# New PFERD-COMBIDISC® Product Line for coarse to ultra-fine grinding



- For a wide range of materials e.g. metal, plastic, wood.
- Two mounting systems CD and CDR.
- Ease of handling, quick disc change.





#### Two Mounting Systems CD and CDR; Peripheral Speed, RPM

**PFERD COMBIDISC®** covers the full range of surface finishing applications.

From coarse grinding to mirror polishing, PFERD COMBIDISC® provides solutions to the most difficult finishing problems.

A carefully tailored selection of power source systems completes the range.

#### **COMBIDISC®** Benefits:

- Ease of handling.
- Quick disc change.
- No-adhesive bonding.
- Secure attachment no disc dislodgement.

- Disc will not detach even at high operating temperatures.
- Vibration-free running as disc is always centrally positioned.
- Disc holders are available in three colourcoded grades: soft (grey), medium-hard (blue), hard (red) for any surface, radius or edge cutting job.
- Selection of grit types and sizes for tools from 20 to 75 mm dia.
- For different materials e.g., metal, plastic, wood.
- From coarse to ultra-fine grinding and polishing.

#### COMBIDISC® Applications

- Tool and mould making
- Pattern shops
- Machine construction
- Automotive industry
- Aerospace industry
- Jet engine construction and repair work
- Tank and process system construction (e.g., foodstuff and chemical industry)

#### **Suitable Power Tools**

- Pneumatic grinders (straight and angle types)
- Flexible shaft machines with straight and angle handpiece

#### **Peripheral Speed and RPM**

Work process			Recom	mended	speed [F	RPM]			Appropriate tools
▼	5	10	15	20	25	30	35	40	▼
Grinding steel and cast iron materials				<b>—</b>			<b>→</b>		Abrasive discs A, A-FLEX, A-PLUS, A-Forte
Grinding stainless steel materials (INOX)				<b>—</b>	<b>-</b>				Abrasive discs A-INOX-Forte
Coarse grinding steel and cast iron materials						<	<b>→</b>		Mini-POLIFAN®
Grinding heat resistant materials (Ni-Co-alloys)		4		<b>-</b>					Abrasive discs SiC, Z and CO
Grinding hard non-ferrous metals, titanium, bronze, very hard aluminium-alloys				<b>←</b>			<b>→</b>		Abrasive discs SiC, A-INOX-Forte, TX Discs
Grinding soft non-ferrous-metals, brass, copper, aluminium-alloys					<b>▼</b>			<b>→</b>	Abrasive discs A, A-FLEX, A-PLUS, A-Forte, A-INOX-Forte, TX Discs
Cleaning, texturing			<b>_</b>	<b>→</b>					Fleece-Layered Discs and POLICLEAN® Discs
Polishing	<b></b>	<b>-</b>							Felt Discs

## Two Alternative Grinding Systems

#### 1. Type CD (pages 3-7)

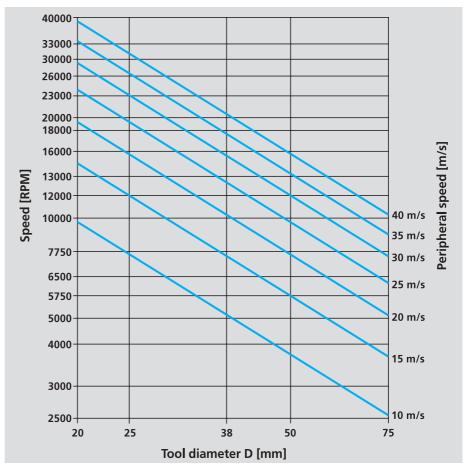


Tool backing: Screw connection with internal thread

#### 2. Type CDR (pages 8-9)



Tool backing: Plastic connector with thread Compatible with existing systems: Roloc® TM, Lockit®, Speed Lok® TR, Power-Lock® Typ III.





#### **Abrasive Disc Holders SBH, Arbors**

# **COMBIDISC® Grinding Tools System CD** (Screw connection with internal thread)

COMBIDISC® Abrasive Disc Holders SBH Type CD



COMBIDISC® Abrasive Disc Holders with screw connection are available in three colour-coded grades:

soft (W) = grey

medium-hard (M) = blue

■ hard (H) = red

Maximum peripheral speed: 50 m/s

Order No.	EAN 4007220	Shank dia. mm	Max.speed RPM	Ø mm		g
SBH 20 M	265901	6	47.500	20	1	30
SBH 25 M	266755	6	38.000	25	1	35
SBH 38 W	266762	6	25.000	38	1	45
SBH 38 M	266779	6	25.000	38	1	45
SBH 38 H	266786	6	25.000	38	1	45
SBH 50 W	266793	6	19.000	50	1	50
SBH 50 M	266809	6	19.000	50	1	50
SBH 50 H	266816	6	19.000	50	1	50
SBH 75 W	266823	6	12.500	75	1	90
SBH 75 M	266830	6	12.500	75	1	90
SBH 75 H	266847	6	12.500	75	1	90



Abrasive Disc Holders soft (W) = grey



Abrasive Disc Holders medium-hard (M) = blue



Abrasive Disc Holders hard (H) = red

#### **Arbors AF 14-1/4**

For COMBIDISC® holders (backing pad). Recommended for PFERD angle grinders PW 9/120 DH, PW 12/120 and angle drive WT 7 E M14. For ordering examples see catalogue 209.



The illustration shows a mounted clamping bolt AF 14-1/4.



All abrasive discs 38-50 mm dia. and COMBIDISC® abrasive disc holders (20 or 25 mm dia.), can be used for work on slots and grooves.





#### Abrasive Discs CD, Mini Fibre Discs



For grinding metals and other materials.

Order No.  Available grit sizes A = Aluminium Oxide  36 60 80 120 180 320  EAN 4007220	Ø mm	Recom. speed RPM		g
CD 20 A - 265864 266007 266038 266052 266069	20	20-35.000	100	120
CD 25 A - 355718 355725 355732 266083 266151	25	15-26.000	100	130
CD 38 A 355749 355756 355763 355770 266175 266199	38	10-16.000	100	250
CD 50 A 355787 355794 355800 355817 266212 266281	50	8-13.000	100	330
CD 75 A 355824 355831 355848 355855 266328 266359	75	5- 9.000	50	380



Very flexible abrasive discs, especially for work on contours, concave and convex surfaces. For non-visible surface finishing and blending from one metal to another. These tools are applied in the tool and mould construction industry. To guarantee the flexibility of the abrasive discs, it is recommended that the discs are used with a soft disc-holder.

	Order No.				Recom.		
Available grit sizes A = Aluminium Oxide 60 80 120					speed RPM		<u>g</u> )
		EAN 4007220					
N! CD 38 A-FLEX	638842	638859	638866	38	10-16.000	100	300
N! CD 50 A-FLEX	638873	638880	638897	50	8-13.000	100	425
N! CD 75 A-FLEX	638903	638910	638927	75	5- 9.000	50	445

**N!** = New in the PFERD-product line



Designed for universal use on all metals. Improved stock removal rate because of firmer backing material.

Recommended for edge-grinding applications, being particularly tearresistant with a long service life.

Order No.  Available grit sizes A = Aluminium Oxide  36 60 80 120  EAN 4007220  CD 50 A-PLUS 593608 593615 593622 593653					Ø mm	Recom. speed RPM		g
CD 50 A-PLUS	593608	593615	593622	593653	50	8-13.000	100	500
CD 75 A-PLUS	593660	593677	593684	593691	75	5- 9.000	50	540



For surface and contour grinding of metals. The fibre backing reinforces the abrasive discs and provides improved stock removal properties. Only hard or medium-hard abrasive disc holders should be used.

Small fibre grinders CDF (50 mm dia.) and small COMBIDISC® abrasive disc-holders (20 to 38 mm dia.) can be used in difficult to reach places.

		Order No.		Ø mm	Recom.		$\Rightarrow$
Available grit sizes A = Aluminium Oxide  36 50 80  EAN 4007220					speed RPM		<u>g</u> ]/
CDF 50 A	265826	266854	266861	50	8-13.000	100	590
CDF 75 A	266878	266885	266892	75	5- 9.000	50	690

### **COMBIDISC®** Grinding Tools

# PFERD

#### **Abrasive Discs CD**



For grinding metals and other materials.

Fast stock removal, cool cutting properties, long service life.

Order No.  Available grit sizes A = Aluminium Oxide  36 60 80 120  EAN 4007220					Ø mm	Recom. speed RPM		g
CD 25 A-Forte	-	265833	266021	266045	25	15-26.000	100	150
CD 38 A-Forte	266076	266090	266106	266113	38	10-16.000	100	300
CD 50 A-Forte	266120	266137	266144	266168	50	8-13.000	100	425
CD 75 A-Forte	266182	266205	266229	266250	75	5- 9.000	50	445



For heavy-duty grinding operations on difficult to work materials such as stainless steels, Hastelloy, Inconel, etc.

Active abrasive fillers in the coating result in a higher rate of rapid stock removal after the initial grinding. This can easily be seen by increased sparks . Only hard or medium-hard abrasive disc holders should be used.

	Order No.			Ø	Recom.		$\Rightarrow$
Available grit sizes	Aluminiu 36	m Oxide A-IN 60	OX-Forte 80	mm	speed RPM		g
		EAN 4007220	)				
CD 50 A INOX-Forte	265840	266427	266434	50	8-13.000	100	455
CD 75 A INOX-Forte	266441	266458	266465	75	5- 9.000	50	515



Suitable for all metals. Particularly rapid stock removal rate in coarse grinding applications using grit 60.

Due to their high strength, these products are very suitable for edge grinding of sheet metal. Use hard or medium-hard disc holders only.

	Order	No.		Ø	Recom.		$\supset$
	Available grit  36	sizes Z = Zirco 60 EAN 400722	80	mm	speed RPM		g
CD 50 Z	265857	266472	266519	50	8-13.000	100	505
CD 75 Z	266526	266533	266540	75	5- 9.000	50	590



For use on aluminium, copper, bronze, titanium, high-alloyed steels and plastics. These discs are recommended particularly for titanium alloy applications, where their low susceptibility to heat build-up effectively prevents heat cracking.

They are particularly suitable for use in the aircraft industry where the use of silicon carbide tools is specified for finishing engine components.

	Order No.	Ø mm	Recom. speed RPM		$\Rightarrow$
	Available grit sizes SiC = Silicon Carbide  36 60 80 120 240  EAN 4007220				<u>g</u> /
CD 50 SiC	441176 441183 441190 441206 441213	50	8-13.000	100	330
CD 75 SiC	441220 441237 441244 441251 441268	75	5- 9.000	50	380



#### Abrasive Discs CD, Fleece-Layered Discs CD, TX Discs CD



For alloyed and unalloyed steels, cast iron, hard metallic surfaces.

Aggressive grinding application with maximum stock removal. For powerful drive systems.

	Order No.  Available griz sizes CO = Ceramic Oxide							g
	24	36	60 60 1007220	80_	mm	speed RPM		
CD 50 CO	617922	617298	617304	617311	50	8-13.000	100	500
CD 75 CO	617939	617328	617335	617342	75	5- 9.000	50	540



Universally suitable for surface grinding of metals (e.g., removal of pre-grinding marks, removal of oxidization, light deburring jobs).

The flexibility of the disc in surface grinding applications is determined by the hardness of the disc holder. Open structure.

Αν	Orde railable grit s coarse <sup>1)</sup>	r No. sizes A = Alum medium <sup>2)</sup> EAN 4007220	inium Oxide very fine <sup>3)</sup>	Ø mm	Recom. speed RPM		g
CD VRH 20 A	-	-	265871	20	14-19.000	50	85
CD VRH 25 A	268865	266564	266571	25	11-15.000	50	115
CD VRH 38 A	266588	266595	268872	38	7-10.000	50	240
CD VRH 50 A	266618	266625	266632	50	6- 8.000	50	360
CD VRH 75 A	266649	266656	266663	75	4- 5.000	25	410

1) yellow brown 2) red brown 3) blue



For super fine grinding of surfaces or contours and cleaning work on metals and coatings. Very open structure.

When grinding with COMBIDISC® fleece-layered discs (hard and soft), the addition of oil or water produces even smoother surfaces, cooler cutting and longer service life.

	Order No.	Ø	Recom.		$\supset$	
Ava n	mm	speed RPM		<u>g</u> //		
CD VRW 50 A	266670 266687	266694	50	5.500-8.000	50	340
CD VRW 75 A	266717 266724	266731	75	3.800-5.000	25	350



The surface finish achieved with these discs, in a single operation, lies between that produced with abrasive spiral bands and fleece-layered discs They are particularly suitable for use on stainless materials and aluminium.

		80	120	ium Oxide 320_	Ø mm	Recom. speed RPM		g
		EAN 4	1007220					
CD 50 A TX	505724	505731	505748	505755	50	7.500-9.500	25	425
CD 75 A TX	505786	505793	505809	505816	75	5.000-6.500	25	650



#### Mini-POLIFAN®, Arbors, Felt Discs CD, POLICLEAN® Discs



Designed for multipurpose grinding jobs on various materials with a high rate of stock removal. Especially suitable for grinding weld seams in difficult to reach places. Better service life and stock removal compared with abrasive discs. Approved for max. 50 m/s acc. to EN 13743.

	Order No.						Suitable		
Available grit sizes A =Aluminium Oxide					mm	speed	arbors		g
	40	60	80	120		RPM			
		EAN 4	1007220						
CD PFF 50 A	617359	617366	617373	617380	50	12-14.000	BO PFF 50 1)	10	180
CD PFF 75 A	617397	617403	617410	617625	75	8-10.000	BO PFF 75 <sup>2)</sup>	10	390

1) Alternative COMBIDISC®-Holder SBH 20 - 50.

2) Alternative COMBIDISC®-Holder SBH 75.



Designed for multipurpose grinding jobs on various materials at high rate of stock removal. Especially suitable for grinding weld seams in difficult to reach places.

Better service life and stock removal compared with abrasive discs. Approved for max. 50 m/s acc. to EN 13743.

	Order No.						Suitable	$\equiv$	
Available grit sizes Z = Zirconia Alumina					mm	speed	arbors		g
	40	60	80	120		RPM			
		EAN 4	1007220						
CD PFF 50 Z	592717	592724	592731	592748	50	12-14.000	BO PFF 50 <sup>1)</sup>	10	160
CD PFF 75 Z	592755	592762	592779	592786	75	8-10.000	BO PFF 75 <sup>2)</sup>	10	340

1) Alternative COMBIDISC®-Holder SBH 20 - 50.

2) Alternative COMBIDISC®-Holder SBH 75.



Order No.	EAN 4007220	Suitable for	Shank dia. mm		g
BO PFF 50	593196	CD PFF 50	6	1	16
BO PFF 75	593202	CD PFF 75	6	1	18

Approved for a max. operating speed of 50 m/s.



For polishing work using polishing paste bars, grinding compounds or diamond polishing pastes for face grinding of medium-sized

surface areas (grinding- and polishing paste see catalogue 204, page 41).

Order No.	EAN 4007220	Ø mm	Recom. speed RPM		g
CD FR 50	440490	50	2-4.000	10	80
CD FR 75	440506	75	1.200-2.500	10	165



For coarse cleaning work including the removal of paint, rust, scale, heat marks and glue residues with a medium to fine surface finish.

For use with hard or medium-hard COMBIDISC® holders.

Order No.	EAN 4007220	Ø mm	Width mm	Recom. speed RPM		g
CD 50 PCLR	471500	50	13	5.500-8.000	10	150
CD 75 PCLR	471517	75	13	3.800-5.000	10	320



#### Abrasive Disc Holders SBHR, Abrasive Discs CDR

### COMBIDISC® Grinding Tools System CDR (Plastic connector with thread)

**COMBIDISC® Abrasive Disc Holders SBH Type CDR** 

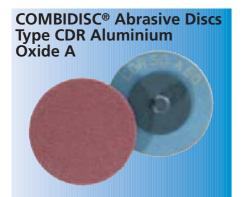
COMBIDISC® holders with plastic thread are available in medium-hard (M).

Maximum peripheral speed: 50 m/s



Order No.	EAN 4007220	Ø mm	Shank dia mm	Max. speed RPM		g
SBHR 38 M	597057	38	6	25.000	1	45
SBHR 50 M	597064	50	6	19.000	1	50
SBHR 75 M	597071	75	6	12.500	1	90

Compatible with existing systems: Roloc® TM, Lockit®, Speed Lok® TR, Power-Lock® Typ III.



For grinding metals and other materials

Order No.	Ø	Max.	<b>=</b>	g
Available grit sizes A = Aluminium Oxide	mm	speed RPM		<u>[</u> 9]/
<u>36 60 80 120 180 320</u>		IXFIVI		
EAN 4007220				
CDR 38 A 596456 596463 596470 597255 597262 596500	38	10-16.000	100	250
CDR 50 A 596517 596524 596531 596548 596555 596562	50	8-13.000	100	330
CDR 75 A 596586 596593 596609 596616 596623 596630	75	5- 9.000	50	380

**COMBIDISC® Abrasive Discs** 

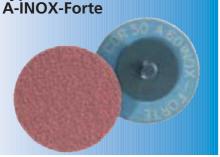
For universal use on all materials.

High stock removal rates, cool cutting properties, long service life.



	O	rder No.			Ø	Recom.	$\overline{\Box}$	g
Available	Available grit sizes A-Forte = Aluminium Oxide							<u> 9</u> /
	36	60	80	120		RPM		
		EAN	4007220					
CDR 38 A-Forte	596647	596661	596678	596685	38	10-16.000	100	300
CDR 50 A-Forte	596692	596708	596715	596722	50	8-13.000	100	425
CDR 75 A-Forte	596739	596746	596753	596760	75	5- 9.000	50	445

**COMBIDISC® Abrasive Discs** Type CDR Aluminium Oxide A-INOX-Forte



For heavy-duty grinding operations on difficult to work materials such as stainless steels, Hastelloy, Inconel, etc.

Active abrasive fillers in the coating result in a higher rate of rapid stock removal after the initial grinding. This can easily be seen by increased sparks. Only hard or medium-hard abrasive disc holders should be used.

Order No.			Ø mm	Recom. speed		g	
Available grit sizes Aluminium Oxide A-INOX-Forte  36 60 80  EAN 4007220					RPM		
CDR 50 A-INOX-Forte	596777	596784	596791	50	8-13.000	100	455
CDR 75 A-INOX-Forte	596807	596814	596821	75	5- 9.000	50	515



#### Abrasive Discs CDR, Fleece-Layered Discs CDR



For all metals. Particularly fast stock removal rates in coarse grinding applications using grit 60.

Due to their high strength, these products are very suitable for edge grinding of sheet metal. Only hard or medium-hard abrasive disc holders should be used.

	(	Order No.		Ø	Recom.		$\Rightarrow$
	Available g	rit sizes Z = Zirco 60	onia Alumina 80	mm	speed RPM		[g]/
		EAN 4007220					
CDR 50 Z	596838	596845	596852	50	8-13.000	100	505
CDR 75 Z	596869	596876	596883	75	5- 9.000	50	590



Universally suitable for surface grinding of metals (e.g., removal of pre-grinding marks, removal of oxidization, light deburring jobs).

The flexibility of the disc in surface grinding applications is determined by the hardness of the disc holder. Open structure.

Order No.  Available grit sizes A = Aluminium Oxide  coarse <sup>1)</sup> medium <sup>2)</sup> very fine <sup>3)</sup> EAN 4007220		Ø mm	Recom. speed RPM		g		
CDR VRH 38 A	596906	596913	596920	38	7-10.000	50	240
CDR VRH 50 A	596937	596944	596951	50	6- 8.000	50	360
CDR VRH 75 A	596968	596975	597354	75	4- 5.000	25	410

1) yellow brown 2) red brown 3) blue



For super fine grinding of surfaces or contours and cleaning work on metals and coatings. Very open structure.

When grinding with COMBIDISC® fleece-layered discs Type CDR (hard and soft), the addition of oil or water produces even smoother surfaces, cooler cutting and longer service life.

Order No. Available grit sizes A = Aluminium Oxide <u>medium</u> fine very fine  EAN 4007220		Ø mm	Recom. speed RPM		g		
CDR VRW 50 A	596999	597002	597019	50	5.500-8.000	50	340
CDR VRW 75 A	597026	597033	597040	75	3.800-5.000	25	350

## **COMBIDISC®** Grinding Tools



#### **Track Grinders, Sets**



Specially designed for slot grinding applications, e.g. inexpensive cleaning and corrosion removal of seat mounting rails (tracks) in commercial passenger aircraft.

Special feature: The special arbor (STS 6) transmits an orbital wobbling movement to the disc



Items	Order No. EAN 4007220	Ø mm		g
Arbors	STS 6 265895	6	1	13
	Order No.  Available grit sizes A=Aluminium Oxide  60 120  EAN 4007220	Ø mm		9
Abrasive Discs	CD 20 A 265864 266038 CD 25 A-Forte 265833 266045	20 25	100 100	120 150
	Order No.  Available grit sizes A=Aluminium Oxide  coarse¹¹medium²¹very fine³¹ EAN 4007220	Ø mm		g
COMBIDISC® Fleece-Layered Disc Hard Type	CD VRH 20 A 265871 CD VRH 25 A 268865 266564 266571	20 25	50 50	85 115

<sup>1)</sup> yellow brown 2) red brown 3) blue



For sampling and testing.

Order No.	EAN 4007220		g	
SET 50	265019	1	215	

Order No.	EAN 4007220		g
SET 75	265932	1	520

#### Contents

Qty.	Item	Order No.
3 ea. Ak	orasive Discs	CD 50 A 36 Forte CD 50 A 60 Forte CD 50 A 120 Forte CD 50 A 60 INOX-Forte CD 50 Z 60
	MBIDISC®- ayered Discs	CD VRH 50 Mittel CD VRW 50 Mittel
	c Holder dium hard	SBH 50 M

#### Contents

Qty. Item	Order No.
3 ea. Abrasive Discs	CD 75 A 36 Forte CD 75 A 60 Forte CD 75 A 120 Forte CD 75 A 60 INOX-Forte CD 75 Z 60
3 ea. COMBIDISC®- Fleece-Layered Discs	CD VRH 75 Mittel CD VRW 75 Mittel
1 Disc Holder medium hard	SBH 75 M

## **COMBIDISC®** Grinding Tools

# PFERD

#### **Mini Tool Cases**



Ideally suited for coarse, and fine grinding, polishing and cleaning jobs - particularly for on-site building and construction. Convenient and comprehensive coordinated range.

#### Contents:

1 Electric Angle Grinder UWER 5/200 SI with electronic speed regulator (9.000 - 20.000 RPM), Power output 500 W.

4 Abrasive Disc Holders + 2 Arbors for alternative Tool Drives.

Various Abrasive Discs, TX Discs, Mini POLIFAN®, Fleece-Layered and Felt Discs in 50 mm dia.

Bars of Polishing Paste for use on Felt Discs.

Order No.	EAN 4007220		g
CD 50 UWER 20	607893	1	4057

Electric angle grinder with electronic speed regulator.



Excellent results with a 'genuine' one-hand angle grinder, which covers the entire spectrum of speeds in the COMBIDISC® 50 mm disc range.











Machinist's Files, Sharpening Files, Rasps and Precision Files



Superabrasives Diamond and CBN Files, Grinding Tools and Cut-Off Wheels



Tungsten Carbide Burrs, H.S.S. and Tool Steel (WS) Rotary Cutters, Hole Saws, Hole Cutters and Accessories



Grinding and Cut-Off Wheels



**Mounted Points** 



Industrial Power Brushes



Fine Grinding and Polishing Tools



**Tool Drives** 





Machinist's Files, Sharpening Files, Rasps and Precision Files



Superabrasives Diamond and CBN Files, Grinding Tools and Cut-Off Wheels



Tungsten Carbide Burrs, H.S.S. and Tool Steel (WS) Rotary Cutters, Hole Saws, Hole Cutters and Accessories



Grinding and Cut-Off Wheels



**Mounted Points** 



Industrial Power Brushes



Fine Grinding and Polishing Tools



**Tool Drives**