## **Abrasive Definitions**

| Term  | Definition  |
|---|---|
| Centerless Grinding                         | A type of grinding in which abrasive cutting is used to remove material from a workpiece. Centerless grinding differs from centered grinding operations in that the workpiece is secured between two rotary grinding wheels.  STATIONARY WHEEL  WORKPIECE  PRESSURE  WORK REST                    |
| Center-Type Cyclindrical Grinding           | Cyclindrical grinding in which each end of the workpiece is mounted on a pointed bar, or center.  |
| Chuck                                       | Piece of equipment that holds a workpiece in place.   |
| Collet                                      | Holding device that forms a collar around the object to be held and exerts a strong clamping force on object once tightened.  |
| Concentricity                               | Quality of having the same center/common center.  |
| Creep Feed Grinding (CFG)                   | CFG is used for high rates of material removal, depths of cut are used along with low work piece speed.   |
| Cutoff                                      | Separating a workpiece into two or more parts.  |
| Cylindrical Grinding (center-type grinding) | Used to grind cylindrical surfaces and shoulders of a workpiece to make parts concentric. The abrasive wheel and workpiece are rotated by separate motors and at different speeds. Types of cylindrical grinding: outside diameter, inside diameter, plunge, creep feed, and centerless grinding. |
| Depth of cut                                | How far a grinding wheel plunges into the workpiece.  |
| Formed grinding wheel                       | An abrasive wheel designed to be used to grind shapes or outlines into a workpiece.   |
| Grade                                       | Describes the hardness of the bond in an abrasive wheel.  |
| Milling                                     | Process using rotary cutters to remove material from a workpiece advancing in a direction at an angle with the axis of the tool.  |
| Offhand Grinding (freehand grinding)        | Grinding operations performed with hand-held tools. Typically held in the operators hand then placed against a grinding wheel in operation.   |
| Regulating Wheel                            | In centerless grinding the regulating wheel (usually rough rubber-bond abrasive) is positioned to apply lateral pressure to the workpiece and pull it through the operation.  |
| Snagging                                    | Type of rough grinding that is used to take off excess material without concern for the surface finish.   |
| Support Roll                                | Holds and positions the workpiece against the regulating wheel in internal centerless grinding.   |
| Surface Grinding                            | Used to produce a smooth finish on flat surfaces by feeding workpiece under a rotating grinding wheel.  |
| Through Feed                                | Movement of a workpiece through an operation.   |
| Tolerance                                   | Deviation from the desired dimension.   |
| Work Rest Blade                             | Supports cylindrical parts during centerless grinding   |
| Workholding Device                          | Any device used to secure a workpiece and hold it in place against the forces of machining.   |

