|  |
| --- |
| **TABLE E-1 : EYE AND FACE PROTECTOR SELECTION GUIDE** |
| http://www.osha.gov/OshStd_gif/26e102e1.gif |
| 1. GOGGLES, Flexible Fitting - Regular Ventilation  2. GOGGLES, Flexible Fitting - Hooded Ventilation  3. GOGGLES, Cushioned Fitting - Rigid Body  4. SPECTACLES, Metal Frame, with Sideshields (\*)  5. SPECTACLES, Plastic Frame - with Sideshields (\*)  6. SPECTACLES, Metal-Plastic Frame - with Sideshields (\*)  7. WELDING GOGGLES, Eyecup Type - Tinted Lenses (\*\*)  7A. CHIPPING GOGGLES, Eyecup Type - Clear Safety Lenses  8. WELDING GOGGLES, Coverspec Type - Tinted Lenses (\*\*)  8A. CHIPPING GOGGLES, Coverspec Type - Clear Safety Lenses  9. WELDING GOGGLES, Coverspec Type - Tinted Plate Lens (\*\*)  10. FACE SHIELD (Available with Plastic or Mesh Window)  11. WELDING HELMETS (\*\*)  Footnote(\*) Non-side shield spectacles are available for limited  hazard use requiring only frontal protection.  Footnote(\*\*) See Table E-2, in paragraph (b) of this section, Filter  Lens Shade Numbers for Protection Against Radiant Energy. |
| |  |  |  | | --- | --- | --- | | OPERATION | HAZARDS | RECOMMENDED PROTECTORS | | Acetylene-Burning  Acetylene-Cutting  Acetylene-Welding | Sparks, harmful rays, molten metal, flying particles | 7, 8, 9 | | Chemical Handling | Splash, acid burns, fumes | 2, 10 (For severe exposure add 10 over 2) | | Chipping | Flying particles | 1, 3, 4, 5, 6, 7A, 8A | | Electric (arc) welding | Sparks, intense rays, molten metal | 9, 11, (11 in combination with 4, 5, 6, in tinted lenses advisable) | | Furnace Operations | Glare, heat, molten metal | 7, 8, 9 (For severe exposure add 10) | | Grinding- Light | Flying particles | 1, 3, 4, 5, 6, 10 | | Grinding- Heavy | Flying particles | 1, 3, 7A, 8A (For severe exposure add 10) | | Laboratory | Chemical splash, glass breakage | 2 (10 when in combination with 4, 5, 6) | | Machining | Flying particles | 1, 3, 4, 5, 6, 10 | | Molten Metals | Heat, glare, sparks, splash | 7, 8 (10 in combination with 4, 5, 6, in tinted lenses) | | Spot welding | Flying particles, sparks | 1, 3, 4, 5, 6, 10 | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Harness Inspection (from Miller Fall Protection Website)***  To inspect your harness or body belt, perform the following procedures.   |  |  | | --- | --- | | [Inspection - Webbing](http://www.millerfallprotection.com/images/stories/smart-solutions/inspection-and-maintenance/large/web) | **1) Webbing** Grasp the webbing with your hands 6 inches (152mm) to 8 inches (203mm) apart. Bend the webbing in an inverted “U” as shown. The surface tension resulting makes damaged fibers or cuts easier to detect. Follow this procedure the entire length of the webbing, inspecting both sides of each strap. Look for frayed edges, broken fibers, pulled stitches, cuts, burns and chemical damage. | | [Inspection - D-Rings/Back Pads](http://www.millerfallprotection.com/images/stories/smart-solutions/inspection-and-maintenance/large/D-r) | **2) D-Rings/Back Pads** Check D-rings for distortion, cracks, breaks, and rough or sharp edges. The D-ring should pivot freely. D-ring back pads should also be inspected for damage. | | [Inspection - Attachment of Buckles](http://www.millerfallprotection.com/images/stories/smart-solutions/inspection-and-maintenance/large/attachment-of-buc) | **3) Attachment of Buckles**  Inspect for any unusual wear, frayed or cut fibers, or broken stitching of the buckle or D-ring attachments. | | [Inspection - Tongue/Grommets](http://www.millerfallprotection.com/images/stories/smart-solutions/inspection-and-maintenance/large/tongue_grom) | **4) Tongue/Grommets** The tongue receives heavy wear from repeated buckling and unbuckling. Inspect for loose, distorted or broken grommets. Webbing should not have additional punched holes. | | [Inspection - Tongue Buckles](http://www.millerfallprotection.com/images/stories/smart-solutions/inspection-and-maintenance/large/tongue-buc) | **5) Tongue Buckles** Buckle tongues should be free of distortion in shape and motion. They should overlap the buckle frame and move freely back and forth in their socket. Roller should turn freely on frame. Check for distortion or sharp edges. | | [Inspection -Friction and Mating Buckles](http://www.millerfallprotection.com/images/stories/smart-solutions/inspection-and-maintenance/large/Friction-Bu) | **6) Friction and Mating Buckles** Inspect the buckle for distortion. The outer bars and center bars must be straight. Pay special attention to corners and attachment points at the center bar. | | [Inspection - Quick-Connect Buckles](http://www.millerfallprotection.com/images/stories/smart-solutions/inspection-and-maintenance/large/quick-connect-buc) | **7) Quick-Connect Buckles** Inspect the buckle for distortion. The outer bars and center bars must be straight. Make sure dual-tab release mechanism is free of debris and engages properly. | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Lanyard Inspection (from Miller Fall Protection Website)***  When inspecting lanyards, begin at one end and work to the opposite end, slowly rotating the lanyard so that the entire circumference is checked. Additionally, follow the procedures below.   |  |  | | --- | --- | | [Inspection -Hardware Snaps](http://www.millerfallprotection.com/images/stories/smart-solutions/inspection-and-maintenance/large/hard) | **1) Hardware** **A) Snaps:** Inspect closely for hook and eye distortions, cracks, corrosion, or pitted surfaces. The keeper (latch) should seat into the nose without binding and should not be distorted or obstructed. The keeper spring should exert sufficient force to firmly close the keeper. Keeper locks must prevent the keeper from opening when the keeper closes. | | [Inspection - Hardware Thimbles](http://www.millerfallprotection.com/images/stories/smart-solutions/inspection-and-maintenance/large/Thim) | **B) Thimbles:** The thimble must be firmly seated in the eye of the splice, and the splice should have no loose or cut strands. The edges of the thimble must be free of sharp edges, distortion, or cracks. | | [Inspection - Wire Rope Lanyard](http://www.millerfallprotection.com/images/stories/smart-solutions/inspection-and-maintenance/large/wire-rope-lan) | **2) Wire Rope Lanyard** While rotating the wire rope lanyard, watch for cuts, frayed areas, or unusual wearing patterns on the wire. Broken strands will separate from the body of the lanyard. | | [Inspection - Web Lanyard](http://www.millerfallprotection.com/images/stories/smart-solutions/inspection-and-maintenance/large/web-lan) | **3) Web Lanyard**  While bending webbing over a pipe or mandrel, observe each side of the webbed lanyard. This will reveal any cuts or breaks. Swelling, discoloration, cracks and charring are obvious signs of chemical or heat damage. Observe closely for any breaks in stitching. | | [Inspection - Rope Lanyard](http://www.millerfallprotection.com/images/stories/smart-solutions/inspection-and-maintenance/large/rope-lan) | **4) Rope Lanyard** Rotate the rope lanyard while inspecting from end-to-end for any fuzzy, worn, broken or cut fibers. Weakened areas from extreme loads will appear as a noticeable change in original diameter. The rope diameter should be uniform throughout, following a short break-in period. | | [Inspection - Shock Absorber Pack](http://www.millerfallprotection.com/images/stories/smart-solutions/inspection-and-maintenance/large/shock-absorber-) | **5) Shock Absorber Pack** The outer portion of the pack should be examined for burn holes and tears. Stitching on areas where the pack is sewn to D-rings, belts or lanyards should be examined for loose strands, rips and deterioration. | | [Inspection - Shock Absorbing Lanyard](http://www.millerfallprotection.com/images/stories/smart-solutions/inspection-and-maintenance/large/shock-absorbing-lan) | **6) Shock-Absorbing Lanyard** Shock-absorbing lanyards should be examined as a web lanyard (described in item 3 above). However, also look for the warning flag or signs of deployment. If the flag has been activated, remove this shock-absorbing lanyard from service. | |

*Self-Retracting Lifeline Inspection (from Miller Fall Protection Website)*

|  |  |
| --- | --- |
| [Inspection - check Housing](http://www.millerfallprotection.com/images/stories/smart-solutions/inspection-and-maintenance/large/check-hou) | **1) Check Housing** Before every use, inspect the unit’s housing for loose fasteners and bent, cracked, distorted, worn, malfunctioning or damaged parts. |
| [Inspection - Check Lifeline](http://www.millerfallprotection.com/images/stories/smart-solutions/inspection-and-maintenance/large/check-life) | **2) Lifeline** Test the lifeline retraction and tension by pulling out several feet of the lifeline and allow it to retract back into the unit. Always maintain a light tension on the lifeline as it retracts.  The lifeline should pull out freely and retract all the way back into the unit. Do not use the unit if the lifeline does not retract. The lifeline must be checked regularly for signs of damage. Inspect for cuts, burns, corrosion, kinks, frays or worn areas. Inspect any sewing (web lifelines) for loose, broken or damaged stitching. |
| [Inspection - Braking Mechanism](http://www.millerfallprotection.com/images/stories/smart-solutions/inspection-and-maintenance/large/braking-mecha) | **3) Braking Mechanism** The braking mechanism must be tested by grasping the lifeline above the impact indicator and applying a sharp steady pull downward which will engage the brakes. There should be no slippage of the lifeline while the brakes are engaged, once tension is released, the brakes will disengage and the unit will return to the retractable mode. Do not use the unit if the brakes do not engage.  Check the hardware as directed in 1A under Lanyard Inspection. The snap hook load indicator is located in the swivel of the snap hook. The swivel eye will elongate and expose a red area when subjected to fall arresting forces. Do not use the unit if the load impact indicator has been activated. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **VISUAL INDICATIONS OF DAMAGE TO WEBBING AND LANYARDS** | | | | |
| **Type of Webbing** | **Heat** | **Chemical** | **Molten Metal or Flame** | **Paint and Solvents** |
| Nylon & Cordula | In excessive heat, nylon becomes brittle and has a shriveled brownish appearance. Fibers will break when flexed. Should not be used above 200 degrees F. | Change in color usually appearing as a brownish smear or smudge. Transverse cracks when belt is bent over a mandrel. Loss of elasticity in belt. | Webbing strands fuse together. Hard shiny spots. Hard and brittle feel. Will not support combustion. | Paint, which penetrates and dries restricts movement of fibers. Drying agents and solvents in some paints will appear as chemical damage. |
| Polyester (Dacron\*) | Same as nylon, except do not use above 180 degrees F. | Same as nylon. | Same as nylon, except will support combustion. | Same as nylon |

1. After performing the inspection procedures, any equipment found to be damaged or defective shall be tagged **“DANGER UNSAFE – DO NOT USE”** and removed from service.
2. After performing the inspection procedures, test performed shall be recorded. This record shall be kept by means of color-coding. These inspection procedures should always be completed by the 15th of the appropriate month

Jan Red March Blue May White

July Brown Sept. Yellow Nov. Orange

1. All required tests shall be performed:
   1. Before each use
   2. Before equipment is used after any incident which can be reasonably suspected to have caused damage.
   3. Once every other month, by the 15th day of the month

**Hazard Assessment**

**Aerial Lifts**

|  |  |  |
| --- | --- | --- |
| **Hazards** | **Describe Specific Hazards** | **PPE Required** |

**Eye/Face Hazards**

|  |  |  |
| --- | --- | --- |
| Dust | Dust/debris in eyes from wind | Wear ANSI Z87.1 approved safety glasses w/side shields |
|  |  | If wind and dust conditions are above normal levels, goggles must also be worn. |

**Working at Heights**

|  |  |  |
| --- | --- | --- |
| Fall | Fall from elevation | Wear full body harness and lanyard |

**Feet**

|  |  |  |
| --- | --- | --- |
| Electrical Shock | Shock from contact with electrical conductors | Refer to ESCO Group Electrical Safety Program for safe approach distances |
| Impact | Crushing injury | Wear ANSI approved safety toe shoes |

**Hands**

|  |  |  |
| --- | --- | --- |
| Cuts | Contact with sharp edges | Wear gloves |
| Crushing injury | Hands in between lift rails and stationary objects | Wear gloves and keep hands inside of lift |
| Electrical shock | Shock from contact with electrical conductors | Refer to ESCO Group Electrical Safety Program for safe approach distances |

**Head**

|  |  |  |
| --- | --- | --- |
| Electrical shock | Shock from contact with electrical conductors | Wear the Company issued Class “E” rated hardhats. Refer to ESCO Group Electrical Safety Program for safe approach distances. |
| Impact | Bumping into objects overhead | Wear the Company issued hardhat |

**Hazard Assessment**

**Daily Driving**

|  |  |  |
| --- | --- | --- |
| **Hazards** | **Describe Specific Hazards** | **PPE Required** |

**Eye Hazards**

|  |  |  |
| --- | --- | --- |
| Glare/Sun | Driving into glare of the sun. | Wear sunglasses |

**Hands**

|  |  |  |
| --- | --- | --- |
| Cuts | Loading material that has sharp edges | If loading sharp edged material into a vehicle, cut resistant gloves must be worn. |
| Crushing | Getting hands caught in between material that is being loaded in the vehicle | Wear general duty work gloves. |

**Body**

|  |  |  |
| --- | --- | --- |
| Crushing | Being ejected from vehicle due to overturned vehicle | A seatbelt must be worn at all times when driving a vehicle |
| Impact | Being hit by or hitting another vehicle or object | A seatbelt must be worn at all times when driving a vehicle. |

**Hazard Assessment**

**Grinding**

|  |  |  |
| --- | --- | --- |
| **Hazards** | **Describe Specific Hazards** | **PPE Required/Safe Practices** |

**Eye/Face Hazards**

|  |  |  |
| --- | --- | --- |
| Dust | Dust/debris in eye from wind | Wear ANSI Z87.1 approved safety glasses w/side shields or “spoggle” style eyewear |
| Flying debris | Grinding particles | Wear a face shield |

**Feet**

|  |  |  |
| --- | --- | --- |
| Impact | Falling material | Wear ANSI/ATSM approved safety toed shoes |

**Hands**

|  |  |  |
| --- | --- | --- |
| Cuts | Cut from handling material with sharp edges | Wear cut resistant gloves |
| Burns | Hot material | Wear leather work glove |

**Head**

|  |  |  |
| --- | --- | --- |
| Impact | Bumping into objects overhead | Wear company issued hardhats |

**Hazard Assessment**

**Wire Terminations**

|  |  |  |
| --- | --- | --- |
| **Hazards** | **Describe Specific Hazards** | **PPE Required** |

**Eye/Face Hazards**

|  |  |  |
| --- | --- | --- |
| Impact | Excess wire or insulation coming in contact with glasses | Wear ANSI approved safety glasses w/side shields |
| Dust | Nuisance dust and debris in area | Wear ANSI approved safety glasses w/side shields |

**Feet**

|  |  |  |
| --- | --- | --- |
| Crushing injury | Dropping material on toes | Wear ANSI approved safety toed footwear |

**Hands**

|  |  |  |
| --- | --- | --- |
| Cuts | Cuts from using knife to strip wire/cable | Wear cut resistant gloves |
| Pinched | Pinched from getting caught in between tool handles | Wear general duty work gloves |
| Electrical shock | Shock from contact with electrical conductors | Refer to ESCO Group Electrical Safety Program for safe approach distances. |

**Head**

|  |  |  |
| --- | --- | --- |
| Electrical shock | Shock from contact with electrical conductors | Wear the company issued class “G” rated hardhats. Refer to ESCO Group Electrical Safety Program for safe approach distances. |
| Impact | Bumping into object overhead | Wear the company issued hardhat. |

**Hazard Assessment**

**De-Energization**

|  |  |  |
| --- | --- | --- |
| **Hazards** | **Describe Specific Hazards** | **PPE Required** |

**Eye/Face Hazards**

|  |  |  |
| --- | --- | --- |
| Arc Flash | Burns or flash from an arc flash accident | Wear an arc flash shield along with safety glasses |

**Feet**

|  |  |  |
| --- | --- | --- |
| Electrical Shock | Shock from exposed steel toe on boot/shoe | Wear EH rated boots/shoes which must be in good condition |
| Impact | Dropped equipment/material | Wear ANSI approved safety toed boots/shoes |

**Hands**

|  |  |  |
| --- | --- | --- |
| Electrical Shock | Shock or burns from an arc flash incident or an electrical shock | Wear insulated gloves according to the tables in ESCO Group Electrical Safety Program |

**Head**

|  |  |  |
| --- | --- | --- |
| Electrical Shock | Shock from contact with electrical conductors | Wear the Company issued class “G” rated hardhats. Refer to ESCO Group Electrical Safety Program for safe approach distances. |
| Impact | Bumping into objects overhead | Wear the Company issued hardhat. |

**Hazard Assessment**

**Using a Drill (Hammer Drill Included)**

|  |  |  |
| --- | --- | --- |
| **Hazards** | **Describe Specific Hazards** | **PPE Required** |

**Eye/Face Hazards**

|  |  |  |
| --- | --- | --- |
| Dust | Dust/debris from drilling procedures | Wear ANSI Z87.1 approved safety glasses w/side shields |
|  | Flying particles, shavings from drilling overhead | Wear ANSI approved safety glasses w/side shields- must be “spoggle” design |

**Hands**

|  |  |  |
| --- | --- | --- |
| Caught in between | Hand(s) contacting equipment near drilling procedures (line-of-fire) | Wear general duty work gloves |
| Cuts | Sharp edges on bit | Wear gloves while preparing the drill |

**Head**

|  |  |  |
| --- | --- | --- |
| Impact | Bumping into objects overhead | Wear the company issued hardhat. |

**Hearing**

|  |  |  |
| --- | --- | --- |
| Loud Noise | Loud noise from drill motor running and bit drilling into concrete | Wear appropriate hearing protection |

**Hazard Assessment**

**Conduit Installation (cutting, threading, bending)**

|  |  |  |
| --- | --- | --- |
| **Hazards** | **Describe Specific Hazards** | **PPE Required/Safe Practices** |

**Eye/Face Hazards**

|  |  |  |
| --- | --- | --- |
| Dust | Flying particles, shavings from cutting and threading conduit | Wear ANSI approved safety glasses w/side shields |
|  | Nuisance dust | Wear ANSI approved safety glasses w/side shields |
|  | Flying particles, shavings from cutting and threading conduit overhead | Wear ANSI approved safety glasses w/side shields- must be “spoggle” design |
|  |  |  |

**Feet**

|  |  |  |
| --- | --- | --- |
| Impact | Dropping material on toes | Wear ANSI approved safety toed shoes |

**Hands**

|  |  |  |
| --- | --- | --- |
| Cuts | Sharp edges | Wear cut resistance gloves |
| Crushing injury | Handling material pinched between material and bender | Wear general duty work gloves |

**Head**

|  |  |  |
| --- | --- | --- |
| Impact | Bumping into objects overhead | Wear Company issued hardhat |

**Hazard Assessment**

**Demolition/Site Clear**

|  |  |  |
| --- | --- | --- |
| **Hazards** | **Describe Specific Hazards** | **PPE Required/Safe Practices** |

**Eye/Face Hazards**

|  |  |  |
| --- | --- | --- |
| Dust | Dust/debris in eyes from wind | Wear ANSI Z87.1 approved safety glasses w/side shields |
|  | Flying particles, shavings from: cutting, removing, drilling equipment overhead | Wear ANSI approved safety glasses w/side shields- must be “spoggle” design |

**Feet**

|  |  |  |
| --- | --- | --- |
| Impact | Crushing injury | Wear ANSI approved safety toe shoes |

**Hands**

|  |  |  |
| --- | --- | --- |
| Cuts | Cuts from handling sharp material | Wear cut resistant gloves |
| Crushing injury | Handling material and getting hand caught between two objects (line-of-fire) | Wear general duty work gloves. |
| Electrical Shock | Checking for presence of voltage with meter before disconnecting wire. | Wear gloves that are rated for the type of work check ESCO Group Electrical Safety Program for correct level of glove. |

**Head**

|  |  |  |
| --- | --- | --- |
| Electrical Shock | Shock from contract with electrical conductors | Wear the company issued class “G” rated hardhats. Refer to ESCO Group Electrical Safety Program for safe approach distances. |
| Impact | Bumping into objects overhead | Wear the company issued hardhat. |

**Hazard Assessment**

**General Housekeeping**

|  |  |  |
| --- | --- | --- |
| **Hazards** | **Describe Specific Hazards** | **PPE Required/Safe Practices** |

**Eye/Face Hazards**

|  |  |  |
| --- | --- | --- |
| Dust | Dust/debris in eyes from wind | Wear ANSI Z87.1 approved safety glasses w/side shields |

**Feet**

|  |  |  |
| --- | --- | --- |
| Impact | Crushing injury | Wear ANSI approved safety toed shoes |

**Hands**

|  |  |  |
| --- | --- | --- |
| Cuts | Handling sharp material | Wear cut resistant gloves |
| Crushing Injury | Dropping material or getting hand caught in between two objects (line-of-fire) | Wear general duty work gloves |

**Head**

|  |  |  |
| --- | --- | --- |
| Impact | Bumping into objects overhead | Wear the company issued hardhat. |

**Hazard Assessment**

**Core Drilling**

|  |  |  |
| --- | --- | --- |
| **Hazards** | **Describe Specific Hazards** | **PPE Required** |

**Eye/Face Hazards**

|  |  |  |
| --- | --- | --- |
| Impact | Foreign material entering eyes | Wear ANSI Z87.1 approved safety glasses w/side shields |
| Dust | Flying particles and shavings from drilling overhead | Wear ANSI approved safety glasses w/side shields- must be “spoggle” design |

**Feet**

|  |  |  |
| --- | --- | --- |
| Impact | Crushing injury | Wear ANSI approved safety toe shoes |
|  |  | Make sure drill is secured. |
|  |  | Core slug falling |

**Hands**

|  |  |  |
| --- | --- | --- |
| Cuts | Cuts from handling core drill bits | Wear general work gloves |
|  |  |  |

**Head**

|  |  |  |
| --- | --- | --- |
| Impact | Bumping into objects overhead | Wear company issued hardhat |
|  | Falling debris from overhead drilling | Wear company issued hardhat |

**Hazard Assessment**

**Operating Forklift**

|  |  |  |
| --- | --- | --- |
| **Hazards** | **Describe Specific Hazards** | **PPE Required** |

**Eye/Face Hazards**

|  |  |  |
| --- | --- | --- |
| Dust | Dust/debris in eyes from wind | Wear ANSI Z87.1 approved safety glasses w/side shields |

**Feet**

|  |  |  |
| --- | --- | --- |
| Impact | Crushing injury | Wear ANSI approved safety toe shoes |

**Hands**

|  |  |  |
| --- | --- | --- |
| Cuts | Handling sharp material after loading/unloading | Wear cut resistant gloves |
| Crushing injury | Placing hands between material and stationary object or equipment | Wear general duty work gloves. |

**Head**

|  |  |  |
| --- | --- | --- |
| Impact | Material falling from elevated height above | Wear the company issued hardhat |

**Body**

|  |  |  |
| --- | --- | --- |
| Crushing | Falling out of the fork from turning corner to sharp or fast | Wear seatbelt restraint device |
|  | Being ejected from forklift due to overturned equipment | Wear seatbelt restraint device. |

**Hazard Assessment**

**Jackhammer**

|  |  |  |
| --- | --- | --- |
| **Hazards** | **Describe Specific Hazards** | **PPE Required/Safe Practices** |

**Eye/Face Hazards**

|  |  |  |
| --- | --- | --- |
| Dust | Nuisance Dust | Wear ANSI Z87.1 approved safety glasses w/side shields |
|  | Flying particles, shavings from cutting and threading conduit overhead | Wear ANSI approved safety glasses w/side shields- must be “spoggle” design |

**Feet**

|  |  |  |
| --- | --- | --- |
| Impact | Crushing injury | Wear ANSI approved safety toe shoes and metatarsal guards |

**Hands**

|  |  |  |
| --- | --- | --- |
| Caught in between | Hands(s) contacting equipment near jackhammer procedures | Wear general duty work gloves |
|  | Hands and fingers pinched while removing debris that has been jack hammered | Wear general duty work gloves |

**Head**

|  |  |  |
| --- | --- | --- |
| Impact | Bumping into objects overhead | Wear the company issued hardhat. |

**Hazard Assessment**

**Material Handling**

|  |  |  |
| --- | --- | --- |
| **Hazards** | **Describe Specific Hazards** | **PPE Required/Safe Practices** |

**Eye/Face Hazards**

|  |  |  |
| --- | --- | --- |
| Dust | Dust debris from wind or material | Wear ANSI approved safety glasses with side shields |

**Feet**

|  |  |  |
| --- | --- | --- |
| Impact/crushing | From dropped material | Wear ANSI approved safety toed shoes |

**Hands**

|  |  |  |
| --- | --- | --- |
| Cuts | Cuts from handling material with sharp edges | Wear cut resistant gloves |
| Crushing injury | Getting hand caught in between equipment of other material (line of fire) | Wear general duty work gloves |

**Head**

|  |  |  |
| --- | --- | --- |
| Impact | From falling material or debris | Wear company issued hardhat |

**Hazard Assessment**

**Pulling Wire**

|  |  |  |
| --- | --- | --- |
| **Hazards** | **Describe Specific Hazards** | **PPE Required/Safe Practices** |

**Eye/Face Hazards**

|  |  |  |
| --- | --- | --- |
| Dust | Dust/debris in eyes | Wear ANSI approved safety glasses w/side shields |

**Working at Heights**

|  |  |  |
| --- | --- | --- |
| Fall | Fall from elevation | Wear full body safety harness and lanyard |

**Feet**

|  |  |  |
| --- | --- | --- |
| Impact | Crushing injury from dropping material/spools of wire on toes | Wear ANSI approved safety toe shoes |

**Hands**

|  |  |  |
| --- | --- | --- |
| Crushing injury | Striking hand against equipment or other material in the area | Wear general duty work gloves. |
| Cuts | Cut from contacting sharp edges(panels) | Wear cut resistant gloves |
| Electrical Shock | Coming in contact with live electrical components | If pulling wire in live panels, guard the live parts with an insulated blanket and check ESCO Group Electrical Safety Program for clearances for live parts and PPE required. |

**Head**

|  |  |  |
| --- | --- | --- |
| Electrical Shock | Getting to close to live electrical components | Wear the company issued “G” rated hardhat and check ESCO Group Electrical Safety Program for clearances. |
| Impact | Contacting material overhead | Wear the company issued hardhat |

**Hazard Assessment**

**Skid Loader**

|  |  |  |
| --- | --- | --- |
| **Hazards** | **Describe Specific Hazards** | **PPE Required** |

**Eye/Face Hazards**

|  |  |  |
| --- | --- | --- |
| Dust | Dust/debris in eyes from wind | Wear ANSI Z87.1 approved safety glasses w/side shields and if equipped with a door, keep it closed. |

**Feet**

|  |  |  |
| --- | --- | --- |
| Impact | Material falling on feet from rolling into cab | Wear ANSI rated safety toed shoes |

**Hands**

|  |  |  |
| --- | --- | --- |
| Crushing injury | Hands being caught between machinery | Wear gloves and keep hands inside of equipment. |

**Head**

|  |  |  |
| --- | --- | --- |
| Impact | Falling debris from bucket | Wear company issued hardhat |

**Body**

|  |  |  |
| --- | --- | --- |
| Impact | Getting thrown out of skid loader by hitting a solid object | A seatbelt restraint must be worn at all times when in the seat of the skid loader |
| Crushing | Being ejected from a skid loader due to overturned equipment | A seatbelt restraint, must be worn at all times when in the seat of the skid loader. |

**Hazard Assessment**

**Using Meters for Voltage Testing**

|  |  |  |
| --- | --- | --- |
| **Hazards** | **Describe Specific Hazards** | **PPE Required/Safe Practices** |

**Eye/Face Hazards**

|  |  |  |
| --- | --- | --- |
| Arc Flash | Intense light/possible flying material | Wear Arc Flash shield and refer to ESCO Group Electrical Safety Program for clearances |

**Feet**

|  |  |  |
| --- | --- | --- |
| Electric Shock | Possible electric shock | Wear EH rated safety footwear required by ESCO Group |

**Hands**

|  |  |  |
| --- | --- | --- |
| Electric Shock | Coming in contact with live parts | Wear insulated gloves w/leather protectors and refer ESCO Group Electrical Safety Program for class and clearances. |

**Head**

|  |  |  |
| --- | --- | --- |
| Electrical Shock | Shock from contact with electrical conductors | Wear the company issued class “G” rated hardhats. Refer to ESCO Group Electrical Safety Program for Safe Approach Distances. |
| Impact | Bumping into overhead objects | Wear company issued hardhat. |

**Hazard Assessment**

**Welding**

|  |  |  |
| --- | --- | --- |
| **Hazards** | **Describe Specific Hazards** | **PPE Required/Safe Practices** |

**Eye/Face Hazards**

|  |  |  |
| --- | --- | --- |
| Welding flash | Harmful rays | Proper shaded lens (refer to ESCO Group Personal Protective Program for proper shaded lens |
| Flying particles | Chipping slag | Wear safety glasses |

**Feet**

|  |  |  |
| --- | --- | --- |
| Impact | Dropping material on feet | Wear ANSI approved safety toed footwear. |

**Hands**

|  |  |  |
| --- | --- | --- |
| Cuts | Handling sharp material | Wear cut resistant gloves |
| Crushing injury | Getting hands caught in between material | Wear general duty gloves |
| Burns | Burn from hot material and burns from welding | Wear welding gloves |

**Head**

|  |  |  |
| --- | --- | --- |
| Impact | Falling debris | If welding in an area where there is work overhead, wear a hardhat welding shield. |

**Hazard Assessment**

**Battery Inspection and Service**

|  |  |  |
| --- | --- | --- |
| **Hazards** | **Describe Specific Hazards** | **PPE Required/Safe Practices** |

**Eye/Face Hazards**

|  |  |  |
| --- | --- | --- |
| Electrolyte Splash | Sulfuric Acid | Wear ANSI approved safety glasses with side shields in conjunction with face shield. Chemical resistant googles can be used in place of face shield and safety glasses |

**Feet**

|  |  |  |
| --- | --- | --- |
| Impact | Dropping material on feet | Wear ANSI approved safety toed footwear |

**Hands**

|  |  |  |
| --- | --- | --- |
| Burns | Burn from Sulfuric Acid | Wear appropriate chemical resistant gloves |

**Head**

|  |  |  |
| --- | --- | --- |
| Impact | Falling debris | If welding in an area where there is work overhead, wear a hardhat welding shield. |

**Body**

|  |  |  |
| --- | --- | --- |
| Electrolyte Splash | Sulfuric Acid | Wear appropriate chemical resistant apron |