-woven discs, hard type
- 115 = Outer dia. D [mm]
- A = Abrasive
- 180 M** = Grit size

Safety notes:

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



= Wear eye protection!



= Wear a dust mask!



= Wear hearing protection!



= Only use with backing pad!



= Please read the safety instructions!



Recommendations for use:


- COMBICLICK® non-woven discs PNER achieve their best performance at a recommended cutting speed of 15–35 m/s

Ordering example:

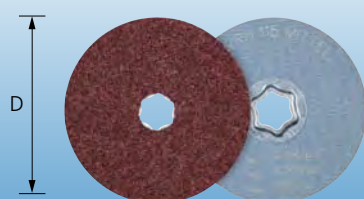
EAN 4007220**935989**
CC-PNER W 115 SiC F

COMBICLICK® non-woven discs PNER type



Description	EAN 4007220	Type	D [mm]	Grit size	Recom. speed [RPM]	Max. perm. speed [RPM]	
CC-PNER W 100 SiC F	948187	soft	100	fine	5,700	9,550	5
CC-PNER MW 100 SiC F	948194	medium-soft	100	fine	5,700	9,550	5
CC-PNER MH 100 SiC F	948200	medium-hard	100	fine	5,700	9,550	5
CC-PNER H 100 A F	948217	hard	100	fine	5,700	9,550	5
CC-PNER W 115 SiC F	935989	soft	115	fine	5,000	8,350	5
CC-PNER MW 115 SiC F	936009	medium-soft	115	fine	5,000	8,350	5
CC-PNER MH 115 SiC F	936016	medium-hard	115	fine	5,000	8,350	5
CC-PNER H 115 A F	936023	hard	115	fine	5,000	8,350	5
CC-PNER W 125 SiC F	935996	soft	125	fine	4,500	7,650	5
CC-PNER MW 125 SiC F	936030	medium-soft	125	fine	4,500	7,650	5
CC-PNER MH 125 SiC F	936047	medium-hard	125	fine	4,500	7,650	5
CC-PNER H 125 A F	936054	hard	125	fine	4,500	7,650	5

COMBICLICK® non-woven discs Hard type



Suitable for general work on metal surfaces
e.g. removal of rough grinding traces, removal
of oxidation and for light deburring work.

Abrasive: Aluminium oxide A

Available grit sizes:

100 G (coarse)	= yellow-brown
180 M (medium)	= red-brown
240 F (fine)	= blue

Application examples:

- Removing heat discolouration on components made of stainless steel (INOX)
- Fine-grinding of large surfaces in equipment, tank and pressure vessel constructions

Recommendations for use:


- COMBICLICK® non-woven discs VRH achieve their best performance at a recommended cutting speed of 15–20 m/s. This provides an ideal compromise between stock removal rate, surface quality, thermal load on the workpiece and tool wear.

Ordering example:

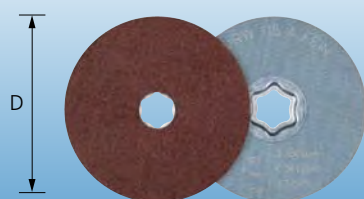
EAN 4007220**935873**

CC-VRH 115 A **180 M**

Please complete the description with the desired grit size.

Description	Grit size			D [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
	100 G	180 M	240 F				
	EAN 4007220						
CC-VRH 100 A	948149	948132	948125	100	3,800	12,000	10
CC-VRH 115 A	935880	935873	935743	115	3,300	10,500	10
CC-VRH 125 A	935910	935903	935897	125	3,100	9,650	10

COMBICLICK® non-woven discs Soft type



Suitable for very fine grinding of surfaces and contours, as well as cleaning work on metals and painted surfaces. The open structure and high flexibility of the non-woven material prevents clogging of the tool.

Abrasive: Aluminium oxide A

Available grit sizes:

100	= medium
180	= fine
280	= very fine

Application examples:

- Matt finishing or structuring of components made of stainless steel (INOX)
- Very fine grinding of brass, copper, titanium and aluminium

Recommendations for use:


- COMBICLICK® non-woven discs VRW achieve their best performance at a recommended cutting speed of 15–20 m/s. This provides an ideal compromise between stock removal rate, surface quality, thermal load on the workpiece and tool wear.

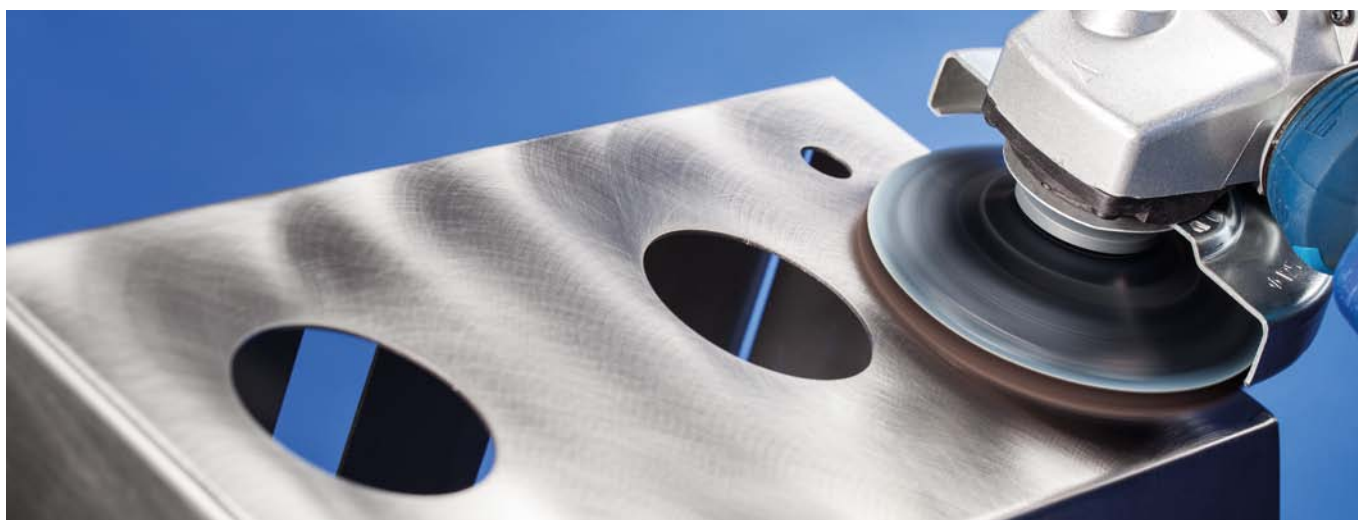
Ordering example:

EAN 4007220**935934**

CC-VRW 115 A **180**

Please complete the description with the desired grit size.

Description	Grit size			D [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
	100	180	280				
	EAN 4007220						
CC-VRW 100 A	948170	948163	948156	100	3,800	12,000	10
CC-VRW 115 A	935941	935934	935927	115	3,300	10,500	10
CC-VRW 125 A	935972	935965	935958	125	3,100	9,650	10



For pre-polishing and high-gloss polishing of medium- to large-sized components, PFERD provides COMBICLICK® felt discs in a range of diameters.

COMBICLICK® felt discs are used with polishing pastes in face-down grinding on speed-adjustable angle grinders.

Application examples:

- High-gloss polishing of stainless steel (INOX) components in chemical plant construction
- Mirror polishing of large press or injection moulds

Recommendations for use:

- Felt discs achieve their best performance at a recommended cutting speed of 5–10 m/s. This provides an ideal compromise between polishing performance, thermal load on the workpiece and tool wear.
- When changing the polishing paste, employ a new, unused felt disc

Safety notes:

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



= Wear eye protection!



= Wear a dust mask!



= Wear hearing protection!



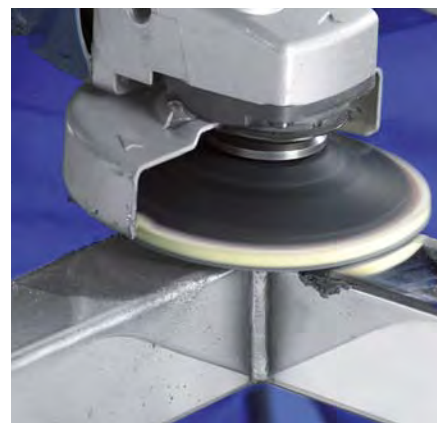
= Only use with backing pad!



= Please read the safety instructions!



= Not permitted for wet grinding!



Ordering note:

Please order COMBICLICK® backing pad separately. More detailed information and ordering data for backing pads can be found on page 10.


Ordering example:

EAN 4007220**936078**
CC-FR 125

Ordering example explanation:

CC-FR = COMBICLICK® felt discs
125 = Outer dia. D [mm]



Description	EAN 4007220	D [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
CC-FR 100	948224	100	1,900	12,000	5
CC-FR 115	936061	115	1,650	10,500	5
CC-FR 125	936078	125	1,500	9,650	5



COMBICLICK® backing pads




This backing pad permits the use of COMBICLICK® tools on all common angle grinders. The cooling slot geometry ensures a high throughput of air, thus significantly reducing thermal loads on the abrasive material and workpiece.

The patented COMBICLICK® mounting system minimizes tool changing times.

Safety notes:

- The maximum permitted peripheral speed is 80 m/s
- For backing pads with a diameter of 180 mm, do not apply too high a contact pressure in order to prevent overstretching of the backing pad



Description	EAN 4007220	Thread	Suitable for	Suitable for machine types	Max. perm. speed [RPM]	
CC-GT 100 M10	836200	M10	CC dia. 100	Angle grinders 100, spindle M10	15,300	1
CC-GT 115-125 M14	725764	M14	CC dia. 115, CC dia. 125	Angle grinders 115 / 125, spindle M14	13,300	1
CC-GT 115-125 5/8"	725771	5/8	CC dia. 115, CC dia. 125	Angle grinders 115 / 125, spindle 5/8"	13,300	1
CC-GT 180 M14	725788	M14	CC dia. 180	Angle grinders 180, spindle M14	8,500	1
CC-GT 180 5/8"	725795	5/8	CC dia. 180	Angle grinders 180, spindle 5/8"	8,500	1

COMBICLICK® sets

COMBICLICK® sets



Set for surface work, from coarse to mirror polished.
To get to know and to test the extensive systems available.

COMBICLICK® CC-SET 115 M14 and 5/8-11

Contents:

3 pcs. each of COMBICLICK® fibre discs:

- CC-FS 115 CO-COOL 36
- CC-FS 115 CO-COOL 120
- CC-FS 115 A-COOL 220

1 pc. each of COMBICLICK® non-woven discs:

- CC-VRH 115 A 240 F
- CC-VRH 115 A 180 M
- CC-VRH 115 A 100 G
- CC-VRW 115 A 280
- CC-VRW 115 A 180
- CC-VRW 115 A 100
- CC-PNER W 115 SiC F

1 piece each:

- Universal polishing paste
- COMBICLICK® felt discs CC-FR 115
- COMBICLICK® backing pad
CC-GT 115-125 M14 or 5/8-11

COMBICLICK® CC-SET 125 M14 and 5/8-11

Contents:

3 pcs. each of COMBICLICK® fibre discs:


- CC-FS 125 CO-COOL 36
- CC-FS 125 CO-COOL 120
- CC-FS 125 A-COOL 220

1 pc. each of COMBICLICK® non-woven discs:

- CC-VRH 125 A 240 F
- CC-VRH 125 A 180 M
- CC-VRH 125 A 100 G
- CC-VRW 125 A 280
- CC-VRW 125 A 180
- CC-VRW 125 A 100
- CC-PNER W 125 SiC F

1 piece each:

- Universal polishing paste
- COMBICLICK® felt discs CC-FR 125
- COMBICLICK® backing pad
CC-GT 115-125 M14 or 5/8-11

Description	EAN 4007220	
CC-SET 115 M14	955345	1
CC-SET 115 5/8-11	955406	1
CC-SET 125 M14	955369	1
CC-SET 125 5/8-11	955413	1

PFERD VALUE

Your added value with **PFERD**



Vibration Filter



Noise Filter



Emission Filter



Haptic Filter



Energy Saving



Waste Saving



Time Saving



Resource Saving

TRUST BLUE

Discover **PFERDERGONOMICS®** and **PFERDEFFICIENCY®**

You can be sure of **optimizing work processes** through the **use of powerful premium tools** and improving the **ergonomics, efficiency and sustainability** of your operations. Results from the **PFERD test laboratories** as well as from the product tests by **independent testing institutes** prove that: **PFERD tools offer a measurable added value.**

Visit our website for information about our innovative products and services.



www.pferd.com



Subject to technical modifications:

819 112

