Grinder

<table>
<thead>
<tr>
<th>Description</th>
<th>Wheel Grinder / Brush</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size / Horsepower</td>
<td>7-8” Wheels / ½-1 HP / 3450 RPM</td>
</tr>
<tr>
<td>Power source</td>
<td>120 volts through plugged power cord</td>
</tr>
<tr>
<td>Uses</td>
<td>Shaping wood and metal parts</td>
</tr>
</tbody>
</table>

**Safety Precautions**

### Hazards

- Abrasions
- Flying debris (potential eye and face damage)
- Electrical shock
- Grinding wheel failure
- Entanglement of hair, jewelry, or clothing
- Sparks from metal grinding
- Fire risk if used near flammable or combustible materials

**Training**

- Shop Safety Fundamentals
- Site Specific Training

**Protective Equipment**

- Safety Glasses AND Face Shield
- Hearing protection

**Operation**

**Startup**

1. Put on PPE listed above
2. Ensure work area is clean and free of obstacles
3. Ensure all guards are present and function properly
4. Make necessary adjustments for safe operation
5. Inspect tool for damage or obstructions to operation
6. Turn on grinder using power switch located in center front of tool
7. Begin work
8. Slowly press work piece into grinder, avoid feeding material too quickly
9. Keep hands clear of spinning wheels

**Shutdown**

1. Remove work piece
2. Turn off tool using power switch
3. Allow grinder to stop on its own before leaving area

**Installing Grinding Wheel or Brush** – **Performed by Authorized Personnel Only**

**Maintenance**

<table>
<thead>
<tr>
<th>Storage</th>
<th></th>
</tr>
</thead>
</table>
| Care    | • Grinder must be unplugged when changing wheels  
|         | • Only use grinding wheels rated for the speed of the grinder  
|         | • Use a dressing tool or block to clean and/or reshape grinding wheels  

| Accessories | Dressing tool or block |
## Checklist for Abrasive Wheel Equipment Grinders

1. **From the Abrasive Wheel standard**
   - 215(a)(2): Do side guards cover the spindle, nut and flange and 75% of the wheel diameter? [ ]
   - 215(a)(4): Is the work rest used and kept adjusted to within 1/8-inch (0.3175cm) of the wheel? [ ]
   - 215(b)(9): Is the adjustable tongue guard on the top side of the grinder used and kept to within 1/4-inch (0.635cm) of the wheel? [ ]
   - 215(c)(1): Is the maximum RPM rating of each abrasive wheel compatible with the RPM rating of the grinder motor? [ ]
   - 215(d)(1): Before new abrasive wheels are mounted, are they visually inspected and ring tested? [ ]

2. **From other OSHA standards**
   - 22(a): Is cleanliness maintained around grinders? [ ]
   - 94(b)(2): Are dust collectors and powered exhausts provided on grinders used in operations that produce large amounts of dust? [ ]
   - 133(a)(1): Are goggles or face shields always worn when grinding? [ ]
   - 212(d): Are bench and pedestal grinders permanently mounted? [ ]
   - 304(c)(4): Is each electrically operated grinder effectively grounded? [ ]
   - 305(0)(1)(A): Are fixed or permanently mounted grinders connected to their electrical supply system with metallic conduit or other permanent method? [ ]
   - 3050(4)(b)(1): Does each grinder have an individual on and off control switch? [ ]

### Footnotes:
1. Extracted from OSHA Publication No. 2209. This checklist does NOT include all elements of 29 CFR 1910.215; it is only a guide.
2. A mark in this column indicates a need for corrective actions.

* A partial list of accidents involving grinders is also available.