

**Safety instructions and application instructions for resin bonded cutting and grinding discs and cup wheels**

**GENERAL SAFETY INSTRUCTIONS**

**The incorrect use of cutting and grinding tools is extremely dangerous.**

- Observe the instructions mentioned on the tool and on the machine.
- The correct specification of the product must be selected for the application. Never use tools which cannot be identified.
- Never use a product which is damaged in any way. Never use a product that has been dropped or damaged during handling.
- Abrasive products must be stored in dry and frost-free conditions without large variations in temperature and must be protected from mechanical damage.
- Do not use abrasive products after date of expiry (for resin-bonded products: 3 years)
- Under no circumstances may the product be modified in any way.

Products complying with the relevant norm (EN 12413) and/or „oSa“-label are recommended for use.

**The following safety instructions must be observed during the working process:**

- Never use a machine which is defective or has faulty parts.
- Suitable clothing must be worn i.e. no loose clothing, no ties or jewelry, long hair must be tied back and secured.
- Avoid any unintentional starting of the machine before the tool has been clamped – for safety reasons disconnect the machine from the power supply system during this time.
- Do not use machines where the protection has been removed.
- Wear safety gloves when working with hand-held or mobile machines.
- The machine must be supervised until it has completely stopped rotating.
- The safety and application instructions on the product and/or packaging must be carefully observed:



Read the instructions



Wear eye protection



Wear ear protection



Wear gloves



Wear a dust mask

- Clamping procedure: The use of excessive force must be avoided. Only the fastening tool supplied with the machine may be used. The clamping faces must be clean, flat and free from burrs. The flanges should be tightened in such a way as to ensure that the product is correctly driven and there is no slippage.
- All protection removed to fit the wheel must be replaced before starting the machine.
- Under no circumstances may the maximum operating speeds be exceeded:  
**Cutting and grinding discs = max. 80 m/s (red stripe on the label) = max. rpm depending on the diameter of the tool**  
**Certain types of cutting disc Ø 350/400mm = max. 100 m/s, no free-hand-cutting (green stripe on the label)**  
**Cup wheels, 55 mm high = max. 50 m/s (blue stripe on the label) = max. 8.600 rpm**  
**Cup wheels, 35 mm high = max. 50 m/s (blue stripe on the label) = max. 9.500 rpm**
- Trial run: Each product must be run for at least 30 s at its full operating speed before operation and after each refitting. For this reason the working area must be completely clear and machines equipped with protection: protection must be properly fitted.
- When switching the machine on there must be no contact between the material and the machine.
- Mechanical damage of the abrasive through excessive force, thrust or heating must be avoided.
- Hand-held and mobile machines should not be released or put down until the wheel has stopped rotating.
- Most operations create dust – suitable dust extraction should be provided. Dust masks should also be used for additional protection.
- Do not use abrasives close to combustible materials.
- Protection guards must be capable of catching broken fragments effectively and capable of withstanding the impact caused by product breakage.
- Additional precautions have to be taken to protect other people in the area of the working process.
- Suitable eye protection is strongly recommended at all times.
- Suitable ear protectors are strongly recommended at all times (according to EN352).
- Hand-held operations which create a high degrees of vibration can lead to injuries such as Hand-Arm Vibration Syndrom (HAVS). Action should be taken to reduce vibration levels if the work process causes tingling or numbness in the fingers after 10 min use. Machines with a low vibration level are recommended.
- Should the machine vibrate excessively it must be stopped and inspected.
- Never apply excessive pressure to the product to force it to cut.
- Avoid a nonstop working process.
- Worn out or damaged abrasive tools have to be disposed of according to regional or national regulations. These tools should be destroyed to avoid any further use.