

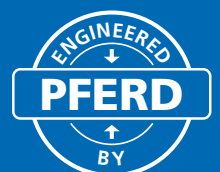
ALUMASTER High Speed Disc

Certainly more stock removal



TRUST BLUE

- Maximum safety as no hazardous or explosive dust is generated
- Fast results due to the extremely high stock removal performance
- Innovative and robust High Speed Disc



ALUMASTER High Speed Disc

Certainly more stock removal

The innovative **ALUMASTER** High Speed Disc is a unique tool with an extremely high stock removal rate. It is ideal for processing aluminium as it does not generate hazardous or explosive dust. It consists of specially developed tungsten carbide cutting inserts, which are fixed to the High Speed Disc.

Advantages:

- Does not generate hazardous or explosive dust.
- An extraction system is not required.
- Cost-effective and eco-friendly alternative to grinding wheels and flap discs of comparable weight.
- Innovative and robust cut geometry:
 - The highest degree of safety
 - Extreme durability
 - Comfortable work
- Specially developed, turnable and replaceable tungsten carbide cutting inserts.
- Exceptionally high stock removal rate.

Materials that can be worked:

- Aluminium alloys
- Brass, copper, zinc
- Bronze
- Plastics
- Fibre-reinforced duroplastics (GRP, CRP)

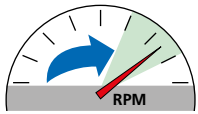
Industries:

- Shipbuilding and yacht construction
- Wagon construction
- Silo and container construction
- Vehicle construction

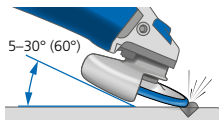


Recommendations for use:

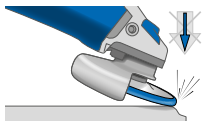
The tool has primarily been designed for use on aluminium, wrought aluminium alloys and cast aluminium. Non-ferrous metals with a relatively low strength and fibre-reinforced plastics can also be machined. This must be checked for the specific application on a case-by-case basis.



- An optimum rotational speed and power output for the tool drive are required for cost-effective use of the **ALUMASTER** High Speed Disc.
 - **HSD-F and HSD-R 115/125 types:**
Max. 13,300 RPM
Pneumatic angle grinders: power output of 1,000 watts or more
Electric angle grinders: rated output of 1,400 watts or more
 - **HSD-R 50 type:**
Max. 25,000 RPM
Pneumatic angle grinders: power output of 350 watts or more
Pneumatic straight grinder: power output of 350 watts or more
Electric straight grinders: rated output of 500 watts or more



- Use the **ALUMASTER** High Speed Disc HSD-F at an angle of 5–30°, or up to 60° in special cases.
- Do not push the tool deep into the workpiece. The milling disc is not a cutting tool.



- Do not exert unnecessarily high forces on the angle grinder. The **ALUMASTER** High Speed Disc already works with low forces.
- When machining workpiece edges, cut along the edge, never across the edge.
- Do not decelerate the tool on the workpiece. The cutting inserts may break.

PFERDVALUE:















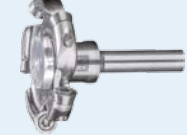
PFERDERGONOMICS recommends **ALUMASTER** High Speed Discs as an innovative tool solution for processing aluminium as they do not generate hazardous or explosive dust.



PFERDEFFICIENCY recommends **ALUMASTER** High Speed Discs for long fatigue-free and resource-saving work with perfect results in a very short period of time.



The fast way to the best tool

Description	Applications	Matching tool drives	Tool	P.
 <p>The HSD-F 115/125 type was specially developed for use on angle grinders with a diameter of 115/125 mm and for flat use.</p>	<ul style="list-style-type: none"> ■ Milling out ■ Work on weld seams ■ Work on fillet welds ■ Work on edges/ chamfering ■ Surface work 	<p>Pneumatic angle grinder PWT 26/120 HV M14</p> <p>Ordering data: EAN 4007220071205</p>  <p>Electric angle grinder UWER 18/110 SI</p> <p>Ordering data: EAN 4007220957127</p> 	<p>ALUMASTER High Speed Disc HSD-F 115/125</p> 	5
 <p>The HSD-R 115/125 type is a refinement of HSD-F and is also suitable for applications such as peripheral milling and milling out root welds.</p>	<ul style="list-style-type: none"> ■ Milling out ■ Work on weld seams ■ Work on fillet welds ■ Work on edges/ chamfering ■ Surface work ■ Milling out root welds ■ Peripheral milling 	<p>Pneumatic angle grinder PWT 26/120 HV M14</p> <p>Ordering data: EAN 4007220071205</p>  <p>Electric angle grinder UWER 18/110 SI</p> <p>Ordering data: EAN 4007220957127</p> 	<p>ALUMASTER High Speed Disc HSD-R 115/125</p> 	6
 <p>Due to its small size, the HSD-R 50 type is highly suitable for working on hard-to-reach areas and delicate components. Thanks to the specially developed arbor, the ALUMASTER High Speed Disc HSD-R 50 cannot only be used on angle grinders (mounting dia. 10 mm), but also on straight grinders and flexible shaft drives.</p>	<ul style="list-style-type: none"> ■ Milling out ■ Work on weld seams ■ Work on fillet welds ■ Work on edges/ chamfering ■ Surface work ■ Milling out root welds ■ Peripheral milling 	<p>Flexible shaft drive Mammoth Electronic ME 22/240</p> <p>Ordering data: EAN 4007220101681</p>  <p>Pneumatic straight grinder PGAS 7/250 E-HV</p> <p>Ordering data: EAN 4007220948880</p>  <p>Pneumatic angle grinder PWSA 5/210 HV</p> <p>Ordering data: EAN 4007220177075</p> 	<p>ALUMASTER High Speed Disc HSD-R 50</p>  <p>Arbor BO 8/10 HSD-R 50</p>  <p>ALUMASTER HSD-R 50 in combination with BO 8/10 HSD-R 50 arbor</p> 	7

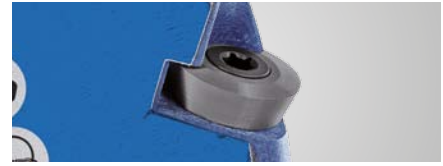
Detailed information and the matching tool drives can be found in our Tool Manual 23, catalogue section 9.

ALUMASTER High Speed Disc

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ALUMASTER with HICOAT coating

PFERD also offers the cutting inserts with a premium-quality HICOAT coating for lubricating aluminium casting alloys with a silicon content of 5–10 %, abrasive aluminium casting alloys with a silicon content of over 15 % and for other abrasive materials or non-ferrous metals. This prevents tool clogging and abrasive wear, even in use on these particularly demanding materials.



Advantages:

- Extremely hard.
- Very low friction coefficient.
- Very low tendency towards adhesion.
- Improved surface quality.
- Reduced burr formation.

Materials that can be worked:

- Lubricating aluminium casting alloys with silicon contents of 5–10 %
- Sticky, greasy materials
- Abrasive aluminium casting alloys with silicon contents of over 15 %
- Abrasive materials such as fibre-reinforced plastics (FRP)
- Non-ferrous alloys of higher strength than aluminium (bronze, brass, etc.)

Selecting suitable cutting inserts:

To determine the most suitable cutting insert, please proceed as follows:

- ❶ Select the material group to be machined.
- ❷ Select the cutting inserts.

❶ Material group		❷ Cutting inserts		
		High-performance application	Universal application	
Non-ferrous metals	Soft non-ferrous metals	Aluminium alloys	HICOAT	uncoated
		Brass, copper, zinc	HICOAT	uncoated
	Hard non-ferrous metals	Hard aluminium alloys (high Si content)	HICOAT	-
		Bronze	HICOAT	-
Plastics	Fibre-reinforced plastics (GRP/CRP), thermoplastics	HICOAT	-	

Safety notes:

- It is essential to tighten the flange nut using the appropriate tool, such as a face pin wrench. Clamping systems which are designed to be tightened without the use of an additional tool, i.e. which are tightened by hand, are not permissible. Suitable clamping nuts can be found in our Tool Manual 23, catalogue section 9.
- Tighten the mounting bolts of the cutting inserts using the Torx key provided. If used properly, it is designed to provide a tightening torque of around 4 Nm. Alternatively, use a torque spanner with a tightening torque of 4 Nm.
- Loose cutting inserts may break during use. Therefore, **check regularly whether they are attached securely.**
- Do not use damaged cutting inserts! They may break!
- Only use original accessories from PFERD.

= CE-marked

= Do not use if damaged!

= Do not use for cutting!

= Wear eye protection!

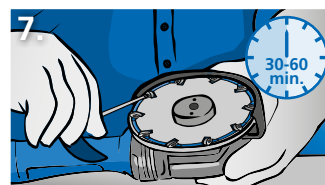
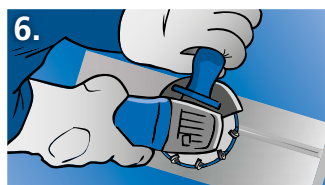
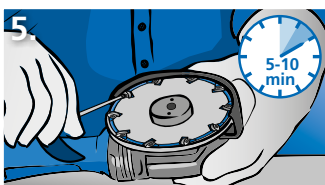
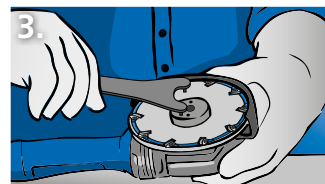
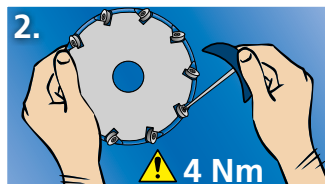
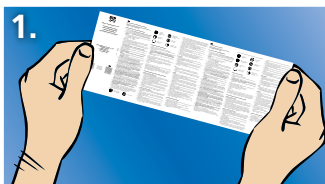
= Wear gloves!

= Wear hearing protection!

= Follow the safety instructions!

= Observe the contact angle of 5–60° (**ALUMASTER HSD-F!**)

Tighten the bolts!



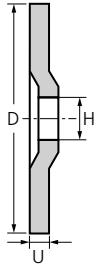
ALUMASTER High Speed Disc HSD-F


Special tool for processing aluminium alloys using an angle grinder.

Contents:

- ALUMASTER High Speed Disc HSD-F 115/125 incl. mounted tungsten carbide cutting inserts
- Torx key, plastic box

PFERDVALUE:



D [mm]	H [mm]	U [mm]	Max. RPM	EAN 4007220		Description
115	22.23	13.0	13,300	026106	1	HSD-F 115/125 ALUMASTER

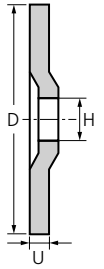
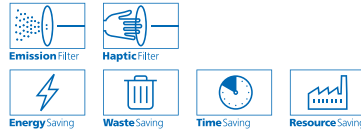
ALUMASTER High Speed Disc HSD-F HICOAT


Special tool for processing particularly challenging aluminium alloys using an angle grinder. The cutting inserts come with a HICOAT coating.

Contents:

- ALUMASTER High Speed Disc HSD-F 115/125 HICOAT incl. mounted tungsten carbide cutting inserts
- Torx key, plastic box

PFERDVALUE:

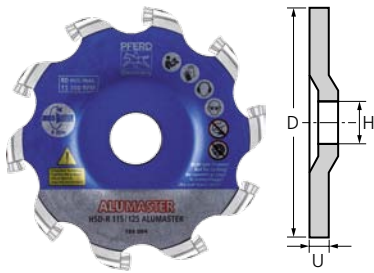


D [mm]	H [mm]	U [mm]	Max. RPM	EAN 4007220		Description
115	22.23	13.0	13,300	061213	1	HSD-F 115/125 ALUMASTER HICOAT



ALUMASTER High Speed Disc

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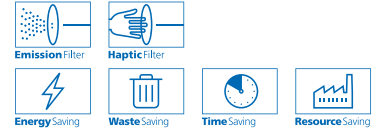
ALUMASTER High Speed Disc HSD-R

Special tool for processing aluminium alloys using an angle grinder. Also suitable for peripheral milling and milling out root welds.

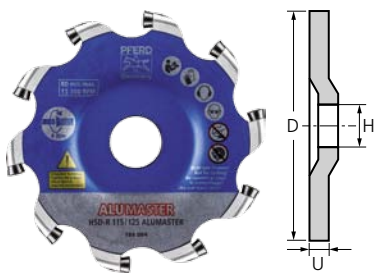
Contents:

- ALUMASTER High Speed Disc HSD-R 115/125 incl. mounted tungsten carbide cutting inserts
- Torx key, plastic box

PFERDVALUE:



D [mm]	H [mm]	U [mm]	Max. RPM	EAN 4007220	Description
115	22.23	8.0	13,300	107461	1 HSD-R 115/125 ALUMASTER



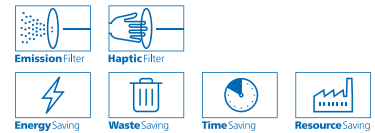
ALUMASTER High Speed Disc HSD-R HICOAT

Special tool for processing particularly challenging aluminium alloys using an angle grinder. The cutting inserts come with a HICOAT coating. Also suitable for peripheral milling and milling out root welds.

Contents:

- ALUMASTER High Speed Disc HSD-R 115/125 HICOAT incl. mounted tungsten carbide cutting inserts
- Torx key, plastic box

PFERDVALUE:



D [mm]	H [mm]	U [mm]	Max. RPM	EAN 4007220	Description
115	22.23	8.0	13,300	107515	1 HSD-R 115/125 ALUMASTER HICOAT



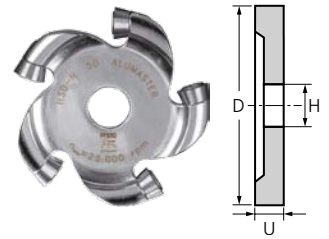
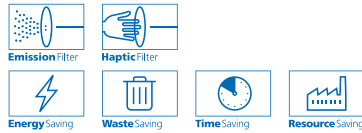
ALUMASTER High Speed Disc HSD-R 50

Special tool for processing aluminium alloys. With the specially developed arbor, it cannot only be used on angle grinders (mounting dia. 10 mm), but also on straight grinders and flexible shaft drives. It is highly suitable for working on hard-to-reach areas and delicate components. Due to the tool diameter of 49 mm, guards are not obligatory.

Contents:

- ALUMASTER High Speed Disc HSD-R 50 incl. mounted tungsten carbide cutting inserts
- Torx key, plastic box

PFERDVALUE:



D [mm]	H [mm]	U [mm]	Max. RPM	EAN 4007220	Description
49	10	8.0	25,000	156858	HSD-R 50 ALUMASTER

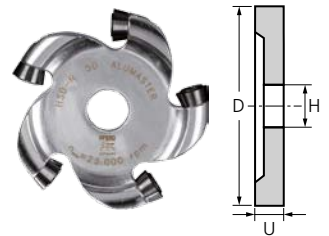
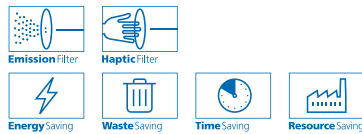
ALUMASTER High Speed Disc HSD-R 50 HICOAT

Special tool for processing particularly challenging aluminium alloys. With the specially developed arbor it cannot only be used on angle grinders (mounting dia. 10 mm), but also on straight grinders and flexible shaft drives. The cutting inserts come with a HICOAT coating. It is highly suitable for working on hard-to-reach areas and delicate components. Due to the tool diameter of 49 mm, guards are not obligatory.

Contents:

- ALUMASTER High Speed Disc HSD-R 50 HICOAT incl. mounted tungsten carbide cutting inserts
- Torx key, plastic box

PFERDVALUE:

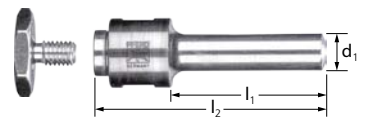


D [mm]	H [mm]	U [mm]	Max. RPM	EAN 4007220	Description
49	10	8.0	25,000	156865	HSD-R 50 ALUMASTER HICOAT

Arbor

Arbor for ALUMASTER High Speed Disc HSD-R 50

Suitable for use on flexible shaft drives and straight grinders.

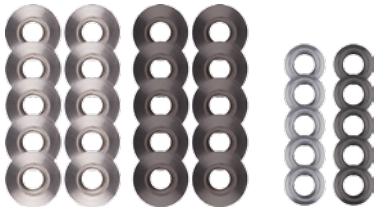


d ₁ [mm]	l ₁ [mm]	l ₂ [mm]	Suitable for	EAN 4007220	Description
8	33	50	HSD-R 50	156919	BO 8/10 HSD-R 50



ALUMASTER High Speed Disc

Certainly more stock removal



Cutting insert sets, HICOAT cutting insert sets

Cutting insert sets for **ALUMASTER** High Speed Disc.

Ordering notes:

- The sets are available with or without HICOAT coating.

D [mm]	Contents [pcs.]	Suitable for	EAN 4007220		Description
8	5	ALUMASTER HSD-R 50	156872	1	WSP-A-8R 50 ALUMASTER
			156889	1	WSP-A-8R 50 ALUMASTER HICOAT
	10	ALUMASTER HSD-R 115/125	107492	1	WSP-A-8R 115/125 ALUMASTER
			107522	1	WSP-A-8R 115/125 ALUMASTER HICOAT
12	10	ALUMASTER HSD-F 115/125	018583	1	WSP-A-12R 115/125 ALUMASTER
			061220	1	WSP-A-12R 115/125 ALUMASTER HICOAT



Screw set for cutting inserts

Screw set for PFERD cutting inserts.

Suitable for cutting inserts	Contents [pcs.]	EAN 4007220		Description
all types	5	005392	1	WSP-S-M4S



ALUMASTER service set, ALUMASTER HICOAT service set

For exchanging individual cutting inserts on the **ALUMASTER** High Speed Disc.

Set contains:

- 2 cutting inserts
- 2 bolts
- 1 TORX key

Ordering notes:

- The sets are available with or without HICOAT coating.

Suitable for	EAN 4007220		Description
ALUMASTER HSD-R 50	156896	1	ASS-R8 50 ALUMASTER
	156902	1	ASS-R8 50 ALUMASTER HICOAT
ALUMASTER HSD-R 115/125	107539	1	ASS-R8 115/125 ALUMASTER
	107546	1	ASS-R8 115/125 ALUMASTER HICOAT
ALUMASTER HSD-F 115/125	061237	1	ASS-R12 115/125 ALUMASTER
	061244	1	ASS-R12 115/125 ALUMASTER HICOAT



Torque spanner and spare blade

WIHA torque spanner with a tightening torque of 4 Nm for optimally and securely mounting cutting inserts on the **ALUMASTER** High Speed Disc.



Suitable for	EAN 4007220		Description
Torque spanner			
ALUMASTER	104620	1	DSWK WIHA Torque 4,0
Spare blade			
DSWK WIHA 4,0	104637	1	TWK WIHA Torque T15

Printed in Germany.

Subject to technical modifications.

02/2019

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