

ERGONOMICS: POWER PLANT

Preventive Measures and Controls

Extreme Weather Conditions

- Dress in layers, preferably fabrics made of wool, cold weather synthetics or blends. Avoid cotton, which does not wick perspiration readily.
- Stay dry as water and perspiration decrease thermal retention of most fabrics.
- Keep your extremities covered, especially your head and hands, since those are the areas where you lose most of your body heat.
- Avoid caffeine and tobacco products as they are well recognized as vasoconstrictors.
- Take periodic breaks in warm, dry areas to warm up.
- Beware of ice, snow and other hazards when walking and maneuvering.
- Wear loose, comfortable clothing, preferably made of natural fabrics.
- Beware of the progressive signs of heat exhaustion and heat stroke.
- Take periodic breaks and drink plenty of fluids, avoiding caffeinated beverages.
- If you are working outdoors, pay attention to sun exposure by wearing a wide brim hat and using high SPF-rated sunscreen.
- Be aware that perspiration can make your grip slippery.

Materials Handling

- Test the load prior to lifting to determine if it is light enough to lift.
- Plan your route before lifting and carrying the load.
- Instead of carrying one heavy load, separate it into smaller, lighter packages and make multiple trips. Use a cart or trolley or ask a co-worker for assistance.
- Place or store heavy items at mid-body height to make retrieval easier.
- Do not lift objects that are slippery, extremely hot or unevenly balanced.
- Make sure you can fit through narrow spaces and that your fingers are out of the way when you set the object down.

Lifting, Lowering and Carrying Loads

- Keep your arms and the load as close to your body as possible.
- Bend with your knees and let your legs and hips do most of the work.
- Do not arch your back.
- Use small steps when walking with a heavy load.
- Do not use fast or jerky movements when lifting, especially when lifting heavy objects.

Using Hand and Power Tools

- The center of gravity of a hand or power tool should be aligned with the center of your gripping hand
- Tools with angled handles or tools with pistol-grips are beneficial where the force is exerted in a straight line in the same direction as the straightened forearm and wrist, especially when the force must be applied horizontally.
- Know the job before you start and select the right tools to perform the task(s).
- Try not to bend your wrists when operating the tool.
- Avoid high contact and static loading.
- Try to reduce excessive gripping force.
- Avoid awkward and extreme joint positions.
- Reduce or avoid repetitive finger motions.
- Limit vibration.
- Minimize the amount of force to trigger devices.
- Do not use tools in poor and/or dull condition.

Working in Awkward Locations

- Try to keep your body in a neutral posture.
- Use mechanical devices to help reduce/eliminate reaching.
- Stretch your muscles to warm up before working in awkward locations.
- Take frequent, short breaks.
- Remember to have all tools required for the job in a easy-to-reach location.
- A buddy system may be required for some of these locations.
- Use task lighting.
- Ladders and elevated locations pose fall hazards. Inspect your equipment and/or location before starting work.

Controls Monitoring

- At start of each shift, adjust your chair, monitor(s), keyboard, reference binders, writing instruments and phone handset at your appropriate setting and distance.
- If you are frequently on the phone, avoid cradling the headset in your neck. Use a hands-free or speaker phone.
- Keep lighting comfortable to avoid glare and maintain good monitor contrast levels.