HEAVY VEHICLE INDUSTRY AUSTRALIA

INDUSTRY BEST PRACTICE GUIDE

Workshop service and inspection pits - safety

Contents

Introduction

Many heavy vehicle workshops feature pits that are commonly used for service, repair, and inspection tasks.

The pits themselves may present workplace safety hazards in some circumstances.

HVIA, with support of members, has prepared this guide to assist the industry in understanding and managing the safety risks associated with workshop pits.

Background

Workplace safety regulations that exist at national and state levels require all employers to provide a safe working environment.

Specifically, employers are required to do everything reasonably practicable to manage safety risks including consideration of:

- the likelihood of the hazard or risk
- the harm that could occur
- knowledge about the hazard or risk
- ways to minimise or eliminate the risk, and if these are available and suitable
- cost, including whether the cost is grossly disproportionate to the risk.

Safe Work Australia, in its model code of practice on assessing workplace safety risks, recommends a systematic approach to managing risks that involves:

- identifying hazards
- assessing risks
- controlling risks
- reviewing control measures

For more information, visit: https://www.safeworkaustralia.gov.au/doc/model-code-practice-how-manage-work-health-and-safety-risks

Specific workshop pit safety hazards

The hazards of working in or around vehicle service pits can include:

- falls into an unguarded or uncovered pit
- poor ventilation allowing hazardous atmospheres to develop within a pit, leading to
  - asphyxiation (e.g. from excess carbon monoxide)
  - fire/explosion (e.g. from concentration of fuel vapours)

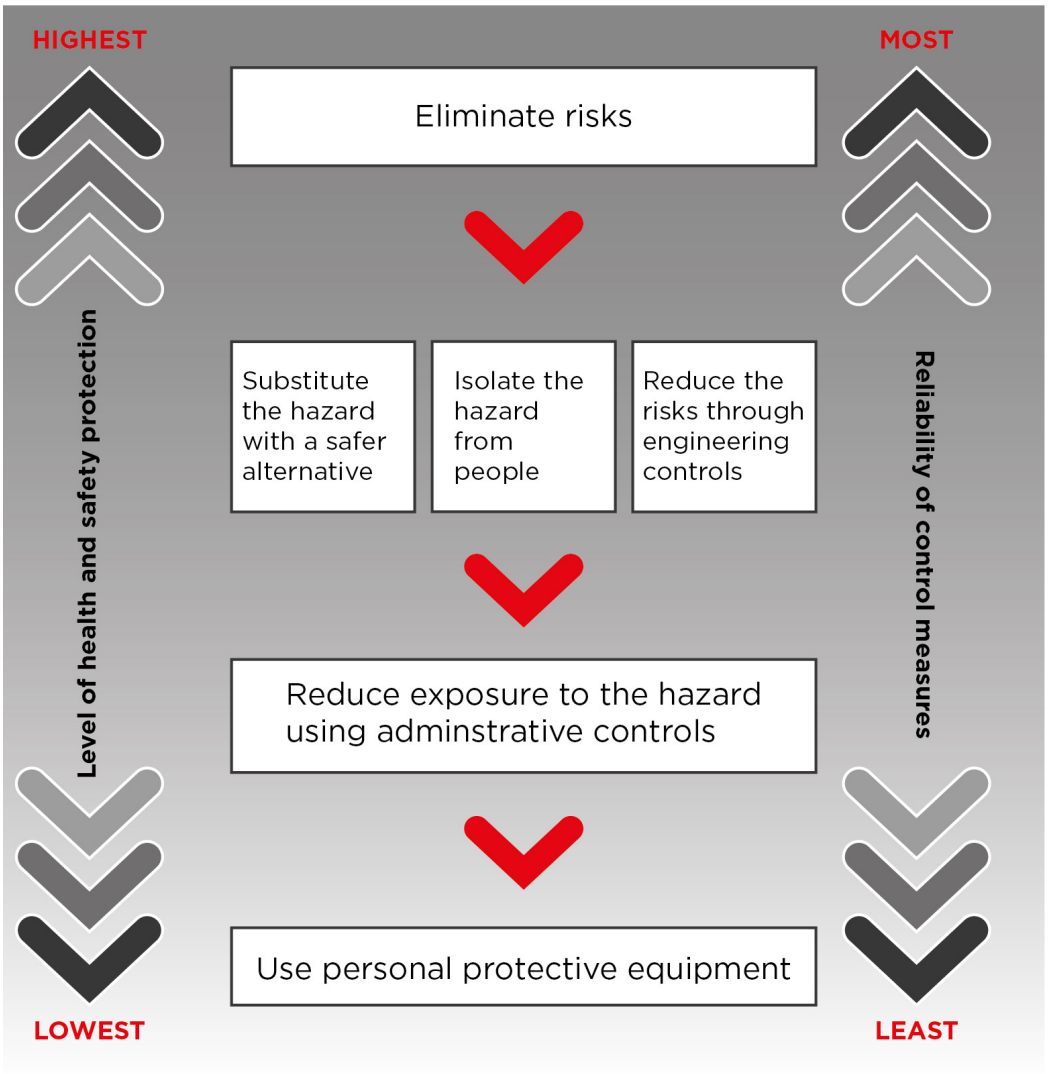
Managing hazards and understanding controls

Every organisation should assess its own pit safety hazards based on the particular characteristics of its sites, and the nature of the business conducted at those sites.

When putting in place control measures, Safe Work Australia recommends a hierarchy of risk controls to help organizations manage risk in the workplace.

The hierarchy consists of five levels, ranked in order of effectiveness.

1. Elimination
2. Substitution
3. Engineering controls
4. Administrative controls
5. Personal protective equipment (PPE)

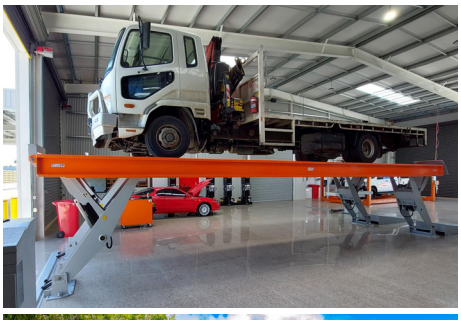
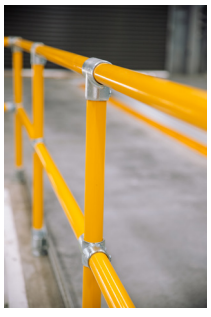


Hierarchy of risk controls


1HGJ 151
ROAD
MGM121
TRAIN

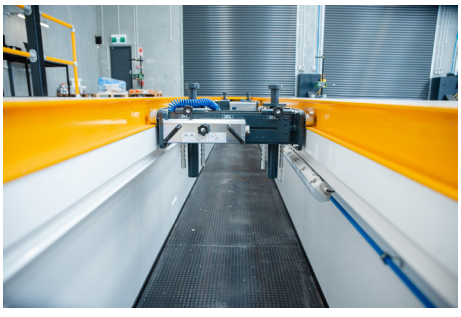
Specific pit safety controls

A range of pit safety control are listed below. They have been ordered in terms of the highest level of health and safety protection, and greatest reliability.'

CONTROL	HIERARCHY LEVEL	IMAGE
Use of multi-purpose hoists, lifts, and elevated ramps for overhead work, rather than conventional pits	Elimination (but may introduce other risks)	 
Installation of barriers/ guards/rails: • sectionalised guard railing designed to fit into prepared floor sockets, or • suspended chain barriers from removable steel uprights.	Isolation (guard rails) Administrative (procedures for placing and removing barriers)	
Covering pits when not in use: • hardwood covers, or • purpose-built heavy interlocked steel plates • 'roller shutter' or concertina' style covers • nets	Engineering/ administrative	

Specific pit safety controls

A range of pit safety control are listed below. They have been ordered in terms of the highest level of health and safety protection, and greatest reliability.'

CONTROL	HIERARCHY LEVEL	IMAGE
Use of ventilation systems with vents in the side walls of the pit to vent vapours and fumes.	Engineering	
Ensuring all portable or permanent lighting and/or electrical equipment within the hazardous zone of the pit is intrinsically safe.		
Prohibition of draining fuels or combustible liquids (e.g. petrol tanks), or service LPG-powered vehicles over or adjacent to pits. (note: some workshops prohibit DG vehicles from entering pit areas)	Isolation/ administrative	
Prohibition of any work involving welding or oxy cutting inside or adjacent to pits.	Isolation/ administrative	
Painting the pit interior white, and outlining the top edges for at least 600 mm in a conspicuous colour (e.g. safety yellow).	Administrative	

In addition to conducting a risk assessment and adopting suitable risk controls, organisations should ensure they address:

Training – Ensure that all staff who use the pits are trained in the correct procedures for working in and around the pit. This includes training on how to use any fall protection systems, barriers, or other safety equipment.

Maintenance – Regularly inspect and maintain pits and any safety equipment used. This includes checking the condition of the pit cover, netting, barriers, and anything else present. Any damaged or worn equipment must be replaced immediately, and the pit removed from service until the equipment has been replaced.

Emergency procedures – Develop and implement emergency procedures for dealing with accidents or incidents that occur in or around pits. This includes procedures for rescuing workers who have fallen into a pit, as well as procedures for dealing with any hazardous materials that may be present.

Documentation – Keep detailed records of all inspections, maintenance, and training related to the service pit. This documentation should be kept on file and made available to workers and safety inspectors as needed.

Further Reading

The following work safety regulator resources are available online.

- Service pits in automotive workshops | SafeWork SA

The following guides have been prepared by organisations offering pit safety products and solutions.

- Levanta - A guide to workshop pit design & specification
- Monit - Service pit guide
- Evolving Workshop Technologies - Pits and OHS

HVIA member organisations

The following HVIA member organisations supply equipment for eliminating and minimizing pit safety hazards.

- Levanta

The following HVIA member organisations supply equipment such as vehicle hoists, that may offer suitable alternatives to the use of pits, in some circumstances.

- Endurequip
- Maha
- NAES (National Automotive Equipment Services)
- Precision Automotive Equipment
- RUD Australia
- Corghi Australia
- Molnar
- Stenhoj Australia

MAHA
GERMAN
Workshop Equipment

ENDUREQUIP
HOISTS

RUD

NAES
PTY LTD

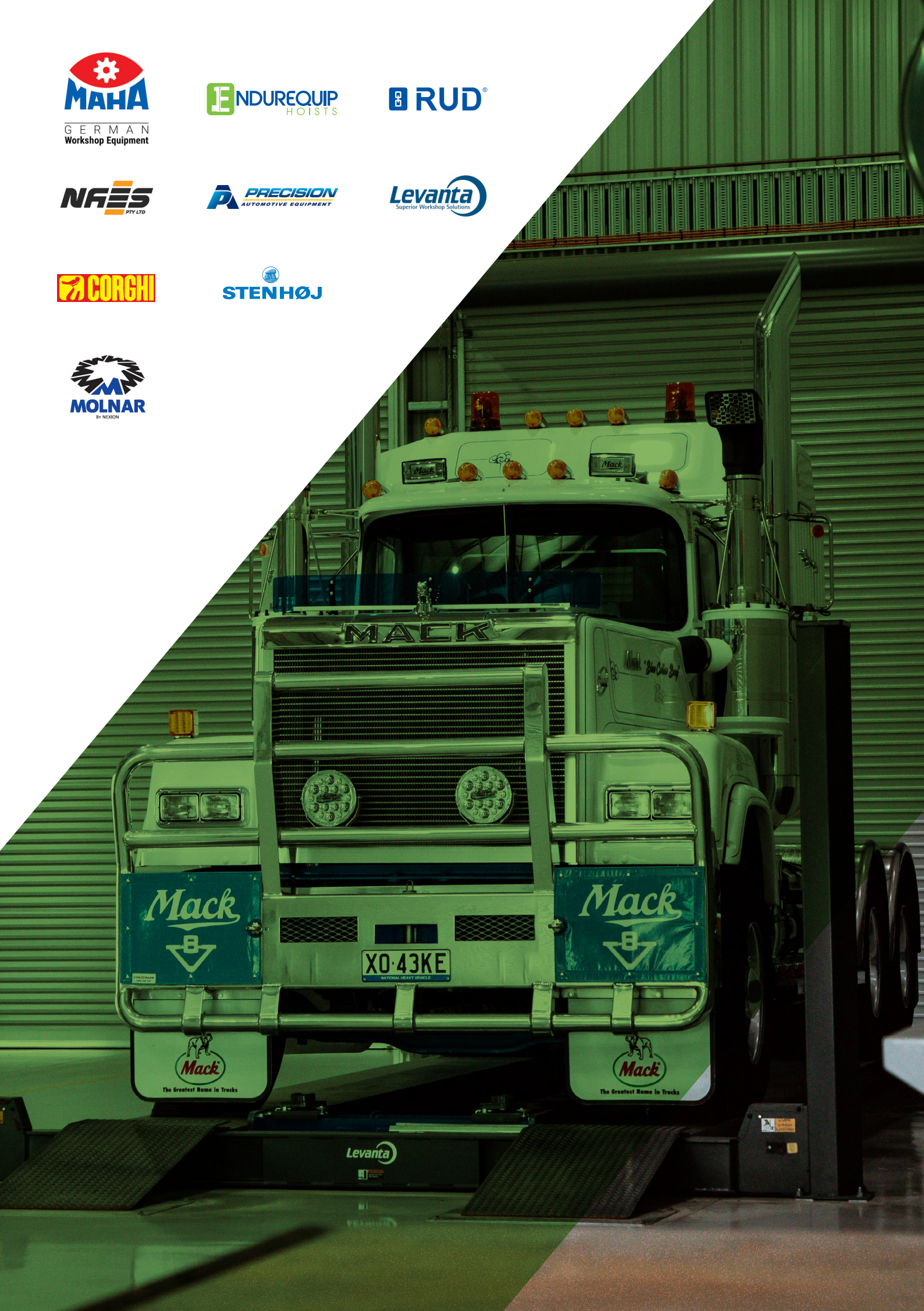
PRECISION
AUTOMOTIVE EQUIPMENT

Levanta
Superior Workshop Solutions

CORGHI

STENHØJ

MOLNAR
By NEXION



HEAVY VEHICLE INDUSTRY AUSTRALIA

HVIA seeks to positively influence the development and maintenance of policy, legislation, regulation and technical standards which foster innovation and contribute to the future viability of the heavy vehicle industry and the safety and productivity of the heavy vehicle fleet.

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