

Safety Book

Telehandler



QUEENSLAND
FARMERS'
FEDERATION

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Queensland Farmers' Federation also acknowledges the materials kindly provided by the Victorian Farmers Federation.

 **HOLDING REDLICH**

 **SAFE AG SYSTEMS™**
Keep safe. Keep farming.

TSHA
Telescopic Handler Association



A telehandler is a versatile type of lifting plant that includes a telescopic boom fitted with a lifting attachment.

THE TELEHANDLER, FARM SAFETY AND YOU

This safety resource has been developed by the Queensland Farmers' Federation, in conjunction with the Telescopic Handler Association (TSHA), Safe Ag Systems and Holding Redlich, to increase awareness for farmers of the machinery's operation and how to prevent accidents while in use.

A telehandler is a versatile type of lifting plant that includes a telescopic boom fitted with a lifting attachment.

The typical lifting attachment used is a fork tyne, but other attachments are used depending on the load lifted. A Telehandler or Telescopic Handler is a useful machine for agricultural work, but its advantages can pose serious risks if it is not used correctly.

Telehandlers may have a side-mounted cab, with the boom mounted to the right of the cabin. The operator's view from the cab may be obstructed by the boom, cab pillars and other parts of the structure and visibility can also be restricted when reversing or lifting large loads.

If not operated correctly, the Telehandler can tip over or contact powerlines, and loads can slip off and attachments can come loose, all causing injuries and fatalities. Unfortunately, these incidents have been increasing and promoting safe practices are a priority.

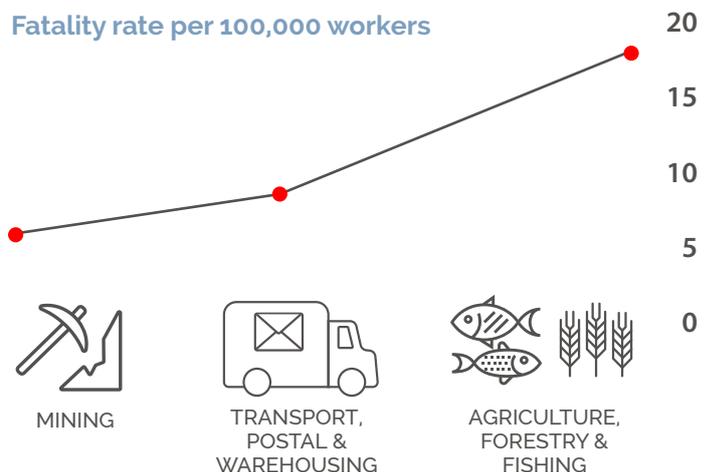
This guidance will assist farmers in highlighting a range of considerations that combined serve to improve the 'state of knowledge' on Telehandler safety for the industry.

QUEENSLAND CONTEXT

In Queensland, agriculture, forestry and fishing workers had the highest fatality rate at 18.4 per 100,000 workers according to the latest Work-Related Traumatic Injury Fatalities report published by Safe Work Australia.

That rate is about twice that of transport, postal and warehousing workers and three times the rate for those working in mining. The highest number of fatalities resulted from vehicle collisions, and machinery operators and drivers had the highest work fatality rate of 7.5 per 100,000 workers. Agriculture, forestry and fishing workers also figured prominently in the claim rates with 12.7 serious claims per million hours worked.

Fatality rate per 100,000 workers



HAZARDS



Hazard...never leave a load suspended in the air!

Be aware of your surroundings when operating a Telehandler, assess the terrain, use attachments that are fit-for-purpose and ensure the equipment is well maintained.

Dangers to look out for

- overturning
- unstable ground conditions
- electrocution – overhead powerlines
- contact with workers, pedestrians and bystanders and other plant
- unsecured loads falling leading to crushing
- inappropriate or poorly maintained handling attachments
- unsafe procedures
- attachments inappropriately used as work platforms (e.g., standing on forks and pallets)
- attachments not secured properly
- unintended movement of the machine

All machinery operators and workers working near powerlines should be aware of their safety obligations under the Electrical Safety Act 2002 and adopt safe work practices in accordance with the Electrical Safety Code of Practice 2020 Working near overhead and underground electric lines.

Exclusion zones apply whenever you need to carry out work, or operate plant or a vehicle, around a live overhead electric line. Exclusion zones extend in all directions, not just sideways.

The exclusion zone will vary depending on the:

- voltage of the line
- whether the line is insulated or bare
- the level of competence, training and authorisation of the person carrying out the work.

The mandated exclusion zones range from zero to eight (8) metres although powerlines normally have a general three (3) metre exclusion zone around the wires and the safest way to operate around the wires is to have a trained safety observer watching the operation of the machinery and the wires. The exclusion zone can be reduced if a trained observer (completed Safe Working Near Exposed Live Parts course or similar) is used at the site where equipment may encroach the three (3) metre exclusion zone.



Scan and Download – Look Up and Live

The tool allows users to identify particular properties, annotate and print out maps of all overhead powerlines (distribution and transmission lines). The tool also allows for maps to be annotated and printed.

The Look Up and Live Tool can be accessed [here](#).



TRAINING AND LICENCES

The licensing requirements for a telehandler differ depending on the attachments and the capacity of the plant.

Completing the right training for the equipment you are using is essential to get your task done safely and efficiently.

For non-slewing telehandlers (any rated capacity)

- Competency/industry based training such as TSHA Gold Card or Statement of Attainment - RI1IHAN309F Conduct telescopic materials handler operations

For slewing telehandlers any rated capacity or attachment

- All states and territories require an operator to hold a High Risk Work Licence – Mobile Slewing Crane with appropriate class for the capacity of the Telehandler - HRWL Class C2/ C6/C1/C0 = Mobile Slewing Crane (≤20t, ≤60t, ≤100t, >100t)



TSHA Trained Operator Gold Card

The Telescopic Handlers Association Australia (TSHA) Operator Gold Card training is recommended.

The THSA provides training on the following attachments:

- Forks
- Crane Jib
- Earthmoving bucket
- Other (for any other type of attachment such a bale grabs, work platforms, sweeper)

The Gold Card will identify the modules you have completed and competency achieved.



For more information go to tsha.com.au/gold-card

High Risk Work Licences

Queensland licensing requirements for multi-purpose non-slewing mobile crane/tool carrier:

- A high risk work licence for a non-slewing mobile crane operation (CN) is required for this plant when used as a crane where the capacity exceeds 3 tonne and when fitted with a boom or jib and hook.
- Where the plant is fitted with a work platform attached directly to the main boom and the work platform can be extended 11 metres or more the operator requires an elevated work platform (WP) high risk work licence.
- Where the plant is fitted with other attachments i.e. bucket or forks etc, no high risk work licence is required.

When a high risk work licence is required to operate this plant, you will need to enrol with a Registered Training Organisation, complete the relevant unit of competency and be assessed under the National Assessment Instrument prior to applying for your high risk work licence.

For multi-purpose slewing mobile crane/tool carriers:

- A high risk work licence for a slewing mobile crane is required to operate this plant when used as a and fitted with a boom or jib and hook. The class of high risk licence will depend on the rated capacity of the crane:
 - › C2 for cranes up to 20 tonnes
 - › C6 for cranes up to 60 tonnes
 - › C1 for cranes up to 100 tonnes
 - › C0 for cranes with capacity over 100 tonnes



See worksafe.qld.gov.au/licensing-and-registrations/work-health-and-safety-licences/when-dont-i-need-a-licence

GENERAL SAFETY CONSIDERATIONS WHEN USING A TELEHANDLER

- Always read the manufacturer's operating manual before operating the unit. Operating instruction will change from machine to machine.
- Ensure the ground is firm enough to support the plant without the wheels sinking into the ground.
- Travel with the boom lowered to make sure the centre of gravity of the machine and the load is as low as possible to maximise stability.
- Ensure that loading yards are well maintained and pot holes and soft patches are repaired.
- Carefully choose routes to avoid overhead powerlines, very steep slopes or gradients and slippery or loose surfaces.
- Ensure all hazards can be both seen and controlled
- When working near dams and waterways make sure the ground can support the machine. Avoid ground that is waterlogged or eroded. Use spreader plates when needed.
- When a telehandler is loaded and moving up or down a gradient, always travel with the load on the uphill side of the unit - otherwise the unit can tip.
- Adopt the correct driving direction and travelling position for negotiating a slope or gradient, e.g., when a load is carried the load should face uphill and when no load is carried the fork arms should face downhill.
- Avoid turning on or traversing a slope or gradient and always descend straight down the gentlest gradient of a slope, instead of driving across it.
- Avoid stacking/de-stacking a load on a slope or gradient.
- Use the boom safety prop supplied by the manufacturer if any work has to be carried out under a raised boom.
- The operator should always look around and check for the presence of by-standers before moving off and while manoeuvring and travelling. Use barriers and exclusion zones to keep people and vehicles clear of the Telehandler.
- Ensure that boom lockouts are used when shifting loads.
- When lifting a suspended load by hook or jib, move the boom slowly to avoid swinging the load. If it starts swinging, then reduce boom movement until it stops. Never use chains or slings slung over the forks or boom carriage.
- Only use a work platform that is directly fixed to the Telehandler, not on forks, and has been approved by the Telehandler manufacturer.
- Never deploy or reset the outriggers while the boom is elevated with a load as this can cause major instability.

ATTACHMENTS

A wide range of attachments are available for agricultural work such as pallet or muck forks, buckets, bale spikes, block cutters and grabs.

Key points to remember

- Operators require training for the attachments used.
- Fitting an attachment may alter the characteristics of the machine and should be considered when determining revised lifting capacities (a process known as de-rating) the self weight of the attachment and an increased load radius will reduce the unit's capacity.
- When fitting attachments ensure that the plant is fitted with the relevant load chart prior to use.
- Always select attachments compatible with the telehandler and are suitable for the task to be performed.
- Attachments need to be regularly inspected and properly maintained. If possible, consult the manufacturer's manual to ensure any maintenance schedules have been adhered to.
- Always operate isolation switches, hydraulic valves or other measures provided on the machine to secure and/or isolate attachments safely.
- Remember that when using forks its easy to accidentally tip the load off the forks due to forward tilt (unlike a traditional forklift where the forward tilt is limited).



EXAMPLE OF

Risk Assessment Checklist Before Using a Telehandler

- Operator has up-to-date training
- Operator has the relevant licence (if required)
- Task is suitable for the Telehandler
- Check for hazards such as powerlines, other vehicles or machinery and implement risk control measures
- Attachment is compatible to the Telehandler
- Attachment has been well maintained
- Unit's load rating has been reduced due to attachment self weight and increased load radius
- Visibility is clear
- Mirrors are in good condition and properly adjusted
- Cab windows are clean and intact
- Telehandler maintenance is up-to-date as per manufacturer's instructions
- Telehandler manufacturer pre-checks completed
- Overload indicator is working
- Transport Lock-out switch is operable
- A fitted lap belt or similar restraint is used
- By-standers (e.g., other workers/pedestrians) and livestock are clear of Telehandler operations
- Consider whether the use of a spotter is necessary
- A walk of the route and workplace have been done to check that the ground can support the Telehandler and load



TELEHANDLER – EXAMPLE OF SAFE WORK PROCEDURE

DO NOT use this equipment unless you have been instructed in its safe use and operation and you hold any required licenses.

PPE Required/Pre-Operational Safety Checks

- Ensure long or loose hair, including beard, is contained
- Ensure no loose fitting clothing or jewellery is worn
- Do not operate the equipment if any defects are identified or if you do not feel competent with operation
- Locate and ensure you are familiar with all equipment operations and controls
- Ensure all guards are fitted, secure and functional
- Do not operate if guards are missing or faulty
- Replace all safety signs that are worn, missing or illegible
- Check wheels and tyres for damage and ensure tyres are inflated to specified pressures
- Check mirrors and windows and adjust for best vision, ensuring windows are cleaned as needed
- Adjust seat to optimum position and inspect seatbelt and fittings



OPERATIONAL SAFETY CHECKS

Check for correct operation of all controls, including load limiter system

LIGHTS AND SIGNALS

- **Check** operation of all lights, horn, reversing signal, and flashing beacon
- **Do not** use machine if controls, lights or signals malfunction

STEERING AND BRAKES

- **Check** operation of steering and brakes, including park brake
- **Do not** operate if brakes faulty

BOOM AND ATTACHMENTS

- **Check** boom extension and retraction and lifting and fork tine operation
- **Check** for hydraulic oil leaks
- Before leaving the cab, ensure that transmission is in neutral, park brake is on, any load is placed on ground, ignition switch is off and key removed
- Use approved attachments only
- Ensure that correct attachment is securely fitted for work to be carried out
- Use only attachments provided with machine or approved by manufacturer
- Load bearing attachments must be regularly inspected for wear or damage
- Worn, broken, cracked or distorted components must not be used
- Follow specified procedures when fitting or removing attachments
- Ensure that attachments are securely fixed to machine and cannot be accidentally dislodged during operation of machine
- Inspect fork tines for wear, cracks or distortion, by a competent person to assess risk of failure before using if faults detected
- Where lifting hook is attached, hook and attaching ring must be of an approved type and hook must be fitted with operable safety latch system
- Use approved lifting gear only
- Hook must be securely attached
- **Always** check the weight of the load before attempting to handle
- **Always** refer to load charts
- Ensure that load is not snagged or held down and is free to be lifted
- Ensure that load is easily moved
- Retract boom as far as possible before commencing load shifting operation



- Refer to load charts if boom is extended to avoid overloading
- Keep boom retracted when traversing with load on boom
- Keep load low and close to machine to maintain stability
- Travel with load 20 to 30 cm from ground, and at no more than 5km/h
- Use stabilisers only to increase the stability of the machine
- Level the machine by means of the level indicator before raising any load
- Ensure that stabilisers are in contact with a firm, stable surface
- Ensure that the stabiliser indicator lamp is on before using the boom
- **Do not** raise boom on unstable or sloping ground
- **Do not** attempt to lift or carry loads greater than those defined on the load charts applied to the inside of the cabin of the machine
- **Do not** leave unattended with engine running
- **Do not** use faulty equipment
- **Do not** attempt unauthorised repairs to load bearing parts
- **Do not** overload the telehandler when lifting
- **Do not** jerk load when lifting – observe load limiter while lifting load
- When the telehandler is loaded and moving up or down a gradient, always travel with the load uphill side of the unit - otherwise the unit can tip
- **Do not** service the hydraulics while there is pressure in the system
- **Do not** drive on gradients exceeding those specified in the manufacturer's instructions both for loaded and unloaded conditions
- **Avoid** operating on side slopes
- **Never** use stabilisers if load is already raised

ENDING OPERATIONS AND CLEANING UP

- Park telehandler on firm, level ground
- Lower attachment to ground level
- Switch off and ensure all moving parts come to a complete standstill, put into neutral and apply brake, remove key from ignition
- Remove any foreign material from in and around the equipment parts
- Immediately report any broken or malfunctioning components
- Conduct a post-use inspection, including the identification of any faults
- Advise supervisor of maintenance requirements
- Before doing any maintenance do a safety evaluation
- Gloves and eye protection must be worn when servicing/maintaining machine
- Always observe precautions in operator's manuals when cleaning and washing machines and attachments
- Wear eye and hand protection when handling and using cleaners and lubricants, etc.
- Inspect all parts of machine for wear, damage or loose or missing parts
- Use only approved parts and lubricants when maintaining and servicing
- Do not carry out unauthorised repairs on load shifting equipment
- Ensure that machine is out of gear and park brake engaged before working
- Avoid contact with hot parts – allow machine to cool down
- Wear hand protection

POTENTIAL HAZARDS AND INJURIES

- Entanglement in moving parts
- Collision with other plant, equipment or structures
- Crush injury from run over, roll over, tipping, load falling

DO NOT

- **Do not** use faulty equipment
- **Do not** carry passengers in the cabin or on the exterior of the machine or attachments
- **Do not** service the hydraulics while there is pressure in the system
- **Do not** operate on unsuitable terrain
- **Do not** raise boom on unstable or sloping ground
- **Do not** operate or do maintenance on the telehandler unless you are trained to do so

IMPORTANT: This guide is not able to cover all possible scenarios that may arise due to variables such as different operating conditions and different workers. Safety instructions must be used in conjunction with other references including training and manufacturer's manuals. Do NOT commence use of this equipment or this task if you are unsure of any component.

For a copy of this safe work procedure, Safe Ag Systems offers a 7-day FREE TRIAL at www.safeagsystems.com



Staying up-to-date with Telehandler best practices and machinery improvements will help you to maximise your productivity and safety.

SAFE AG SYSTEMS

Manage safety on your farm and support your agribusiness with a digital safety management system. Safe Ag Systems software includes:

- Policies and inductions for working with machinery, tools and equipment
- Safe work procedures for telehandlers and attachments
- QR codes to manage machinery maintenance records
- Pre-operational safety checklists to keep machinery in working order
- A [Free Risk Assessment tool](#) to gauge potential mechanical risks
- Emergency management and more

Learn more about how **Safe Ag Systems** can improve efficiencies, support your safety compliance and WHS responsibilities head to

W safeagsystems.com

P (08) 8490 0939

Further reading



[The importance of Risk Assessments in farm safety](#)



[Does your traffic management plan stack up?](#)

[+ Free Telehandler In Use Signage]

Telescopic Handlers Association

The TSHA has created a 'Good Practice Guide' to assist employers with guidance on the safe use of Telehandlers in workplaces covering training, operation and maintenance.

For more information

W tsha.com.au

P 1800 015 166

Worksafe Queensland

For advice and support on health and safety laws and regulations, contact Worksafe Queensland

For more information

W worksafe.qld.gov.au

LEGAL OBLIGATIONS



Edmund Burke *Partner*

Farms and rural businesses are Persons Conducting a Business or Undertaking for the purposes of the Work Health and Safety Act 2011 (Qld) and the Electrical Safety Act 2002 (the Acts).

Under these Acts business owners, management, supervisors and workers all have duties concerning the safety of themselves and others and breaches of these duties can result in criminal charges and even time in prison if the accident and resultant injury warrant it.

The most serious charge under the legislation is industrial manslaughter and although prosecutions for this charge are rare, the serious penalties that may be imposed and the significant resource-backing by the Queensland Government justify the implementation of safety systems that are robust and reassessed regularly. The next most serious charges can be summarised as:

- **Industrial Manslaughter** - a person conducting a business or undertaking (PCBU), or a senior officer, negligently causes the death of a worker - maximum penalty of 20 years imprisonment for an individual, or \$10M for a body corporate
- **category 1 offence**—a person engaging in conduct that exposes an individual to whom a duty is owed to a risk of death or serious injury being reckless to the risk
- **category 2 offence**—a person failing to comply with a duty that exposes an individual to risk of death or serious injury
- **category 3 offence**—a person failing to comply with a duty.

Background

On 6 October 2016, two men were crushed to death by a concrete slab at Eagle Farm Racecourse. On 25 October 2016, a malfunctioning ride at the Dreamworld theme park resulted in four fatalities. These tragic and high profile events, which happened in such quick succession, prompted the Queensland Government to commission an independent 'Best Practice Review' of the workplace health and safety laws in Queensland.

Following this review, it was recommended that industrial manslaughter offences be incorporated in Queensland legislation. In October 2017, the offence of industrial manslaughter commenced in the Work Health and Safety Act 2011 (Qld) and the Electrical Safety Act 2002 (the Acts).

The amendments to the Acts introduced a charge of industrial manslaughter for a person conducting a business or undertaking (PCBU), or senior officer, to negligently cause the death of a worker. Unlike the 'traditional' manslaughter charge, the charge under the Acts can be more easily levied at executives or 'senior officers' (including owners) of a business. That means those who own and run farms and other rural enterprises in Queensland can be held criminally responsible for any accidents that happen on their properties.

The introduction of the new laws was also accompanied by a significant investment in the 'infrastructure' necessary to enforce them. The Office of the Work Health and Safety Prosecutor (OWHSP) commenced on 18 March 2019 and is an independent prosecution office that conducts and defends proceedings for breaches of Queensland's work health and safety laws. The Government has also invested in increased numbers of WHSQ and ESO inspectors who respond to and investigate work place incidents ultimately providing the prosecutors with the evidence they need to make charges stick.

Business in urban centres, Local Government Councils and the construction industry have anecdotally noticed the increased enforcement activity and we can expect to see that same increased enforcement moving into more agricultural and rural industries.

Industrial manslaughter enforcement

In 2020, a worker at an auto wrecking company in Rocklea died after being struck by a reversing forklift. In finding there were no safety systems in place and that supervision of work were inadequate, the Queensland District Court imposed a fine of \$3 million on the employing company for industrial manslaughter. The directors of the company were also imprisoned for a separate breach of workplace health and safety laws.

Recently, a Gympie business owner was charged with industrial manslaughter for negligently causing the death of a worker. This is the first industrial manslaughter case in Queensland against an individual.

The broad nature of the provisions mean that the offence can be easily applied to all employers throughout Queensland, and relevantly, to employers in a rural context. It is also telling that the first prosecution for industrial manslaughter involved the use of a forklift truck, exactly the kind of mechanised tool, like a tractor or a quad bike that is used in rural businesses across the state.

What can you do?

It is essential that "senior officers" and "executives" on farms and other rural industries know:

- a) That that is what they are, for the purposes of the Act
- b) What their duties and responsibilities are under the Act.

In a basic sense senior officers and executives are those within a workplace who have the ability to influence safety management and culture at workplaces. The more power they have to do so, the more responsibility they have.

Workplace Health and Safety Queensland have published a helpful online guide to assist small to medium sized agricultural businesses to develop a management system for health and safety risks around the farm and other agricultural workplaces.

The guide covers:

- legislative requirements for workers' compensation
- safety management systems
- identifying and assessing risks
- implementing suitable safe work procedures
- general hazard information for the agricultural industry.

The guide can be found at www.worksafe.qld.gov.au/safety-and-prevention/hazards/workplace-hazards/agriculture/serious-about-farm-safety

But if an accident does happen getting independent legal advice at the beginning of a Worksafe investigation can mean the difference between a being prosecuted and lengthy and expensive litigation and not being prosecuted at all.

Holding Redlich are experts in the area of Workplace Relations & Safety. Should you have any workplace issues or concerns, contact Partner Edmund Burke on (07) 3135 0686 or edmund.burke@holdingredlich.com.

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