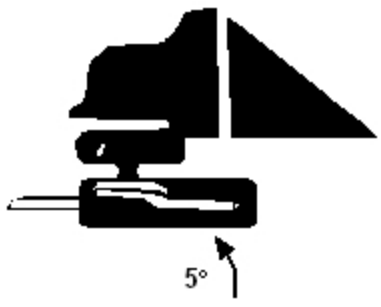
Afrox Abrasive Products

Afrox now offers a select line of professional cutting and grinding discs, abrasive blades, flap discs and wire brush products. Our collection of metalworking and construction-related abrasives will meet the needs of most metal preparation and finishing applications.

Basic Grinding Procedures

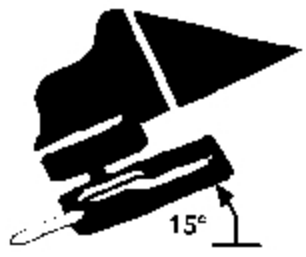
- Do not "bump" the wheel when starting to grind or while cutting
- Do not use excessive pressure, allow the wheel to do the work
- RPM of machines must never exceed RPM indicated on wheel
- Do not use without machine guard
- Always wear eye protection and protective clothing

Do not use flat



Incorrect

Minimum Grinding Angle 15 Degrees



Correct

Cutting Off Wheels

Machine Requirements

1. Must have adequate power.
2. Must be rigidly constructed, especially the arbor assembly. The machine must maintain straight line cuts to be efficient and to avoid breakage.
3. Must provide rigid support and "hold down" of piece being cut. Cutting off wheels are not completely unbreakable. Side pressure MUST be avoided to ensure straight cuts and avoid possible breakage.
4. Must have adequate heavy arbor and heavy duty arbor bearings to withstand operating stresses and continue to operate trouble free over long periods of time. Loose bearings can result in rough cutting and rapid wheel wear and even wheel breakage if end play develops.
5. Must have adequate power transmission belting and belts must be kept tight to ensure full power transmission.
6. Must have proper drive flanges. Minimum one third the wheel diameter.
7. Must have adequate guard over the wheel.
8. Must be maintained in first class condition.

All of the above machine features should be frequently checked and substandard conditions corrected.

Basic abrasive cutting procedure

1. Be sure work piece is securely held down.
2. Start the cut gently - do not "bump" the wheel to start a cut.
3. Feed the wheel through the work as fast as possible without slowing the wheel in the cut.
4. Use machine with safety guards only.

Correct

Incorrect

The abrasive cutting operation generates a great deal of localised heat which causes rapid expansion of the piece being cut. Wheels operated at a speed significantly below efficient speed or if fed through the cut too slowly will generate extensive heat. Result: Rapid wear, fraying around the edge of the reinforced wheels and wheel breakage.

Depressed Centre Grinding Wheels

Depressed centre wheels, because of their shape and usage, require specially designed adaptors. Mounts which are affixed to the wheel by the manufacturer shall not be re-used. Depressed centre wheels shall be used with a safety guard located between wheel and operator during use. For DC-wheels the locking nut which is less than the minimum of one-third of the diameter of the wheel fits in the depressed side of the wheel to prevent interference in side grinding and serves to drive the wheels by its clamping force against the depressed portion of the back flange.

Correct Mounting of depressed centre wheels less than 230mm dia.

Correct Mounting of depressed centre wheels equal to or greater than 230mm diameter