



Using a pipe carriage prevents back, shoulder, and wrist fatigue

Hanging pipe, using tirsors, can cause fatigue and increase risk of injury to your back, shoulders, and wrists. Factors that can contribute to injury as a result of using tirsors include:

- Excessive effort required to grip the handle and then hoist up the pipe – more force is needed when using bigger pipe and/or smaller handles
- Awkward positions while standing on a ladder to hoist pipe – your arms can be above shoulder height and your back can be twisted
- Repeated gripping of the tirfor handle – this can cause fatigue to your hand and forearm muscles
- Contact stress – ridged or short handles can create pressure points in the palms of your hands

To minimize the effects of hoisting pipe, pipe fitters from a major construction firm came up with the idea of building a pivoting pipe carriage that could hold pipe as large as 92 cm (36 in.) in diameter. The pipe carriage is picked up by a forklift to raise the pipe up to the required height for hanging.

Tips for safely using a pipe carriage

- Before raising the carriage, be sure the pipe is balanced on the pivoting angle iron.
- Secure the pipe to the forklift carriage frame to prevent accidental dislodging from the carriage.
- Be sure that the load is safe for the forklift.
- Take special care with extra-wide loads.
- If welding several pieces together prior to hanging, weld the pipe pieces together directly below the overhead location where the pipe will be hung.

A pipe carriage is not appropriate in all situations. Knowing when and when not to use it is important. The pipe carriage works effectively for hanging large sections of pipe on new construction sites. The pipe carriage cannot be used in small, restricted spaces.

Pipe pieces can be welded together at the ground level, and larger sections can then be hung using the carriage. This increases productivity and helps reduce risk of injury.

How does the pipe carriage reduce risk of injury?

Welding sections of pipe together at ground level allows larger sections of pipe to be hung and therefore less time is spent working overhead. This reduces the amount of time the arms are held overhead and the neck is bent back to look up.

The pipe carriage greatly reduces the need to manually hand-rig pipe. This reduces awkward and forceful shoulder, wrist, and back movements.

