

# New in the PFERD product range 202

## High Speed Disc ALUMASTER®

The innovative **ALUMASTER®** High Speed Disc is a unique tool with an extremely high stock removal performance, which was specially developed for use on angle grinders. The latest new development from PFERD is ideal for processing aluminium as it does not generate hazardous or explosive dust. The special design of the tool also guarantees maximum safety. It consists of ten specially developed tungsten carbide cutting inserts, which are fixed to the very light, but extremely robust GRP disc. The innovative geometry of the disc and the possibility of turning or replacing the cutting inserts when they are worn allow the very long and cost-effective use of this uniquely safe solution for processing aluminium.

### Advantages:

- Extremely high stock removal performance
- Maintains the user's health as no hazardous or explosive dust is generated
- Maximum safety thanks to the innovative cut geometry and the integrated depth gauge
- Very light and still extremely robust tool thanks to the innovative GRP disc (weight similar to that of reinforced grinding wheels)
- Can be used on all standard angle grinders (dia. 115/125 mm)
- Can be used in almost any location as you do not need an extractor unit
- Extremely long tool life because of the innovative disc geometry as well as the specially developed turnable and replaceable tungsten carbide cutting inserts
- The tool does not clog up even on lubricating materials
- Cost-effective and eco-friendly alternative to reinforced grinding wheels and flap wheels

### Recommendations for use:

- For cost-effective use, preferably use on air angle grinders with a power output of at least 1,000 watts or electric angle grinders with a nominal power of at least 1,400 watts.
- Do not exert unnecessarily high force on the angle grinder: The **ALUMASTER®** High Speed Disc already works with low forces. The weight of the angle grinder is enough.
- Use the tool at an angle of 5–30°, in special cases of up to 60°.
- Avoid deep penetration. The milling disc is not a cutting tool.
- Process workpiece edges along and not against the workpiece edge.
- Do not decelerate the tool on the workpiece. The cutting inserts might break.

### Application fields:

- Ship- and yacht building
- Construction of railway wagons
- Silo and tank construction
- Vehicle construction

### Application examples:

- Work on butt and fillet welds
- Work on edges/chamfering
- Modification of geometries



**PFERDERGONOMICS®** recommends the **ALUMASTER®** High Speed Disc as an innovative tool solution for processing aluminium as it does not generate hazardous or explosive dust.




**PFERDEFFICIENCY®** recommends the **ALUMASTER®** High Speed Disc for long, fatigue-free and resource-saving work, with perfect results in the shortest possible time.





**PFERDVIDEO**  
You will receive more information here or at [www.pferd.com](http://www.pferd.com)


### Safety notes:

- The tool is designed for use on aluminium, wrought aluminium alloys and cast aluminium only.
- The flange nut has to be tightened with the appropriate tool, e.g. face wrench. Clamping systems which are tightened without additional tools, i.e. only manually, by design are not permitted. Please refer to the Tool Manual, Catalogue 209, for suitable clamping nuts.
- Tighten the fastening screws of the cutting inserts with the torx wrench included. Alternatively, you can use a torque wrench with a tightening torque of 4 Nm.
- Loose cutting inserts might break during use. Therefore, check whether they are attached securely on a regular basis.
- Do not use damaged cutting inserts! They might break!
- Only use original accessories from PFERD.
- The milling disc **complies with the following safety requirements:**
  - **EN 12413** for grinding tools made of bonded abrasives (resistance to breaking, side load capacity)
  - **EN 13236** for grinding tools with diamond or boron nitride (resistance to breaking)
  - **EN 13743** for coated abrasives (resistance to breaking)


 = CE marked


 = Do not use if damaged!


 = Do not use for cutting!


 = Wear eye protection!

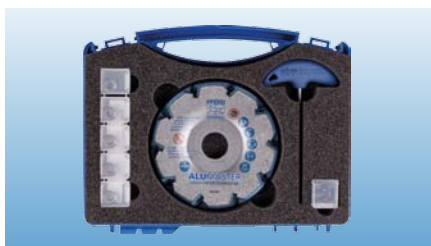
 = Wear gloves!

 = Wear hearing protection!

 = Read the safety instructions!

 = Observe the contact angle of 5–60°!

 = Make sure that the screws are tightened correctly!




**Content of the set:**

- ALUMASTER® High Speed Disc
- Cutting insert set
- Screw set for cutting inserts
- Torx wrench

**Ordering example:**  
 EAN 40072200**26106**  
 HSD-F 115/125 ALUMASTER

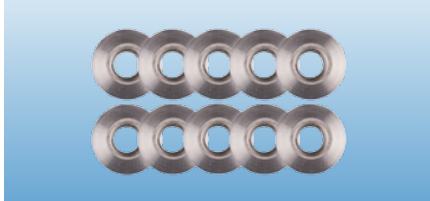
### ALUMASTER® High Speed Disc




Description	EAN 4007220	∅ [mm]	Max. perm. speed [RPM]	
N! HSD-F 115/125 ALUMASTER	026106	115	13,300	1

**Ordering example:**  
 EAN 40072200**18583**  
 WSP-A-12R ALUMASTER

### Cutting insert set




Description	EAN 4007220	∅ [mm]	Content of the set	Suitable for	
N! WSP-A-12R ALUMASTER	018583	12	10	HSD-F 115/125 ALUMASTER	1

**Ordering example:**  
 EAN 40072200**05392**  
 WSP-S-M4S

### Screw set for cutting inserts



Description	EAN 4007220	Content of the set	Suitable for cutting inserts	
N! WSP-S-M4S	005392	5	WSP-A-12R ALUMASTER	1



The ALUMASTER® High Speed Disc won the "EISEN 2016 Innovation Award" at the international Hardware Fair in Cologne. "All in all, it is an innovative product!" the jury concluded.

**EISEN 2016**  
 INNOVATION-AWARD



**2016**

You will find more information about our innovative products and services at [www.pferd.com](http://www.pferd.com)

# New in the PFERD product range 202

## EDGE FINISH system for work on edges

In addition to a specially designed drive, the EDGE FINISH system for work on edges includes a cutting tool used for defined chamfering, edge breaking and producing rounded edges on medium to large-sized steel tools.

Through the selection of the appropriate tungsten carbide cutting inserts and matching tool mounting, exact edge shapes can be created with either 30° or 45° chamfering, or with a defined radius of 3.0 mm. The desired chamfer height is adjustable from 1 to 6 mm. When processing stainless steel (INOX), a maximum chamfer height of 2 mm is recommended. The special tungsten carbide cutting inserts have a high quality coating and achieve the best stock removal results.

Among other things, rounding edges is a precautionary measure for anti-corrosion protection according to:

- ISO 12944-3
- ISO 8501-3
- SOLAS XII/6.3 (Ref. T4/3.01 MSC.1/Circ. 1198)

### Safety notes:

- Never use damaged cutting inserts! There is a risk of breaking!



= Wear eye protection!



= Wear gloves!



= Wear hearing protection!



= Read the safety instructions!



= Observe the recommended rotational speed!

### Advantages:

- Large time savings by producing defined edges in a one-step operation
- Highest working comfort and optimum guidance thanks to the ergonomically optimized design and very good haptics
- Best stock removal rate and long tool life thanks to the specially coated cutting inserts
- Chamfer height individually adjustable up to 6 mm
- Fatigue-free working thanks to the anti-vibration handle SENSOHANDLE

### Application examples:

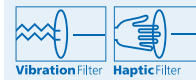
- Rounding edges in preparation for application of anti-corrosion coatings in shipbuilding, on crane systems and other medium to large-sized steel constructions which are exposed to corrosion loading
- Chamfering of the weld seam preparation of medium to large-sized components (V-shaped seam 60° according to ISO 9692-1)
- Chamfering for edge breaking (45° visible edge)

### Recommendations for use:

- Set the EDGE FINISH system to **speed range 7,100 to 8,700 RPM**
- Run the EDGE FINISH system over the workpiece in reverse rotation, to prevent damage to the tool and to avoid chatter marks on the workpiece
- Machine highly uneven burn ridges beforehand using reinforced grinding wheels or POLIFAN® flap discs, to avoid damage to the cutting inserts and to achieve better guidance
- Increase the tool life of drive and tool by appropriate maintenance and proper storage



**PFERDERGONOMICS®** recommends the EDGE FINISH system as an innovative tool solution for comfortable working with reduced vibration, good haptics and optimized tool guidance.



**PFERDEFFICIENCY®** recommends the EDGE FINISH system for long, fatigue-free and resource-saving work, with perfect results in the shortest possible time.



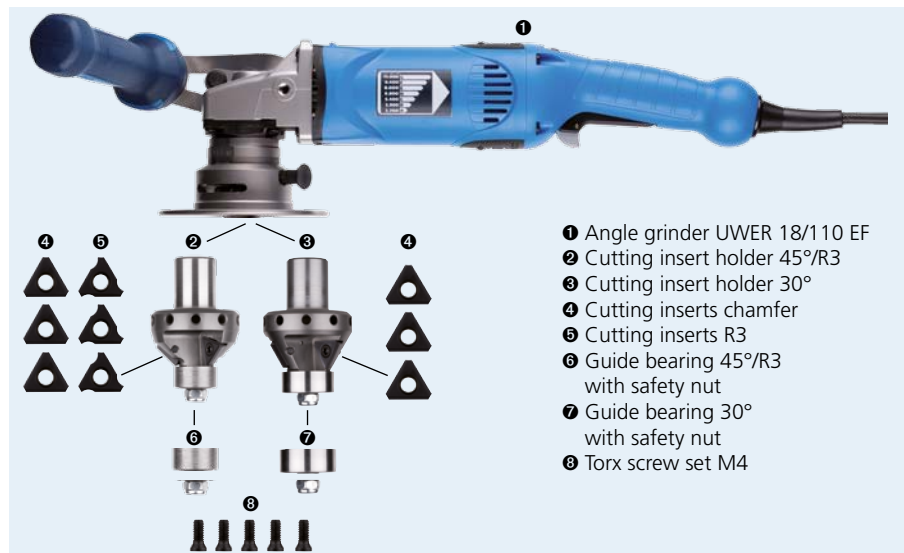
### PFERDVIDEO

You will receive more information here or at [www.pferd.com](http://www.pferd.com)

## Construction of EDGE FINISH system for work on edges

A powerful angle grinder with rotational speeds of 2,750 to 11,000 RPM provides the basis for this compelling system. Two different cutting insert holders are available and can, if necessary, be replaced at any time. They specify the desired angle of 30° or 45° and come with three tungsten carbide cutting inserts. In combination with a high-quality surface coating, these inserts allow outstanding stock removal rates and produce defined chamfers or radii depending on the type. The guide bearing ensures optimum guidance along the edges to be finished.

All of the described parts are available both as a complete system (see page 75) and separately. The available, robust transport case provides the best possible protection and has enough space for accessories (see page 24).



- 1 Angle grinder UWER 18/110 EF
- 2 Cutting insert holder 45°/R3
- 3 Cutting insert holder 30°
- 4 Cutting inserts chamfer
- 5 Cutting inserts R3
- 6 Guide bearing 45°/R3 with safety nut
- 7 Guide bearing 30° with safety nut
- 8 Torx screw set M4


### Cutting insert set 3 mm radius



**Ordering example:**  
EAN 4007220005118  
EF-WSP-F

### Cutting insert set chamfer



Description	EAN 4007220	Angle $\alpha$	Radius [mm]	Content of the set	Suitable for cutting insert holder	
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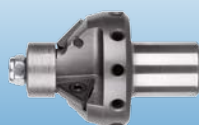
#### Cutting insert set 3 mm radius

N! EF-WSP-R3	005101	–	3.0	3	EF-WSP-A R3/45°	1
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#### Cutting insert set chamfer

N! EF-WSP-F	005118	45°/30°	–	3	EF-WSP-A R3/45°, EF-WSP-A 30°	1
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### Cutting insert holder 3 mm radius/45° chamfer




#### Ordering note:

■ The cutting inserts and matching screw sets are not included in the delivery. Please order separately.

**Ordering example:**  
EAN 4007220005170  
EF-WSP-A 30°

### Cutting insert holder 30° chamfer



Description	EAN 4007220	Angle $\alpha$	Radius [mm]	Suitable for cutting inserts	Suitable for machine type	
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#### Cutting insert holder 3 mm radius/45° chamfer

N! EF-WSP-A R3/45°	005200	45°	3.0	EF-WSP-R3, EF-WSP-F	UWER 18/110 EF	1
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#### Cutting insert holder 30° chamfer

N! EF-WSP-A 30°	005170	30°	–	EF-WSP-F	UWER 18/110 EF	1
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### Guide bearing 3 mm radius/45° chamfer



**Ordering example:**  
EAN 4007220005132  
EF-FL-30°

### Guide bearing 30° chamfer



Description	EAN 4007220	Suitable for cutting insert holder	
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N! EF-FL-R3/45°	005163	EF-WSP-A R3/45°	1
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N! EF-FL-30°	005132	EF-WSP-A 30°	1
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**Ordering example:**  
EAN 4007220005392  
WSP-S-M4S

### Screw set for cutting inserts



Description	EAN 4007220	Content of the set	Suitable for cutting inserts	
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N! WSP-S-M4S	005392	5	EF-WSP-R3, EF-WSP-F	1
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