KENNEDY®
QUALITY INDUSTRIAL TOOLING

TECHNICAL DATA SHEET
COATED ABRASIVES
Issue two 2016

Coated abrasives are inert products which themselves are not classified as dangerous or hazardous, and do not create any risk when handled or stored. When used on grinding machines they require specific actions to protect the operators. During the grinding operation over 90% of the particles of dust come from the material being ground, and with wet grinding from the vapour generated by the grinding fluid. Therefore attention must be given to the nature of the material part, the fluid & the appropriate protection devices used.

FIRST AID

The following recommended first aid measures are basic rules to be observed during grinding operations. They must be used in conjunction with the Safety Data Sheet information for the material being ground and/or the grinding fluid when used.
Dust Inhalation - Remove from exposure, seek medical advice if symptoms persist.
Eye - Remove from exposure and flush with clean water, seek medical advice if symptoms persist.

PERSONAL PROTECTION

The following personal protection equipment (PPE) should be used when carrying out grinding operations. They are dependant on the exact operation and the material being ground.
Eye - Machine guarding, safety goggles/spectacles, face shield.
Dust - Dust mask.
Hand - Barrier cream, protective gloves.
Ear - Ear muffs/defenders.
Skin - Suitable protective clothing.

STABILITY & REACTIVITY

- Coated abrasives are stable and non reactive when handled or stored.
- Materials to avoid:- Strong acids, strong bases & strong oxidising agents may modify the mechanical characteristics of the product and therefore create safety hazards when used on machines.
- If coated abrasives are used in accordance with instructions, no hazardous decomposition products are created.

DISPOSAL

- Consideration should be given to the disposal of coated abrasives after use as they may be contaminated with hazardous materials, eg. particles of cooling agent. In such cases they should be disposed of in accordance with local & national regulations.

STORAGE

- Coated abrasives should be stored in dry, frost free conditions and should be kept away from sources of heat & cold, should not be in direct contact with the floor, or exposed to direct sunlight.
- Temperature should be between 18° C and 22° C with 45-65% relative humidity.
- Products should be kept in their original packaging until use; when unpacked they should be stored in such a way to avoid distortion.

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GENERAL PRECAUTIONS

- Always comply with the machine manufacturers instructions for use, only machines designed specifically for the purpose of grinding, and utilising any safety accessories supplied with the machine eg. guards, covers & hoods.
- Always visually check abrasives prior to use. **Do not** use damaged coated abrasive products and **never** modify products for use.

BELTS

- When removed from their packaging belts should be preconditioned by hanging them over a rod/peg not less than 50mm diameter, at between 18° C and 22° C with 45-65% relative humidity.
- Lap jointed belts must always be run in the direction indicated on the belt.
- Only use belts for wet grinding if they have been manufactured specifically for that purpose.
- Always release the tensioning device on the machine when fitting the belt and never leave the belts under tension on a stationary machine.
- Begin grinding only when the machine is correctly tensioned and running up to speed.
- Use the centre of the belt whenever possible.
- The belt should always be guarded when starting up, adjusting and running the machine.
- **Do not** stop the belt when it is in contact with the workpiece.
- When wet grinding turn off the coolant supply and allow the belt to run until all the coolant has been ejected, prior to stopping the machine.
- **Do not** attempt to remove the belt from the machine while it is running.

DISCS & SHEETS (PAPER, CLOTH & COMBINATION) FOR ORBITAL/DUAL ACTION SANDERS

- Discs and sheets should only be used on machines fitted with suitable support pads.
- Discs - **Do not** exceed the maximum operating speed indicated on the back-up pad, or use a disc more than 4mm diameter larger than the back-up pad.
- When using Velcro or self adhesive discs or sheets ensure the contact faces of the back-up pad and the abrasive disc/sheet are clean & dry.
- Begin to grind only when the machine is at operating speed, except with air random orbital machines which should be started with light pressure on the disc.
- Apply the disc to the workpiece at the shallowest possible angle, approx. 10 degrees is recommended.
- When using Velcro or self adhesive discs/sheets begin grinding with light pressure and **do not** allow overheating of the disc/sheet to occur, this can affect the adhesion to the back-up pad.
- Grind 'off' an edge rather than 'into' it.
- **Do not** use discs for slot grinding or cutting-off. Wet grinding can only be carried out with discs/sheets specifically designed for that use.
- Care should be taken when storing a machine, the face of the abrasive should not be in contact with the bench or floor.

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FIBRE DISCS

- Must be used with the correct size backing pad. The disc diameter must be 3mm minimum, 15mm maximum greater than the backing pad.
- The spindle speed of the machine must **never** exceed the maximum operating speed of the disc.
- The fibre disc should only be brought into contact with the workpiece when the machine is running at its operating speed.
- Apply the disc to the workpiece at the shallowest possible angle, approx. 10 degrees is recommended.
- Grind 'off' an edge rather than 'into' it. **Do not** use fibre discs for slot grinding, cutting-off or wet grinding.
- After use store the machine carefully, **do not** leave the face of the disc in contact with the bench or floor.

FLAP DISCS

- Always use a support pad if specified by the manufacturer.
- The spindle speed of the machine must never exceed the maximum operating speed of the flap disc.
- The flap disc should only be brought into contact with the workpiece when the machine is running at its operating speed.
- Apply the flap disc to the workpiece at the shallowest possible angle, approx. 10 degrees is recommended.
- Grind 'off' an edge rather than 'into' it. **Do not** use fibre discs for slot grinding, cutting-off or wet grinding.
- After use store the machine carefully, **do not** leave the face of the disc in contact with the bench or floor.

SANDER BANDS & CARTRIDGE ROLLS

- Ensure the band/roll diameter matches the drum holder or mandrel and they are fitted securely to the machine.
- **Do not** run the bands/rolls at a higher operating speed than the manufacturers recommended data.
- **Do not** begin grinding until the machine is up to speed.
- Grind 'off' an edge rather than 'into' it.
- **Do not** use excessive pressure when grinding, this can loosen the band/roll.

SPINDLE MOUNTED PRODUCTS

- Ensure that the spindle is centred and fixed securely in the collet/chuck of the machine, and the wheel operates in the correct direction.
- **Do not** use excessive pressure, thereby preventing the spindle becoming loose.
- The machine spindle speed should never exceed the manufacturers recommendation for the abrasive product.
- Begin to grind only when the machine is up to speed.
- Grind 'off' an edge rather than 'into' it.

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