# with Patented Cooling and Quick-Mounting System





- Up to 25% increased stock removal.
- Up to 30% lower workpiece temperature.
- Up to 30% longer service life and improved utilization of abrasive product.
- **75%** time saving through fast tool change.



### with Patented Cooling and Quick-Mounting System

Introducing PFERD COMBICLICK<sup>®</sup> Quick-Change Fiber Discs and Backing Pads - a new, patented mounting and cooling system for use on angle grinders.

Conventional quick-change fiber discs allow users to change up discs without the use of spanner wrenches. Reduced down-time for change-ups improves productivity. PFERD has designed and engineered a new system to improve disc performance and further reduce change-up time.

PFERD's COMBICLICK<sup>®</sup> quick-change system offers 3 important enhancements over conventional quick-change fiber discs:

- Faster and Easier Disc Mounting
- Optimized Backing Pad
- No metal parts on face of disc

#### 1. Faster and Easier Disc Mounting

PFERD COMBICLICK<sup>®</sup> fiber discs are extremely fast and easy to change. Conventional quick-change discs require substantial pressure to be applied at the center of the disc to catch a thread on the spindle of the angle grinder. This proc-

#### User benefits: The system



Exceptional ease of handling and convenience.

#### Flexible grinding



Fiber discs give a particularly soft and flexible abrasive performance in face grinding.

ess becomes more difficult if the discs have curled. COMBICLICK® discs "click" into place when presented to the backing pad, and need just a slight, effortless clockwise rotation to lock into place. Disc removal is just as simple, making change-ups faster and easier than ever. And the patented system virtually eliminates disc curling.

#### 2. Optimized Backing Pad

COMBICLICK<sup>®</sup> Backing Pads are engineered to minimize disc-change-up time, and to maximize air circulation. Significantly reducing thermal loads on the abrasive material and workpiece. And the pads are soft and flexible enough to follow contours, yet firm enough to maintain aggressive stock removal rates in demanding applications.

## 3. Disc grinding surface completely free from metal parts

COMBICLICK<sup>®</sup> quick-change fiber discs attach to the backing pad without any metal parts projecting through the abrasive disc. This design supports grinding nearly flat, and eliminates any risk of damage to the workpiece. Both the quick-change nut and the receiving mechanism built into the backing pad are metal. The mounting fixture provides secure disc attachment to the backing pad, plus optimized cooling help to provide:

- up to 25% increased stock removal;
- up to 30% longer service life and improved utilization of abrasive product;
- up to 30% less tool wear; and
- up to 30% lower workpiece temperature.

With their patented quick-mounting and cooling system, COMBICLICK® Fiber discs provide rapid tool changes and increased productivity. These improvements will allow you to gain more efficiency without changing your current process or procedures.

#### Cooling effect



Very good cooling of the tool and workpiece.

COMBICLICK<sup>®</sup> supports grinding at very flat angles!



The COMBICLICK<sup>®</sup> system eliminates surface scratching by projecting metal parts while maximizing the utilization of available abrasive grain.

#### Mounting principle



Extremely easy and reduces process costs.





## with Patented Cooling and Quick-Mounting System



PFERD supplies an extensive line-up of COMBICLICK<sup>®</sup> Fiber discs with differing

- grit sizes,
- abrasive grain, and
- dimensions.

Our comprehensive product range includes the right tool for every application, from coarse to fine grinding.

#### **Advantages**

- Long tool life.
- Uniform surface finish.
- Very high stock removal rate.
- High flexibility.
- Excellent grit adhesion.

#### **Application examples**

Weld dressing

Recommendations for the use of COMBICLICK<sup>®</sup> Fiber discs

- Deburring of steel components
- Coarse grinding
- Fine grinding of stainless steel
- Removal of rolling and casting skin
- Grinding in narrow, hard-to-reach areas (e.g., cooling ribs).

Abrasive Alum. oxide Alum. oxide

#### **Recommendation for use**

COMBICLICK® Fiber discs are used with COMBICLICK® backing pads on standard commercial angle grinders.

#### **Ordering note**

Please order COMBICLICK® backing pad separately.

#### **Safety Recommendations**



ZIRKON

Ceramic

Ceramic CO-COOL

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ZIRKON

#### A-COOL Ζ Z-COOL со Α **Material groups** Constructional steels Carbon steels Non-hardened Tool steels 0 0 non-tempered steels Non-alloyed steels Steel and steel Steel castings castings Tool steels Heat treated and Tempered steels 0 0 tempered steels Alloyed steels Steel castings Stainless steels INOX 0 Soft aluminium 0 0 alloys Soft non-ferrous Brass metals Copper 0 0 Zinc Non-ferrous Very hard 0 0 aluminium alloys Hard non-ferrous metals Bronze 0 $\bigcirc$ Titanium High-temperature Nickel-based alloys 0 0 materials NiCo alloys Grey cast iron Steel castings Cast iron 0 Nodular cast iron Fiber-reinforced Plastics plastics Thermoplastics Wood Wood

Chipboard

Paint / coatings

Paint / coatings

metals

Other



## Aluminum Oxide A, A-COOL, Zirconia Alumina



For general-purpose grinding, from coarse to fine, in diverse applications (industry, trades, DIY).

#### Abrasive

Aluminum Oxide A

#### **Ordering Note**

Please order COMBICLICK<sup>®</sup> backing pad separately.

PFERD Specification Number CC-FS A

Diameter (Inches)			$\square$					
	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
7	40115	40116	40117	40118	40119	40121	8,500	25



For general-purpose grinding, from coarse to ultra-fine, on poor heat-conducting materials. Active additives in the coating ensure substantially increased stock removal while preventing loading and heat build-up in the workpiece.

#### Abrasive

Aluminum Oxide A-COOL (top-sized)

#### Ordering Note

Please order COMBICLICK® backing pad separately.

**PFERD Specification Number** 

CC FS A-COOL

Diameter (Inches)			$\square$						
	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
7	40328	40329	40330	40332	40333	40334	40335	8,500	25



Designed for coarse grinding and high stock removal, with an extended service life. Zirconia alumina is a high-performance abrasive which delivers best results on high-powered angle grinders at increased contact pressure.

#### Abrasive

Zirconia Alumina Z

#### **Ordering Note**

Please order COMBICLICK<sup>®</sup> backing pad separately.

#### **PFERD Specification Number** CC-FS Z

**Grit and EDP Number** Diameter P Max. RPM (Inches) 36 80 120 24 50 60 \_ 4-1/2 40131 40132 40133 40134 40136 13,300 25 5 40137 40138 40139 40140 40141 40143 12,200 25 40151 40152 40153 40154 40155 40157 7 8,500 25



## Z-COOL, Ceramic Oxide CO, CO-COOL



For coarse but cool grinding at high stock removal rates. Zirconia alumina is a highperformance abrasive which delivers best results on powerful angle grinders at increased contact pressure. Active additives in the coating ensure substantially improved stock removal and a reduced thermal load on poorly heat conducting materials.

#### Abrasive

Zirconia Alumina Z-COOL (top-sized)

#### **Ordering Note**

Please order COMBICLICK<sup>®</sup> backing pad separately.

#### **PFERD Specification Number**

CC-FS Z-COOL

Diameter (Inches)		Grit and E	May DDM			
	36	50	60	80		
5	40170	40171	40172	40173	12,200	25
7	40188	40189	40190	40191	8,500	25



For aggressive grinding achieving maximum stock removal rates. Nevertheless, these fiber discs attain a very long service life. Their ceramic grain is particularly well suited for working on hard materials and coatings. To be used preferably with high-powered angle grinders.

Available with standard arbor hole or 5/8-11 quick-change hub.

#### Abrasive

Ceramic Oxide CO

#### **Ordering Note**

Please order COMBICLICK<sup>®</sup> backing pad separately.

#### PFERD Specification Number CC-FS CO

Grit and EDP Number Diameter P Max. RPM (Inches) 50 60 80 120 24 36 4-1/2 40197 40198 40199 40200 40201 40203 13,300 25 5 40204 40205 40206 40207 40208 40210 12,200 25 7 40218 40219 40220 40221 40222 40224 8,500 25



For aggressive grinding achieving maximum stock removal on hard, poorly heat conducting materials. Active additives in the coating ensure a substantially improved abrasive performance while preventing loading and reducing heat build-up in the workpiece.

Available with standard arbor hole or 5/8-11 quick-change hub.

#### Abrasive

Ceramic Oxide CO-COOL (top-sized)

#### **Ordering Note**

Please order COMBICLICK<sup>®</sup> backing pad separately.

PFERD Specification Number CC-FS CO-COOL

Dimensions (O.D. x I.D.)			Æ					
	24	36	50	60	80	120	IVIAX. KPIVI	
4-1/2	40225	40226	40227	40228	40229	40231	13,300	25
5	40232	40233	40234	40235	40236	40238	12,200	25
7	40246	40247	40248	40249	40250	40252	8,500	25

# PFERD

## **Backing Pads**

#### COMBICLICK<sup>®</sup> Backing Pads



This backing pad permits the use of  $\mathsf{COMBICLICK}^{\otimes}$  fibre discs 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<sup>®</sup> mounting system minimizes tool changing times.

#### Safety note

The peripheral speed must not exceed 80 m/s.



Disc Diameter (Inches)	Thread Size	EDP Number	Max. RPM	
4-1/2, 5	5/8-11	69470	13,000	1
4-1/2, 5	M14 x 2.0	69471	13,000	1
7	5/8-11	69474	8,600	1
7	M14 x 2.0	69475	8,600	1

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PFERD quality certified according to EN ISO 9001.