

This **user information** summarizes the information required for the safe use of reinforced grinding wheels, cut-off wheels, cup wheels, grinding wheels, diamond cut-off wheels, POLIFAN flap discs, CC-GRIND grinding discs and CC-GRIND-SOLID grinding discs from PFERD (referred to below as „grinding tools“) on stationary cut-off machines, hand-held grinders and hand-held cut-off machines (both referred to below as „grinders“). In addition to this user information, user information relating to the grinder, as well as the applicable provisions on health and safety at work, should always be observed. Finally, when being used in Australia the AS 1788.1 and 1788.2 should always be observed.

This user information complies with EC Directive 2001/95/EC on general product safety.

Explanation of the labelling of grinding tools

- Always observe the instructions on the grinding tool, the grinder and all accompanying user information.
- Only use grinding tools which meet current safety standards. These products carry the relevant EN resp. AS standard number and the „oSa“ mark:
 - EN 12413 for grinding tools with bonded abrasives (reinforced grinding wheels, cut-off wheels, cup wheels and grinding wheels)
 - EN 13236 for grinding tools with diamond or boron nitrate (diamond cut-off wheels)
 - EN 13743 for coated abrasives (POLIFAN flap discs, CC-GRIND grinding discs)
 - AS 1788.1
- Use a grinding tool that is suitable for the respective application. A tool that can not be clearly identified should never be used.



Observe any use restrictions, warnings and safety instructions on the grinding tools and on the accompanying labels or packaging:



Not permitted for hand-held grinding



Not permitted for face grinding



Not permitted for wet grinding



Do not use if damaged



Only permitted with a back-up pad



Refer to instruction manual/booklet



Wear eye protection



Wear ear protection



Wear protective gloves



Wear a respirator/mask

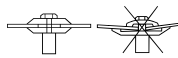
- Grinding tools for hand-held grinding with bond types B (e.g. cup wheels) and BF (reinforced grinding wheels, cut-off wheels, grinding wheels) must not be used after their expiry date. The expiry date is stated as the month and year, e.g. 04/2017. The bond type is always marked on the label.

Storage of grinding tools

- Grinding tools should be stored in such a way as to prevent any adverse effects caused by moisture, frost or large temperature variations and so as to avoid mechanical damage. Do not use resinoid-bonded grinding tools or grinding tools using coated abrasives that have been exposed to severe humidity, damp, or high temperatures.

Mounting principle for grinding tools

- Only use grinders that are intended for use with the relevant tool.
- Never use a grinder that is not in good condition.
- Use only grinding tools whose outer diameter and centre-hole diameter and/or thread match the specifications of the grinder.
- Never use damaged grinding tools. Grinding tools must be visually inspected and checked for any possible damage before each use.
- Keep mounting components clean and in good mechanical condition. Replace them if they become damaged or worn. If the manufacturer of the grinder provides clamping devices and special wrenches of the grinding tools (e.g. a key), then these are to be used. Tighten the clamping mechanism finger tight.
- In principle, only clamping flanges having a contact surface with the same outer diameter and which are identically shaped on the contact side are to be used.
 - For Australia only: According to Australian Standards, for wheels of type 27 and 28 equal to or greater than 180 mm the locking nut shall seat within the depressed portion of the wheel. The flange adjacent to the wheel shall be equal to or greater than one-third of the wheel diameter and the outer part of the flange shall be free and clear from the wheel. For details see AS 1788.
- For large diameter cut-off wheels, use blotters between the grinding tool and clamping components if required.



- Prevent the grinder from accidentally turning on, before mounting or changing the grinding tool by disconnecting the power supply.
- Never exceed the maximum operating speed of a grinding tool. Make sure that the rotational speed of the grinder (rev/min, 1/min, RPM or min⁻¹) does not exceed the maximum permissible speed given on the grinding tool, the accompanying label or packaging.
- Do not make any unauthorized changes to grinding tools.
- If a diamond cut-off wheel is a marked with a specified direction of rotation, this must be complied with.
- Each time that a tool is mounted, perform a trial run at operating speed, with the guard properly installed, for at least 30 seconds. During the trial run, the grinder must be held in such a way that in the event of any failure of the abrasive tool the operator is not struck by any fragments.
- Stationary cut-off wheels must only be used on appropriate stationary cut-off machines. They are not permitted for hand-held or manually guided grinding. If a maximum power output of the cut-off machine is indicated on the wheel label, it must never be exceeded.
- Clamping flanges for stationary cut-off wheels must meet today's requirements according to EN ISO 16089 (Europe) and/or AS 1788 (Australia). Our PFERD sales department will be happy to advise you.

Use of grinding tools

- Ensure that the correct abrasive product is selected for the desired application. Never use a product if it cannot be properly identified.
- Always be aware of the potential dangers during use of grinding tools.
- Always use protective equipment and guards in compliance with the operating instructions for the grinder and make sure they are properly mounted and in good condition before you switch on the grinder. The guard must always be positioned in such a way that it is located between the operator and the tool. Sparks should not fly in the direction of the operator.
- The workpiece must be fixed without tension by appropriate clamping devices or by its own weight.
- The grinder must always be turned on before the grinding tool comes into contact with the workpiece.
- Always bring grinding tools carefully into contact with the workpiece surface.
- Always guide cut-off wheels in a straight line. No lateral load should be applied to the cut-off wheel and it should not be used for face grinding.
- Only use diamond cut-off wheels on materials listed on the label.
- Grinders may only be put down once they have been turned off and have come to a complete stop.

Hazards due to tool breakage, abrasive particles, sparks, dust, fumes, noise and vibration and bodily contact with the abrasive product at operation speed

- The use of appropriate personal protective equipment is required for all grinding operations to provide protection against mechanical impacts, abrasive particles, sparks, dust and fumes, noise and vibration. This includes eye protection, ear protection, respiratory protection and hand protection. Long-sleeved, flame-resistant clothing and appropriate safety footwear must be worn. Tie back long hair and do not wear loose clothing, ties or jewellery. These rules apply not only to the operator of the grinder but also to any other persons in the working environment.
- Inhalation of grinding dust can lead to lung damage. Make sure that sufficient extraction or other appropriate measures are provided during grinding work.
- Do not use grinding tools in the vicinity of flammable materials. Flammable and explosive substances must be removed from the working environment before starting work. This includes, for example, dust deposits (especially aluminium dust), cardboard, packaging material, textiles, wood and wood chips, as well as flammable liquids and gases.
- In the event of excessive vibrations stop the grinder and investigate the cause of the vibration. Take immediate action, when using a grinding tool, if you begin to experience tingling, stinging or numbness in the hand or arms.
- Prevent accidental start-up of the grinder during the process of mounting or changing an abrasive product. Isolate grinders from their power source where necessary.
- Never remove guards from grinders where fitted and ensure they are in good condition and properly adjusted before starting the machine.
- After switching off the grinder, ensure the abrasive product has come to rest before leaving the machine unattended.

Disposal of grinding tools

- Worn or defective grinding tools must be disposed of according to all local resp. national regulations.
- Note that grinding tools may become contaminated by work on certain materials.
- Grinding tools for disposal should be destroyed in a clearly visible manner in order to prevent re-use.
- Further information can be obtained from the manufacturer's Voluntary Product Information and Safety Data Sheet (SDS).