




Construction Safety Guidelines No. 11a

Arc Welding & Cutting

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| <p>WELDING MACHINE & CONNECTIONS</p> | <p>HOT WORK PERMIT</p> | <p>WELDING ROD, HOLDER, CABLE & EARTHING</p> |
| <ul style="list-style-type: none"> ▪ Select the correct welding machine depending upon the type of metal to be welded. ▪ Ensure that connection is done by certified electrician. ▪ Keep the welding machine away from the source of heat. ▪ Ensure that the cables are not causing a tripping hazard. ▪ Do not overload the welding machine. ▪ Switch off the power supply to the machine when not in use. | <ul style="list-style-type: none"> ▪ Obtain Hot work Permit from the area supervisor & to be closed daily. ▪ Cordon off the area & display PTW where welding work is carried out. ▪ Welding operations shall be shielded by non-combustible or flameproof screens to protect people working in the close vicinity from ultra violet rays. ▪ Welding or cutting work shall be performed away from the flammable goods storage. ▪ Flammable containers shall be drained, washed, dried thoroughly & purged with inert gas. | <ul style="list-style-type: none"> ▪ Do not bend the welding rod & flux should be intact. ▪ Ensure that the holder is properly insulated. ▪ Welding cable should be completely insulated, flexible & capable of handling the maximum current requirements of the work. ▪ Pipe lines containing gases or flammable liquids or electrical conduits shall not be used as a ground return. |
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| <p>FIRE FIGHTING EQUIPMENT & PPE</p> | <p>FUME EXTRACTION SYSTEM</p> | <p>TRAINING & FIRE WATCH</p> |
| <ul style="list-style-type: none"> ▪ Provide appropriate fire fighting equipment as prescribed by the Civil Defense. ▪ Workers shall be protected by suitable eye, face, hand, body, foot & respiratory protective equipment. | <ul style="list-style-type: none"> ▪ Provide adequate mechanical fume extraction & / or forced ventilation whenever work is not carried out in the open air. | <ul style="list-style-type: none"> ▪ Contactors shall instruct employees in the safe means of arc welding and cutting. ▪ Provide fire watch for at least an hour after completion of welding or cutting work. |