Safety Slides – Rotating Shafts

- loose-fitting shirts might possibly become entangled in rotating spindles or other kinds of moving machinery

- Jewelry, such as bracelets and rings, can catch on machine parts or stock and lead to serious injury by pulling a hand into the danger area.

Prevent contact:

- Firmly secured to the machine.
- Protect from falling objects: A small tool could easily become a projectile that could strike and injure someone.
- Create no new hazards: no shear points or jagged edges, or an unfinished surface which can cause a laceration
- Allow safe lubrication:

AR-G2 Couette Fixture

$\Omega_{max} = 250 \text{ to } 300 \text{ rad/s}$

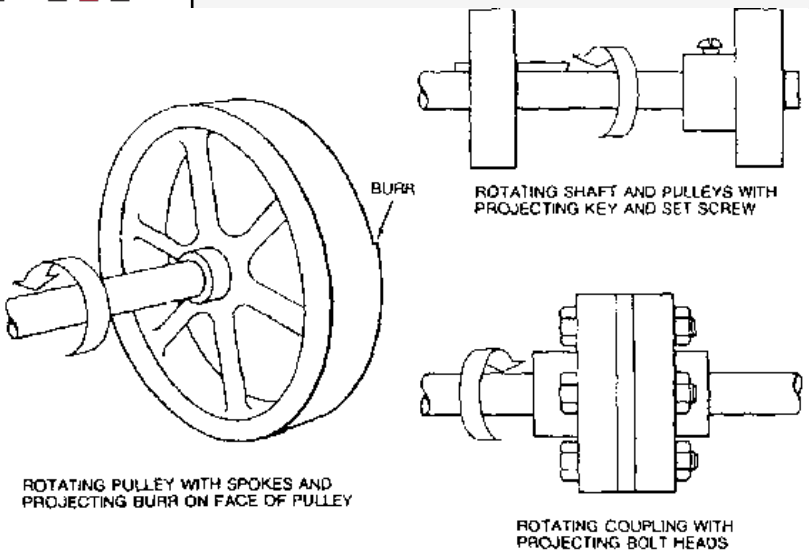
Additional Concerns working with heated rotors specific to our lab experiments

Heating inner rotor to 100 °C-150 °C: (Jai – creation of a SOP)

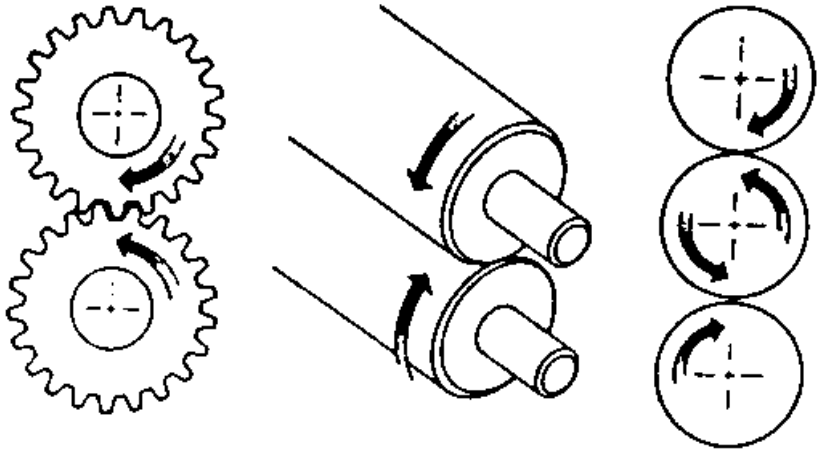
<u>Prevent and Avoid:</u>

burns while attaching geometry, splashing of liquid while operation, accidental exposure

Safety Slides – Rotating Shafts



Sharp Edges/Hazardous Projections



Pinch Points in Rotating Equipment

A Rotating motion can be dangerous:

- Even smooth, slowly rotating shafts can grip clothing, and through mere skin contact, force an arm or hand into a dangerous position.
- Collars, couplings, cams, clutches, flywheels, shaft ends, spindles, and horizontal or vertical shafting are examples of common hazardous rotating mechanisms. T
- Danger increases when bolts, nicks, abrasions and projecting keys or setscrews are exposed on rotating parts.

From OSHA Machine Guarding Requirements