GUIDELINES FOR ANGLE GRINDER SAFETY

Contents

PURPOSE..............................................................................................................................................2
ANGLE GRINDER REQUIREMENTS...........................................................................................................2
ANGLE GRINDER SAFETY..........................................................................................................................2
TRAINING..................................................................................................................................................2
ANGLE GRINDER CHECKLIST...................................................................................................................3
ANGLE GRINDER PERMIT..........................................................................................................................4
PURPOSE

This document provides guidance standards for the proper use of angle grinders across Southern Company Generation facilities. These standards include angle grinder requirements, safe practices, managing access to the tool, and correct tool selection. This is applicable to all angle grinders (especially to those > 6”).

ANGLE GRINDER REQUIREMENTS

1. Auto brake, which can stop the break within 2 seconds
2. Slip clutch
3. Blade guard
4. Handle
5. Non-locking “dead-man” switch

ANGLE GRINDER SAFETY

- Keep both hands on grinder
- Correct body posture to maximize control
- Ensure work piece is properly supported and secured
- Ensure electrical cords are in good shape and dry
- Never clamp a hand held grinder in a vise
- Select the right RPM wheel for the grinder speed
- Identify dangers of grinding in close proximity to unprotected workers
- Ensure the grinder is the proper tool for the job (convenience is not a sufficient reason)
  - Restrict use of angle grinder if there is a better or safer option
- Proper storage of the grinders when not in use
- Training required for all personnel prior to using
- Use of an angle grinder checklist prior to use
- Use of an angle grinder permit to maintain tool usage
- Include in the Job Safety briefing
- PPE requirements
  - Full face shield
  - Safety Glasses, spoggles or goggles
  - Cut level 4 gloves
  - Hearing Protection

ANGLE GRINDER TRAINING

A written and hands on training should be conducted for all personnel required to work with angle grinders. Training items to be included but not limited to:

- Safe use practices
- Use of cutting wheels and alternate options
- Selecting the right RPM wheel for the grinder speed
- Inspection prior to use
- Expectation of non-locking dead man switch
- Use of handle and two-handled operation where the manufacturer requires
- Training video aids or other manufacturer requirements
COMMON MAINTENANCE PRACTICE GUIDELINES

BEFORE ANY GRINDER IS ISSUED TO A JOB, ASK THE FOLLOWING QUESTIONS

1. Is the angle grinder the correct choice of tool for the required work? Can the work be accomplished with a band saw or other cutting tool?

2. Is the operator trained in the use of angle grinders and trained to recognize the possible hazards associated with the use of an angle grinder?

3. Does the operator have the required PPE?

TOOL MAINTENANCE / ISSUANCE CHECKLIST

☐ **Side handle:** Attached and in good order. If cracked, broken, or ill fitting, replace it.

☐ **Specifications label:** Readable. If not, do not issue grinder until replaced.

☐ **Wheel guard:** Securely attached to the grinder. If guard is adjustable, does it adjust freely then lock into place?
  - Ensure guard is the correct size per the specification label
  - Ensure guard is the proper type for the tool being issued
  - Check for condition of guard; replace if bent, cracked, or altered in any way
  - Ensure abrasive issued fits inside the curled lip of the guard

☐ **Accessory:** Use only accessories that match the diameter and equal or exceed the speed rating (RPM), found on the specification label of the grinder. Inspect for cracks, decay, warping, or signs of abuse. If questionable, replace it with new.

☐ **Mounting hardware:** Ensure proper wheel flanges are being used. Mounting flange is not worn or warped. Raised area of flange fits snugly into the accessory. Threaded spin on accessories match the thread of the grinder spindle. If spanner wrench is required for tightening accessory, be sure it fits the locking flange and is issued with the tool.

☐ **Power cord:** No breaks, kinks, pinches, splices, frayed areas, or exposed wires. Prongs on plug are not bent or loose.

☐ **On/Off switch:** Works properly and freely

☐ **Spindle lock:** Button moves freely and locks spindle when engaged.

☐ **Control access:** Access to angle grinders should be controlled (ex. See following angle grinder permit)
EXAMPLE ANGLE GRINDER PERMIT

Date Required: ______________________  Time Required: ______________________

Guard Verified: ____  Handle Verified: ____  RPM Verified: ____  Non-Lock Switch Verified: ____

Task Location: __________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

Supervisor: ___________________________________________________________

Journeyman: ___________________________________________________________

Reason for tool usage: _________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

Work to be performed: _________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

Requested by: ______________________  Craft: ______________________

Supervisor Signature: _________________________________________________

Superintendent Signature: _____________________________________________