

OWN SAFETY ONSITE

Toolbox Talk – Suspended pipe work

Applying a dynamic risk assessment approach to managing hazardous manual tasks onsite during suspended pipe work.

STOP

THINK about and plan your work tasks

- Ensure that lifting aids, equipment and appropriate resources are considered in the project budget.
- Plan forward and look ahead. Have you planned and budgeted for scissor lifts, pipe stillages, site toolboxes, trolleys, platform ladders, duct lifters and considered site access? Do you have the resources and tools to ensure the job is done safely?
- Does the scissor lift have pipe racks or holders? Can a duct lifter be used?
- Do you have appropriately licenced and skilled workers that can operate the scissor lift and duct lifters? Ensure site access
 to and from as well as within site.
- Are your workers using the right tools for the job? Do workers understand and know how to use tooling to avoid unnecessary manual handling such as hammer drills, jackhammers rather than sledgehammers, shovels, crow bars, etc.
- Ensure any pipe is stored on stillages close to the site works to avoid unnecessary lifting or carrying.
- Eliminate lifting using lifting aids wherever possible such as duct lifters or scissor lift with racks. If lifting or carrying must occur, always use a team lift or carry to handle lengths of pipe.

ACT using safe lifting principles

- Workers to understand their capabilities and limitations regarding manual handling tasks (stature, strength, pre-existing weaknesses, or injuries).
- Visual assessment weight, size, shape, handles.
- Assessment with foot or hand tap or pull to get a feel for weight when unsure of weight or awkwardness.
- Check path for hazards or obstructions.
- Ensure regular job and task rotation to avoid sustained or repetitive postures.

Installation of lengths of pipe overhead on scissor lift:

- Eliminate lifting using a duct filter or pipe racks on scissor lift where possible.
- Ensure scissor lift is placed directly under clips to avoid overreaching.
- Ensure your clips are appropriately installed and positioned to avoid having to adjust whilst holding lengths of pipe.
- Use a two man- timed and controlled lift waist to shoulder and then clip into position whilst resting on shoulder, or feed into clips. Avoid overreaching.
- Try and rotate shoulders to avoid exposure to just one shoulder or neck side.
- Safe lift principles good wide base of support on scissor lift, use a squat or leg drive to lift pipe to shoulder.

Using tooling above shoulder height on scissor lift and elevated work platforms:

- Eliminate lifting using a duct filter or pipe racks on scissor lift where possible.
- Hammer drill use a sharp drill bit to reduce effort. Make sure EWP or scissor lift is directly under the site area you are
 working on to avoid overreaching, use a two-handed neutral power grip on the tool, elbows by side and drive with squat or
 knee dip when pushing tooling. Let the tool/bit do the work and don't fight it. Try and rotate left and right-hand sides if safe
 to do so.
- Welding make sure EWP or scissor lift is directly under the site area you are working on to avoid overreaching, try and keep your shoulder and elbow by your side to avoid over reaching or awkward sustained postures. Ensure you adjust your position on the EWP, or the EWP itself to maintain neutral postures where possible. Try and rotate left and right sides if safe to do so.

Pushing / pulling site boxes and stillages:

 Use a two-man push – pull and ensure you dip and drive from the legs with a neutral back posture and move a stillage or site box.

Report any issues early

- Ensure any issues machinery or equipment is reported, and if you develop any discomfort or pain.
- Report any hazards early.
- Seek early treatment or medical assistance.



OWN SAFETY ONSITE

Suspended pipe work: Task examples



Do



Do not

 Use a duct lifter and two man lift with scissor lift to install pipe overhead, avoiding over-reaching.



Over-reach when handling pipe. Scissor lift, duct lifter not set up to optimal lifting zones.





Do



Do not

Two-man carry for long or awkward lengths of pipe.



One-man carry or lift for long or heavy lengths of pipe.





Do



 Two-man controlled lift pipe to shoulder to install to clips. Use mechanical lift whenever possible to lift pipe and set up scissor lift to avoid overreaching. Consider scissor lifts with pipe racks.



One person push or pull with poor base of support and not using legs to drive movement.





Do



 Two workers pushing stillage using a dip and drive technique with neutral back postures to move the load.



 Avoid twisting the wrist, overreaching or awkward shoulder postures when using tooling for sustained or repetitive periods. Ensure ladder is facing correct way.





 Keep close to tooling and let the tool do the work. Use a two handed, firm power grip and wrist neutral position. EWP set up close to works to avoid overreaching.





Disclaimer

The information contained within is general in nature and is not related to your specific circumstances, situations, or medical conditions. Neither Master Plumbers' Association of Queensland (MPAQ) nor WorkCover Queensland will be liable for any injury or illness sustained for following this information and it is recommended to seek advice as to individual circumstances before using this information.

Safety Equipment Recommendations

Genie Material Lift



Purchase: Genie® SLC™-18 Superlift Contractor® (genielift.com)

RRP: \$5000 (approx.) **Hire**: Height for hire

RRP: \$50 per week (approx.)

Ductlifters Archives - Height 4 Hire

- Extremely durable yet also lightweight and portable
- A variety of load handling accessories make this unit extremely versatile
- Legs fold up and attachments are removable for easy storage
- Quiet, two-speed winch option shift gears on the fly

Genie Electric Scissor Lift



Purchase: Genie® GS™-1932 & GS-1932 E-Drive Scissor Lift (genielift.com) RRP: \$18 000 (approx.)

Hire: height for Hire Brisbane Scissor Lift Hire | Electric Scissor Lift Sales (height4hire.com.au)

RRP: \$150 per week (approx.)

- Genie® AC E-Drive configuration offers increased runtime, reduced maintenance costs and industry-leading performance
- Front-wheel drive and zero inside turning radius
- Easily pass through standard single or double doors
- Large platform workspace with 0.91 m (36 in) roll-out platform extension
- Swing out components trays for easy access
- User-friendly Smart Link™ dual-zone controls for indoor and outdoor use



OWN SAFETY ONSITE

Suspended pipe work: Task specific dynamic warm-ups and strength exercises for you to own your health, safety and wellbeing.

Shoulder and neck strengthening for overhead works. (Consult a GP or Allied Health professional prior to commencing any new exercise program).

Shoulder press





As a warm-up, perform 20-30 reps without weights. Add dumbbells to perform as a strengthening exercise in the gym or at home. Increase difficulty by standing instead of sitting and doing single arm alternating shoulder press.

Alternating split quat to single arm shoulder press





As a warm-up, perform 10-15 reps each side without weight. Modify the lunge to a stationary split squat if range of motion is limited in the hips or legs.

Add dumbbell for strengthening in the gym or at home.

Goblet squat





As a warm-up, perform 20-30 reps without weight, arms out to counterbalance weight. Add dumbbell or barbell for home or gym-based strengthening.

Isometric neck push (forwards and sideways)





Push with moderate force against your own hand as resistance forwards and sideways holding each side for 10-15 seconds. Add holding a weight in the opposite hand for strengthening at home or the gym.

Shrugs





As a warm-up without weight, shrug shoulders and pull shoulders back and hold for 3-5 seconds 10 times. Add weights and shoulder raise to the side for resistance strengthening in the gym or at home.

Sled push (isometric)



Push with moderate force against a wall or another worker for 20-30 seconds for a warm-up. Use a weighted sled for strengthening in the gym.

Acknowledgements

The development of this document has been funded by WorkCover Queensland and involved collaboration with stakeholders and worker representatives from CC Group, Beavis and Bartels Group, WorkCover Queensland, and the Master Plumbers' Association of Queensland.

For further information on workplace health and safety, please refer to:

Hazardous Manual Tasks Code of Practice 2011

Work Health and Safety Regulation 2011

Disclaimer

The information contained within is general in nature and is not related to your specific circumstances, situations, or medical conditions. Neither Master Plumbers' Association of Queensland (MPAQ) nor WorkCover Queensland will be liable for any injury or illness sustained for following this information and it is recommended to seek advice as to individual circumstances before using this information.