

Personal Protection

- ▶ Face-shield
- ▶ Eyeglasses
- ▶ Dust mask
- ▶ Gloves
- ▶ Safety shoes
- ▶ Aprons
- ▶ Long pants, long sleeves (no loose or baggy clothes)

Equipment Precautions

- ▶ Always observe safety recommendations supplied by the manufacturer of your grinder.
- ▶ Use a sheet metal hood/guard.
- ▶ Enclose abrasive belt, idler pulley and contact wheel to confine flying sparks, grinding dust and fumes.
- ▶ An adequate exhaust system should be used. At the grinding area and at the idler pulley.
- ▶ Check grinder spindle for run-out.
- ▶ Wobble usually caused by worn bearings.
- ▶ Make sure the spindle speed of the grinder does not exceed the maximum RPM recommended by the wheel manufacturer.
- ▶ Check contact wheel for balance and run-out.
- ▶ Inspect contact wheels for nicks or damage that could cause the belt to tear or the workpiece to catch between the belts and the workpiece.
- ▶ Check idler pulley(s) spindle for run-out and balance.
- ▶ Use a workpiece fixture whenever possible. The fixture holds the workpiece more securely and affords protection if the workpiece jams.

Abrasive Belt Precautions and Use

- ▶ Never use an abrasive belt with nicked or cut edges, creases or other visual damage.
- ▶ For lap joints - find the arrow on back of the abrasive belt and install in running direction of contact wheel.
- ▶ Butt joint belts are non-directional.
- ▶ Make sure the abrasive belt fully covers the face of the contact wheel.

- ▶ A partially uncovered contact wheel face will cause snagging and throw off the workpiece.
- ▶ Jog the machine to start abrasive belt tracking.
- ▶ A sudden full power start could cause the belt to track off the machine.
- ▶ Check the sound of the running abrasive belt.
- ▶ If a ticking sound or bumping noise occurs, stop the machine and check for possible belt or machine damage.
- ▶ Check with abrasive belt supplier and machine manufacturer for information on belt speeds to be used with varying types of material being ground.
- ▶ Present the workpiece to the abrasive belt below the horizontal center line of the contact wheel.
- ▶ Presenting above the line, will cause the workpiece to chatter and is difficult to hold.



- ▶ Always use an upward stroke to present the workpiece to the abrasive belt.

This method both improves the cutting and increases safety by drawing hands away from the belt.



- ▶ Too much tension can break the belt
 - Adjust belt tension to the minimum sufficient to insure good contact with the drive and idler pulley so that the belt will track properly under both start-up and grinding conditions.
 - Excessive belt tension puts undue stress on bearings and can harden softer contact wheels.

SafetyTIPS

Additional Coated Abrasive Product Precautions

- ▶ Do not use coated discs that have excessive curl.
- ▶ Never use a coated disc in excess of the safe operating speed of the proper back-up pad that is recommended for the machine.
- ▶ Only use appropriate back-up pads for the right machine and inspect back-up pads for nicks and damage.
- ▶ Make sure that PSA back-up pads are clean and free of oil – as dirt and oil will interfere with adhesion.
- ▶ Always check the core around a flap wheel or flap disc for cracks or defects.
- ▶ Only use specially designed waterproof coated abrasive products when sanding or grinding wet.
- ▶ Do not use excessive pressure on a coated product as this may cause damage to the backing and cause the product to fail.

- ▶ Only use pressure that is appropriate to the application and the machine.
- ▶ Never use a machine for coated abrasives in excess of the speed designated by the machine manufacturer.
- ▶ Always pay attention when controlling a portable machine or a handheld workpiece.
- ▶ Always maintain control of the workpiece as it is presented to the coated abrasive product in applications where the work is applied to the machine.

Proper Handling and Storage

- ▶ Do
 - Store products as shipped
 - Store products off the floor on horses or skids
- ▶ Do not
 - Expose products to water, solvents, extreme humidity or freezing temperatures
 - Store products on concrete floors