PRECAUTIONS AGAINST LIKELY HAZARDS

Noise

• Ear protection complying with EN352 is recommended for all applications where the workpiece or machine is hand-held, irrespective of the noise level.
• Ensure that the correct abrasive product is selected. An unsuitable product can produce excessive noise.

Vibration

• Processes where the workpiece or machine is hand-held can cause vibration injury.
• Action needs to be taken if tingling, pins and needles or numbness is experienced after 10 minutes continuous use of the abrasive product.
• The effects of vibration are more pronounced in cold conditions so keep the hands warm and exercise hands and fingers regularly. Use modern equipment with low vibration levels.
• Maintain all equipment in good condition and stop the machine and have it checked if excessive vibration occurs.
• Use good quality abrasive products and keep them in good condition during their life.
• Maintain mounting flanges and back-up pads in good condition and replace if worn or distorted.
• Do not grip the workpiece or machine too tightly and do not exert excessive pressure on the abrasive product.
• Avoid continuous use of the abrasive product.
• Use the correct product. An unsuitable product can produce excessive vibration.
• Don’t ignore the physical symptoms of vibration - seek medical advice.

Disposal of abrasives

• Used or defective abrasives should be disposed in accordance with local or national regulations.
• Further information can be obtained from material safety data sheets provided by the supplier.
• Be aware that the abrasive product may be contaminated with material from the workpiece or process after use.
• Disposed abrasive products should be damaged to prevent them from being taken from waste skips and reused.

GENERAL PRINCIPLES OF SAFETY

Abrasive products improperly used can be very dangerous.

• Always follow the instructions provided by the abrasive product and machine supplier.
• Ensure that the abrasive product is suitable for its intended use. Examine all abrasive products for damage or defects before mounting.
• Follow the correct procedures for handling and storage of abrasive products.

Be aware of the hazards likely during the use of abrasive products and observe the recommended precautions to be taken:

• Bodily contact with the abrasive product at operating speed.
• Injury resulting from product breakage during use.
• Grinding debris, sparks, fumes and dust generated by the grinding process.
• Noise.
• Vibration.

Use only abrasive products conforming to the highest standards of safety. These products will bear the relevant EN standard number and/or the inscription “oSa”.

• EN12413 for Bonded Abrasives.
• EN13236 for Superabrasives.
• EN13743 for Specific Coated Abrasives (vulcanised fibre discs, flap wheels, flap discs and spindle-mounted flap wheels).

Never use a machine that is not in good working order or one with defective parts.

Employers should carry out a risk assessment on all individual abrasive processes to determine the appropriate protective measures necessary. They should ensure that their employees are suitably trained to carry out their duties.

This leaflet is only intended to provide basic safety recommendations. We strongly recommend that or more detailed information on the safe use of abrasive products, comprehensive Safety Codes are available from FEPA or your National Trade Association:

• FEPA Safety Code for Bonded Abrasives and Precision Superabrasives.
• FEPA Safety Code for Coated Abrasives.
PRECAUTIONS AGAINST LIKELY HAZARDS

Bodily contact with the abrasive product

- Always take great care and attention when using abrasive products. Tie back long hair and do not wear loose clothing, ties and jewellery.
- Prevent accidental start-up of the machine before mounting or changing an abrasive product. Isolate machines from their power source where necessary.
- Never remove guards from machines where fitted and ensure they are in good condition and properly adjusted before starting the machine.
- Always use gloves and suitable clothing where the workpiece or machine is hand-held. For gloves, a minimum protection level of EN 388 Category 2 is recommended.
- After switching off the machine, ensure the product has come to rest before leaving the machine unattended.

Injury caused by product breakage

- Always handle abrasives with great care, they are easily damaged. Examine all products for defects or damage before use.
- Store abrasives in dry, frost-free conditions avoiding wide variations in temperature. Ensure they are properly protected and supported to prevent damage and distortion.
- Coated abrasives should be stored at 18-22°C, 45-65% relative humidity.
- Abrasive belts should be hung on a rod or peg not less than 50mm diameter.
- Never use an abrasive product beyond its expiry date where marked. Observe the shelf life for the following specific products; Resinoid and Shellac products 3 years, Rubber products 5 years, Vitrified products 10 years.

Check abrasive product or package for any warnings or other safety information:

- Not permitted for hand-held or manually-guided grinding
- Only permitted for use on totally enclosed machines
- Not permitted for wet grinding
- Read the instructions
- Not permitted for face grinding
- Wear eye protection
- Do not use if damaged
- Wear hearing protection
- Only permitted with a back-up pad
- Wear gloves
- Only permitted for wet cutting
- Wear a respirator

Grinding debris – sparks, dust and fumes

- Exposure to dust generated from workpiece and/or abrasive materials can result in lung damage and/or other physical injury.
- All dry grinding processes should be provided with adequate extraction facilities.
- Do not use abrasive products near flammable materials.
- The use of respirators complying with EN149 is recommended for dry grinding processes even if extraction systems are provided.
- Guards where provided should be adjusted to deflect sparks and debris away from the operator.
- Take additional measures to protect people working nearby.
- Eye protection is recommended for all machine applications for abrasives. For hand-held machines or workpiece, goggles or full-face shields are recommended.
- Eye protection with a minimum protection of EN166 Grade B is recommended.
- Ensure that the correct abrasive product is selected. An unsuitable product can produce excessive debris and dust.