

*This is the third in a series of Safety Tip Sheets addressing common hazards found within the forging industry. These Tip Sheets are designed to bring awareness and provide practical information on methods for reducing these injuries.*



## *Safety Tip Sheet No. 3:*

# **Reduce the Risk of Back Injuries**

*When people injure their backs, not only does it impact their work, it can also impact every facet of their lives. The risk of back injury can be greatly reduced if you understand a few principles and always think defensively about your back.*

### **THINGS YOU CAN DO ON THE JOB**

- **Use lifting equipment when possible. Avoid manually lifting and carrying objects when possible.**
  - **Cranes and hoists are very useful material handling tools. Ensure that the lifting devices (rope, chain, straps, etc.) are rated for the weight of the load you intend to lift. Make sure you are trained before using this equipment.**
  - **Conveyors are very useful for moving material since you do not need to lift and carry.**
- **Use mechanical equipment to transport items. When using equipment such as hand trucks, carts, pallet jacks, etc., make sure you choose the right equipment for the job. It is generally better to PUSH the equipment rather than PULL it. (*Your back is the same strength whether you push or pull; however, you have better mechanical advantage and can use your weight to assist when you push*).**
- **Store the heaviest materials at approximately mid-thigh to mid-chest height. Storing materials at least 12 inches off the ground, where possible, minimizes the danger of one of the most hazardous movements — lifting directly from the ground.**
- **Avoid lifting in a situation where the body will be twisted. Avoid jerking or erratic motions.**
- **Whenever possible, warm up your muscles prior to lifting. Warm up exercises can be done by moving through the range of motions that you will use to perform the task.**
- **Do not attempt to lift heavy or bulky items alone. Ask co-workers to help you.**
- **IF YOU DO SUFFER A BACK INJURY, NOTIFY YOUR SUPERVISOR.**

(Continued on Reverse Side)

## **THINK AHEAD**

- Evaluate the load:
  - How much does it weigh?
  - Look at the label for weight.
  - Try pushing the item to judge its weight, prior to actually lifting the device.
  - See if it can be lifted and carried by one person.
  
- What about the shape and size of the item—is it bulky? Even a light object can be difficult to lift if it is bulky or oddly shaped. If it is wider than your shoulders, you may not be able to get a good grip on the object. Can you see around or over the object when you pick it up? These are times when you should get help.
  
- Plan your route of travel and make sure it is clear. Are there steps or stairs along the path? Remove any debris or objects that might be in the way. Do you have to maneuver through any tight doorways, down hallways, or around difficult corners? Have you measured these tight spots to make sure your load will squeeze through them?
  
- Make sure you have a clear, accessible place to unload the object.

## **LIFTING & LOWERING**

- Do not repetitively lift loads in excess of 50 pounds.
- Keep the load close to your body when lifting.
- Keep your feet about shoulder width apart for greater stability and lifting power.
- Keep your back straight to keep the spine and back muscles in correct alignment.
- Extend your chin to help maintain the proper back alignment.
- Use cutouts or attached handles so you can grip the object with the whole hand.
- Keep your arms and elbows close to your torso when lifting.
- Keep the load directly in front of you when lifting.
- Always move your feet when turning instead of twisting your back.
- Lift your load in a slow, smooth fashion, avoiding quick and jerky motions.

## **CARRYING**

- Make sure you can see forward over your load. Trying to save time by carrying that one extra box is not worth getting injured.
  
- Take small steps and make sure you have good footing before taking the next step. Be especially careful when climbing stairs, ramps, or areas with uneven flooring.

## **HIGH LOADS**

- Do not reach up to pick up a load off a shelf that is over your head. Use a step stool or ladder to climb up so your shoulders are level with the load. Do not stand on a chair, box, etc. This could cause you to fall.
  
- Pull the load close to your body and grip it firmly. While maintaining good posture, use your legs to carefully step down from the ladder or step stool.
  
- If necessary, consider using a spotter to help you maintain your balance.

## **HELPFUL THINGS YOU CAN DO OFF THE JOB**

- Follow a regular exercise program. See a doctor first for a checkup and advice.
- Some activities such as swimming can provide good conditioning and have a minimum impact on the back.

*Through OSHA's Alliance Program, this Safety Alert was developed through the OSHA & Forging Industry Association Alliance for informational purposes only. It does not necessarily reflect the official views of OSHA or the U.S. Department of Labor.*

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