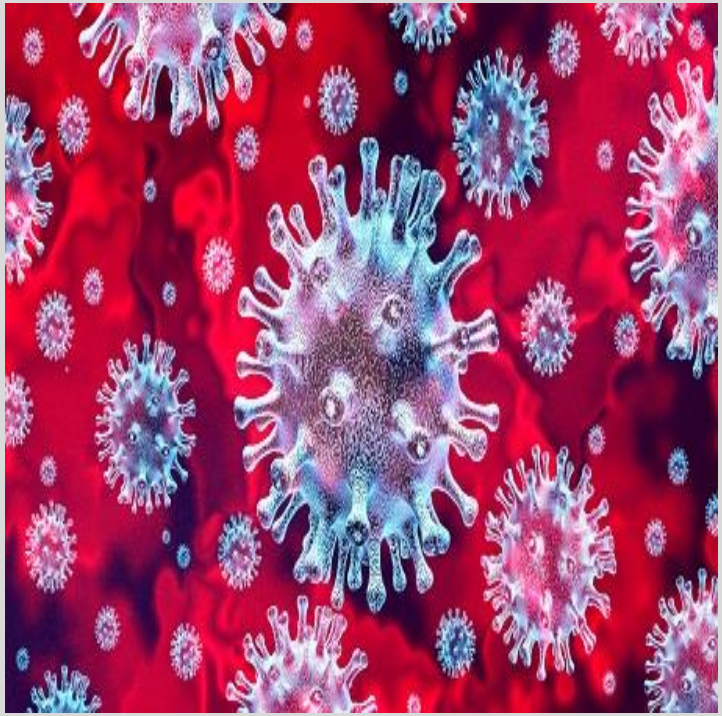
Risk Assessment

Linde Material Handling

Date:	Assessed by:	Reviewed by:	Authorised by:	Location:	Assessment Ref:	Review date:
4th Jan 2022	Andy Galt QHSE Manager Gavin Carslake Technical Manager Alan McEnteggart LMH UK HSE Manager	QHSE Team	Senior Management Regional Director Responsible for QHSE	Generic	RA 001 COVID	June 2023 Note: Sooner if significant changes occur

Task: Maintenance and Repair of Fork Lift Trucks – COVID-19



General duties of employees at work.

It shall be the duty of every employee while at work—

(a)to take reasonable care for the health and safety of himself and of other persons who may be affected by his acts or omissions at work; and

(b)as regards any duty or requirement imposed on his employer or any other person by or under any of the relevant statutory provisions, to co-operate with him so far as is necessary to enable that duty or requirement to be performed or complied with.

Additional Information:

Risk Assessment only valid when site conditions have been fully assessed, and individuals at risk identified via Point of Work Risk Assessment.

COVID-19 Special Considerations in Red Section below.

Additional hazard - transmission of infection from individuals who may or may not be showing symptoms of having a virus.

This Risk Assessment only covers MHE with no known contamination risk, a separate Risk Assessment will be required where the MHE has been used by any person suspected of being infected.

Where all controls cannot be maintained, or additional controls are required, a separate Risk Assessment should be compiled.

Task/Premises:	Site Address:	Reason for Assessment
Routine Maintenance and Breakdown Repairs during times of extraordinary control measures	Generic Note Site Specific Risk Assessment Required Where Significant Hazards Identified.	Risk Assessment to cover all generic aspects of maintenance and repair to Fork Lift Trucks

Our Engineers have been designated as Key Workers with an important role necessary to support customers in critical industry sectors and keep supply chains operational at this time. These critical industries provide goods and services that enable society to keep functioning and extend to the areas of (but are not limited to) food production, grocery supply chain, healthcare, pharmaceutical & logistics. It is vital that we maintain continuity of supply and support to these customer operations.

To allow us to continue to offer this support, it is essential that employees and customers alike follow appropriate Government and Public Health guidance where hand hygiene, social distancing and face coverings are concerned. It is also strongly recommended that where facility exists, industry guidance on cleaning of MHE is also followed. This forms part of the joint duty of care between the Engineer, Linde MH (UK) Ltd Management and the Customer and if at any time, any party feels that the risks cannot be suitably controlled then the service must be withdrawn until such times as suitable controls can be put in place.

Activity / Equipment	Hazard	Who Might Be Harmed	Extraordinary Measures to Control Risk	Risk Analysis		Residual Risk Factor
				Severity	Likelihood	
Pre attendance - Work	Viral Infection [24]	Linde Employee Any Other Person	Any person who has been identified as high risk or vulnerable and received confirmation from the Government, NHS or a medical professional to self-isolate due to COVID-19 must stay at home for the recommended period of time. Special consideration should be given to disabled persons, pregnant workers, religious commitments as well as those performing primary care duties to a member of their household. Any person with a new or persistent cough, or any other COVID-19 prescribed symptoms must stay at home for a period of time as designated by current Government guidance. Any person who has been in close contact with someone showing symptoms of or suspected of having COVID-19 must stay at home for a period of time as designated by current Government guidance. ~~All instances of attending any Linde Facilities or Customer Sites will be prearranged with the Line Manager and be approved by Senior Management~~. Any person who develops symptoms or receives a positive COVID-19 test result will notify Management to allow any possible contacts within the previous 72 hrs to be traced and notified.	5	1	5 Medium Risk
Travelling to and from Work / Site via Public Transport	Viral Infection [24]	Linde Employee Any Other Person	Public transport should be avoided, if possible. ~~If the use of public transport cannot be avoided, then Management should consider altering start / finish times to allow the Employee to travel outside of peak times.~~ Employees to maintain social distancing in line with current Government Guidelines. Where possible, avoid touching door handles and other commonly touched surfaces. Face coverings should be worn when travelling on public transport. Wash hands upon arriving at work.	5	1	5 Medium Risk
Travelling to and from Work / Site via Company Car / Van or Private Transport	Viral Infection [24]	Linde Employee Any Other Person	Walking or cycling to work should be actively promoted. Bikes to be stored in such a manner as not to block doors / walkways etc, Line Manager to identify suitable storage location if necessary. ~~Avoid car sharing with persons outside your own household if possible~~. Each engineer (inc. Apprentices) should travel to the place of work separately, where this is not possible, all occupants of Service Vehicle must wear a disposable face covering during the journey. The passenger should sit in the left-hand seat where 3 seats are fitted. Where possible windows should be opened to increase ventilation. All common touch points should be cleaned before and afterwards. Door handles and other surfaces that may have been touched by any passenger should be cleaned. Park courteously and allow other drivers to maintain social distancing. ~~Gloves should be worn when refuelling / charging vehicles.~~ Wash hands upon arriving at work / site.	5	1	5 Medium Risk

Activity / Equipment	Hazard	Who Might Be Harmed	Extraordinary Measures to Control Risk	Risk Analysis		Residual Risk Factor
				Severity	Likelihood	
Pre attendance - sites	Viral Infection [24]	Service Engineer Any Other Person	~~All tasks will be assessed on a case by case basis, in consultation with the Customer prior to the Engineer being dispatched.~~ Service Controller to ensure Pre-attendance questionnaire has been completed and is still valid – see Page 4 for details. Customer to ensure Engineer has a safe means of access and egress in accordance with the current social distancing guidelines. Due to the likelihood of reduced staff being on site, special consideration must be made regarding Lone Working with adequate provision for regular checks to be carried out either by the Customer or the Service Controller via phone. Any work carried out by Sub-contractors must be pre-approved by the Manager, who must ensure all relevant Linde / Customer paperwork is completed before attending site. Some Customers are requesting visitors take Lateral Flow Tests prior to visiting site, these are available to Engineers via the Parts Department and must be taken before leaving the house where possible. All results must be logged on the Lateral Flow Test Results website. In all cases of face to face Technical Training, Lateral Flow Tests must be ordered by the Engineer from https://www.gov.uk/order-coronavirus-rapid-lateral-flow-tests and taken the night before the first day of the course, results logged on the LFT results website and the text message shown to the Trainer. Full details will be provided in the Joining Instructions.	5	1	5 Medium Risk
Safe Area	Viral Infection [24]	Service Engineer Any Other Person	Engineer to complete Customer's normal / revised Signing in / Permit to Work procedure but should complete all paperwork using their own equipment. Engineer to be provided with a safe working area with a minimum of 1m clearance between working area and the nearest other person.	5	1	5 Medium Risk
Equipment Handover	Viral Infection [24]	Service Engineer Any Other Person	Where possible the Customer should convey the truck to the designated work area and wipe it down with disinfectant wipes or disinfectant sprayed onto a disposable paper towel. Where this is not possible the Customer must ensure safe passage of the truck and Engineer to the working area, in accordance with current social distancing guidelines.	5	1	5 Medium Risk
Hand Hygiene Breaks	Viral Infection [24]	Service Engineer Any Other Person	Engineer must have safe access to hand washing facilities where social distancing measures are in place to prevent inadvertent contact with other persons. While these facilities need not be exclusive to the Engineer, they must be available during the time of the visit, not just at the end of the job. Engineer to wash hands more frequently, in particular upon entering or leaving site, moving from 1 area to another, before eating / drinking / smoking etc. This handwashing should be carried out for a minimum of 20 seconds, using soap / hand cleanser and warm water. Alcohol hand sanitiser can be used in addition but does not negate the requirement for the cleaning of hands. Follow sensible respiratory hygiene, for example, cover your mouth and nose when coughing or sneezing, use tissues and throw them away after single use, and wash your hands or use a hand sanitizer every time you touch your mouth or nose. When using shared canteens, breaks should be scheduled to align with customer requirements thereby avoiding overcrowding whilst adhering to current social distancing guidelines. Wherever possible all refreshments should be self-supplied. Linde best practice is detailed in RA 400 COVID - Linde Facilities, however, any additional processes that the Customer has put in place must be followed where appropriate.	5	1	5 Medium Risk

Activity / Equipment	Hazard	Who Might Be Harmed	Extraordinary Measures to Control Risk	Risk Analysis		Residual Risk Factor
				Severity	Likelihood	
Truck Maintenance and Repairs	Viral Infection [24]	Service Engineer Any Other Person	Engineer to establish a physical barrier defining the safe working area if unauthorised access by other persons is ~~a possibility~~ an issue. Engineer to ensure POWRA is complete prior to EVERY job. All work being carried out by more than one person must be pre-authorised by Senior Management and must always comply with the current social distancing guidelines (minimum gap of 1m). In cases of multiple engineers on a job, this must be noted on the POWRA with comments regarding precautions taken. Where any activity involving 2 or more persons means the 1m+ rule cannot be followed, each team member must wear a disposable face mask. Any work carried out alongside Contractors must be pre-planned with all parties agreeing the sequence of work for the day, including any important guidelines and safety measures implemented for the specific task. At all times, and with all parties, social distancing guidelines must be adhered to.	5	1	5 Medium Risk
Truck Operations & Testing	Viral Infection [24]	Service Engineer Any Other Person	It is recommended that the Engineer wipes the MHE down with antibacterial wipes (or spray & disposable paper towel) before work commences (even if Customer has done this). Particular attention should be paid to common contact surfaces such as Steering Wheel, Control Switches & Levers, Touch sensitive display screens, Grab handles, Seat belts, Dashboards & shared chassis areas, Floor mats, Access covers, e.g. battery change, fuel cap Any truck operations / testing must comply with the social distancing guidelines.	5	1	5 Medium Risk
Return to Customer & Sign off	Viral Infection [24]	Service Engineer Any Other Person	Again, the Engineer should repeat the process of wiping the MHE down with antibacterial wipes (or spray & disposable paper towel), prior to returning the MHE to Customer. Handover is pre-arranged with the site contact, Engineer to provide details of work carried out, work required etc. but must not get customer to provide a signature, as per Management Guidance.	5	1	5 Medium Risk
Waste Disposal	Viral Infection [24]	Service Engineer Any Other Person	All waste from cleaning down trucks should be bagged and disposed of via normal waste streams as per Government Guidelines.	5	1	5 Medium Risk

The Engineer must take an active role in monitoring the situation throughout the activity.

- If any person, Engineer or other, shows any symptoms then this must be reported to the Site Contact & Line Manager immediately to allow suitable action to be taken.
- If the Engineer has any concerns regarding the suitability of the area / facilities provided, or that there is a lack of adherence to the social distancing measures, he/she MUST discuss it with the Customer, then escalate it to his / her Line Manager if a mutually suitable arrangement cannot be reached.
- If no arrangement can be reached then the POWRA must show that the job could not be carried out / completed safely, with details of the issues in the comments section. This POWRA should be attached to the job and sent to the Line Manager.

If any person, Engineer, Customer, Manager, Service Controller or Contractor has any concerns regarding the effectiveness of the measures taken then the job must be stopped, relevant parties notified, and further advice obtained.

LINDE MATERIAL HANDLING (UK) AFTERSALES – COVID-19

Pre-Attendance Questionnaire for Aftersales Back Office

"I am sure you are aware of the current situation with regards to COVID-19 and the latest guidance issued by the UK Government on actions required by us all to contain the spread of the virus. We are aware of the need to support all our customers as much as possible and wherever possible we are adopting a business as usual approach. It should be noted however that as the situation evolves, you may experience some disruption to your normal service levels. It also means there are a couple of additional points that we must cover and clarify prior to our engineer attending site so that we may protect both your employees and our own

"Our preference is to avoid any face-to-face handover of trucks and therefore we would like to identify an appropriate site contact name*, telephone number* and email address*. This information will only be used for pre-arrival contact, handover, post-visit handover/update plus the emailing of an electronic copy of the engineer's worksheet for the visit. Please note, the engineer will not be getting his electronic worksheet signed as this would result in breaking the guidance on social distancing and risk potential transmission of the virus through contact with the engineer's laptop and or stylus."

*all marked items should be verified and/or added as a contact person on the appropriate tab in the notification in SAP to reduce engineer admin effort and point of job completion

Notification Ref: _____ Site _____ (Note: always log a call even if engineer cannot attend)

Question	Yes	No	Details
Do you currently have any restrictions in place regarding visitors to your site or require any information to be supplied in advance of any visit? If yes, please provide details	☐	☐	
Notify your Back-Office Manager of any sites which will not allow any form of access so these can be registered			
Is there any reason why our engineer would be prevented from accessing site and undertaking the required tasks? If yes, please provide details	☐	☐	
If yes – refer details to RSM to confirm that attendance should proceed in light of any specific restrictions			
Considering the latest guidance in terms of hand hygiene, are there adequate handwashing facilities that would be accessible to our engineer for use before and after work has been carried out? If so, where on site can these be located?	☐	☐	
If no – inform Customer it will not be possible to send an engineer at this time. Refer details to RSM			
Do you have any confirmed or suspected cases of COVID-19 within your operation? If yes, please define what steps have been taken with regards to isolation and minimisation of risk to other employees and/or visitors to your site?	☐	☐	
If yes – refer details to RSM to confirm that attendance should proceed in light of any specific actions taken			
Considering the latest guidance on social distancing, we would request that the truck be parked in an area at least 2m from the nearest other person so that our engineer can always work on it whilst also adhering to this guidance. Will this be possible?	☐	☐	
If no – refer details to RSM to confirm that attendance should proceed and agree with customer/engineers any further controls that can be implemented			
As an additional precaution, we would recommend you clean down the truck controls and high contact areas between operators. Are there disinfectant wipes and/or spray available on the site so that our engineer might do this for you after their work has been carried out?	☐	☐	
If no – inform customer that we would strongly recommend that they undertake this and adopt this practice moving forward			

Activity / Equipment	Hazard	Who Might Be Harmed	Existing Measures to Control Risk	Risk Analysis		Residual Risk Factor
				Severity	Likelihood	
0 General	Unsafe Environment [1]	Service Engineer Unauthorised Person	Before starting work always alert the customer to your presence on site. Agree a safe working area with adequate room to access truck. If necessary, cordon off area to prevent unauthorised access. Adhere to site rules, if in doubt seek clarification from customer. Wear all PPE designated by customer / area as necessary.	4	1	4 Low Risk
0 General	Unsafe Working Practices [2]	Service Engineer Unauthorised Person	All engineers should be competent and sufficiently trained for the role. All engineers completing a task should be familiarised with its associated procedure / safe system of work. Observe safe system of work when carrying out operational checks, always ensure traction wheels are raised, truck blocked and chocked prior to testing. Isolate control system when not required for testing – remove key and disconnect battery. Follow safe systems of work outlined in Linde Service Guide, Training Manuals / Courses, Service Information Sheets etc. Carry out pre-use checks on all equipment, remove from service and notify Line Manager if any defect is found / suspected. Minimum PPE for carrying out maintenance and repairs should consist of Overalls, Safety Boots and Gloves. Avoid loose clothing, hair and jewellery which may get caught up resulting in drawing in. All engineers to have completed Linde 'Health and Safety Passport Course' and follow the principles taught therein. All work will be organised and authorised by the Service Control Team taking into account appropriate adherence to contracts and hours worked, social factors outside of the normal working context must be taken into consideration where applicable and any situations that could have an adverse effect on safety must be escalated to the appropriate Service Manager for guidance. All Managers and Engineers are enrolled in Linde Safety Leadership Course and should assist in improving the safety culture within the organisation – See something wrong, do something about it, don't leave it to somebody else. Regular supervision by Managers / Team Leaders, including Job Safety Observations, take place and should include a discussion between the parties to identify any difficulties or issues encountered that may have a negative effect on mental wellbeing. All accidents / high impact near misses will be investigated to determine root cause and contributing factors and actions taken to prevent a reoccurrence where possible.	3	2	6 Medium Risk
0 General	Truck Operations & Testing [3]	Service Engineer Bystander	All staff that service/operate fork lift trucks are required to attend an accredited course for driving the class of truck they are working on. All truck operations to be carried out as per principles taught in Driver Training Course.	4	1	4 Low Risk
0 General	Manual Handling [4]	Service Engineer	Avoid manual handling when possible, use appropriate techniques where manual handling is required – 4 guided principles from Pristine Condition Course. Suitable mechanical handling equipment to be utilised where required. Observe extra caution if removing unwieldy components – e.g. bonnet / seat assembly, doors, windscreens seek assistance if necessary for removal, realignment or fitting. Isolate from battery and disconnect all related wiring before removal.	3	2	6 Medium Risk

Activity / Equipment	Hazard	Who Might Be Harmed	Existing Measures to Control Risk	Risk Analysis		Residual Risk Factor
				Severity	Likelihood	
0 General	Slips [5] Trips [6]	Service Engineer Unauthorised Person Bystander	Ensure all spillages are cleaned up immediately. Keep soles of boots clean whenever possible. Always keep working area tidy as parts, tools, packaging may become slip / trip hazards. Forks can be both slip and trip hazards, going around back of truck is preferable to crossing forks. Always look in the direction of travel, avoid distractions.	3	2	6 Medium Risk
0 General	Falls [7]	Service Engineer Unauthorised Person	Suitable working at height equipment and safe systems of work to be used where required. All W@H equipment must be subject to planned inspection. All W@H should be carried out in a cordoned off area. Look down before you step down.	4	1	4 Low Risk
0 General	Confined Space Working [8]	Service Engineer	Follow safe systems of work outlined in Linde Service Guide. Remove covers, ancillary components etc. to allow proper access.	2	2	4 Low Risk
0 General	Crushing [9] Entrapment [10]	Service Engineer Bystander	Ensure any component capable of moving – mast section, bonnet, floorplate, door etc. is properly secured prior to accessing area. Determine weight of component and method of support and removal before slackening securing bolts.	3	2	6 Medium Risk
0 General	Burns & Scalds [11]	Service Engineer	Identify hot components prior to removal. Allow fluid in engine and hydraulic circuits to cool prior to starting work. Take care when working on live electrical circuits – short circuits caused by tools, watches, jewellery etc. can cause rapid heat build-up.	3	1	3 Low Risk
0 General	High Pressure Injection [12]	Service Engineer	Hydraulic systems to be fully depressurised and isolated prior to starting work. High pressure diesel injection system can run at a pressure of 2000bar (28,000PSI) – and should only be tested using the correct procedure and equipment. Risk of hydraulic injection injury - do not search for leaks with hands	4	1	4 Low Risk
0 General	Electric Shock [13]	Service Engineer	Ensure sources of stored energy are discharged prior to starting work **Note – Isolate battery, do not discharge** Observe Electricity at Work Guidelines at all times.	3	1	3 Low Risk
0 General	Lifting Operations [14]	Service Engineer Bystander	When using mechanical lifting equipment and accessories ensure equipment is tested and any lifting operations are planned and carried out in line with LOLER 1998 http://www.hse.gov.uk/pubns/indg290.pdf. Carry out pre-use checks on all equipment, remove from service and notify Line Manager if any defect is found / suspected	4	1	4 Low Risk
0 General	Dust / mists / fumes[21] Skin / eye contact Inhalation[21]	Engineer Staff Member Visitor Unauthorised Personnel	Products are used in accordance with the manufacturer's instructions or safety data sheets. All substances are stored correctly. Personal Protective Equipment is supplied to protect against airborne dusts. The choice of PPE is based on COSHH risk assessment. Refer to MSDS and Sypol COSHH Risk Assessment for individual details. Where Local Exhaust Ventilation is provided for extraction of exhaust fumes is provided, it must be used when trucks are idling within the Workshop.	3	1	3 Low Risk
0 General	Environmental Damage [15]	Environment	Suitable work area to located away from drains and surface water drainage when working on systems containing hazardous fluids. Ensure all spillages are cleaned up immediately and all waste is disposed of via hazardous waste management system. Ensure gas sources are isolated and depressurised before breaking into circuit.	3	1	3 Low Risk

Action Plan			
Further action required	**Action by whom**	**Action by When**	**Done**

Training Requirements: Refer to RA 001 Maintenance and Repairs on FLTs

Reference to other Assessments / Training Material:

□ RA 100 PPE Risk Assessment / Guidance Document
□ RA 507 Vulnerable Persons Risk Assessment
□ Other Relevant Risk Assessments
□ Linde Service Guide
□ Technical Training Course Information
□ Truck Jacking Positions from Linde Service Guide & Extranet
□ Linde Safety Passport, Safety Leadership & TBTs

Site Specific Considerations:

□ Make Customer Aware of Presence on Site and agree Safe Working Area
□ Advise Service Control Desk of Estimated Job Completion Time
□ Clean Up Any Spillages Immediately
□ Always Remove any Waste Products from Site (Unless Advised Otherwise)
□ Ensure Customer is Appraised of Truck Status Before Leaving Site
□ Always Remove Key from Truck and Return to Customer
□ Advise Site Contact When Leaving Site
□ Advise Service Controller of safe return home

Responsibility for Action: Manager / Team Leader

Advisory: Regional Director Responsible for QHSE / QHSE Team

Documents / Pictures Attached:

Risk Assessment Matrix

Likelihood→ ↓ Severity		Certain	Very Likely	Likely	May Happen	Unlikely
		(5)	(4)	(3)	(2)	(1)
Death	(5)	25	20	15	10	5
Major injury	(4)	20	16	12	8	4
Over 7-day injury	(3)	15	12	9	6	3
Minor Injury (treatment offsite)	(2)	10	8	6	4	2
Minor Injury (First Aid Onsite	(1)	5	4	3	2	1

Risk Rating Table

Score	Priority	Action
1-4	Low	Represents a low risk, although control measures must be maintained.
5-10	Medium	A level of risk has been identified, but control measures are in place - periodic supervision required to ensure control measures are effective.
12-25	High	Unacceptable level of risk identified – Immediate action required to control risks. Further resources may be needed.

Revisions RA 001 COVID Maintenance and Repairs of Fork Lift Trucks

Jan 2020	Document Created from consolidated Product Risk Assessments.
March 2020	Revision due to extraordinary circumstances regarding COVID-19
April 2020	Reviewed – no changes
May 2020	Reviewed – Addition in Truck Maintenance and Repairs to cover multiple persons travelling to a place of work
2nd June 2020	Reviewed – Sections on Pre-attendance (Work) & Travelling to and From Work / Site added from RA 400 COVID (page 2) to consolidate Risk Assessments.
22nd June 2020	Reviewed – no changes
10th July 2020	Reviewed – no changes
31st July 2020	Reviewed – change to working at home / attending workplace controls within Pre – attendance work (in red). Considered regional lockdown but no actions required.
4th Sept 2020	Reviewed – no changes
23rd Sept 2020	Reviewed following change in Government guidance - change to car sharing in Scotland within Travelling To and From Work & Truck Maintenance & Repairs (in red)
13th Oct 2020	Reviewed following customer request – "face coverings" added to sentence regarding following Government guidance (page 2 in red). Revision list extended
30th Oct 2020	Reviewed - information regarding Engineers sharing vans moved to Traveling To and From Work but controls remain unchanged. Requirement for additional Risk Assessment in certain circumstances added to title page (in red).
5th Jan 2021	Reviewed - reinforcement of controls when using shared canteens on customers sites in Hand Hygiene & Breaks (in red). No other changes.
25th Feb 2021	Reviewed - Job titles changed to align with One Linde, no content changes
6th May 2021	Reviewed - Information added regarding Customers and Linde requiring Lateral Flow Tests to be taken prior to attending site in Pre-attendance Sites (in red) . Removal of the requirement to wear Single Use Nitrile Gloves on top of the correct selection of gloves.
25thJune 2021	Reviewed, abbreviated version of HASWA 1974 Section 7: Employees Duties rewritten in full form (page 1 in red)
16th July 2021	Reviewed prior to return to "Normal Operations" in line with current Government Guidance and Basic Guidance Document - Return to Offices following COVID-19 v0.6.
14th Sept 2021	Reviewed - some control measures removed and levels of authorisation reduced for certain activities (indicated by ~~strikethrough~~).
4th Jan 2022	Reviewed - no changes

Risk Assessment Sign Off Sheet
(For Printed Versions Only)

Linde Material Handling

Date:	Assessed by:	Reviewed by:	Authorised by:	Location:	Assessment Ref:	Review date:
4th Jan 2022	Andy Galt QHSE Manager Gavin Carslake Technical Manager Alan McEnteggart LMH UK HSE Manager	QHSE Team	Senior Management Regional Director Responsible for QHSE	Generic	RA 001 COVID	June 2023 Note: Sooner if significant changes occur

I have read and understood RA 001 COVID

Task/Premises:	Site Address:	Reason for Assessment
Routine Maintenance and Breakdown Repairs during times of extraordinary control measures	Generic Note Site Specific Risk Assessment Required Where Significant Hazards Identified.	Risk Assessment to cover all generic aspects of maintenance and repair to Fork Lift Trucks

Appendix 1 Explanation of Hazards

Unsafe Environment[1]	Forklift trucks tend to operate in busy workplaces beside other workplace transport, in and around machinery, customer's product and personnel on site. They also work in all environments – inside and out, hot and cold, clean and dirty & noisy. Unfortunately, FLTs can break down anywhere and it is not always easy to move them to a "Safe Working Area" therefore it may be necessary to make the "Working Area" safe until the repair can be carried out and the truck moved.
Unsafe Working Practices [2]	These may be defined as poor behaviour and examples include starting a job without the necessary knowledge, experience, equipment or time to complete it in a safe manner, not following safe systems of work or taking shortcuts. Failing to look after work equipment, carry out pre-use checks and report defects as well as not maintaining Personal Protective Equipment can all result in not having what you need when you need it, resulting in working unsafely to get the job done. Such behaviour could be deemed as the employee having failed to carry out their duties as defined in Section 7 of The Health and Safety at Work Act 1974 or Safety, Health and Welfare at Work Act 2005 (Ireland)
Truck Operations & Testing [3]	Due to the nature of the job almost every task involves operating a fork lift truck, whether it be the truck being worked upon / tested or a 2nd truck being used as a mechanical aid, the latter may include working in close quarters with the other truck / engineer etc. and may require delicate use of controls to gain the desired effect. The testing of a truck usually involves checking all functions to their limits – speed, height, tilt, reach and sometimes rated capacity.
Manual Handling [4]	Virtually every aspect of maintaining and repairing FLTs involves Manual Handling including lifting, putting down, carrying, supporting, pushing & pulling. Lifting, putting down & carrying tasks are readily identifiable but supporting, pushing and pulling are less so but including holding a component in place whilst starting the bolts, slackening & tightening fasteners and components. Some tasks cannot be slotted into any of these categories but still involve Manual Handling – e.g. Swinging a hammer.
Slips [5]	Slips are normally a result of spillages of fluids (lubricants, coolant or fuel) that are not cleaned up immediately. Even a small amount of grease, picked up on the sole of the boot can cause a slip when minimal contact between the foot and the supporting surface is possible e.g. climbing a ladder. Other slip hazards include oil absorbent (spill hound, clay granules, sawdust), tools and small components. Ice and frost must also be considered a hazard, and these tend to build up on metal quicker than on the ground therefore metal steps, forks etc. can be slippery.
Trips [6]	Trips are usually encountered when an engineer leaves something on the floor during normal working practices. Jacks and jack handles, tools and tool boxes, components, hoses, electrical cables are all common trip hazards encountered by FLT engineers. Unless a safe working area with adequate room to access the truck is available then trip hazards may also include customer's product, pallets, irregular surfaces. When space is tight it is common practice to park the truck with the counterweight against the wall, as this area is not usually accessed, but this means going around the front of the truck to access both sides, if fitted the forks are a trip hazard.
Falls [7]	Our engineers need to be able to access all areas of a FLT therefore working at height cannot always be avoided. Working from steps / ladders is commonplace but engineers can also use their ladders to access elevated surfaces on trucks e.g. counterweight, overhead guard. Some of our truck have multiple steps that need to be climbed just to access the driver's compartment. Falls can occur exiting trucks and Service Vehicles.
Confined Space Working [8]	A confined space is normally defined as "a place which is substantially enclosed (though not always entirely), and where serious injury can occur from hazardous substances or conditions within the space or nearby (e.g. lack of oxygen)." In the case of this hazard Confined Space Working is the term used to identify working areas where the Engineer may need to reach to gain access to components / fasteners etc. but does not need to get his body / head into such areas to work therefore asphyxiation is not a risk. There is however risk of strains from muscles being in awkward and uncomfortable positions for long periods of time.
Crushing [9]	Crushing involves getting a body part caught between moving and static objects. In this Risk Assessment, it could include • getting crushed between the truck / component being worked upon and the floor or another object if the truck / components drops. • getting crushed between the truck and a moving object – e.g. another vehicle in the working area. • getting a body part crushed between truck components – e.g. bonnet and floorplate, starter and chassis, mast sections. A crush injury of 15 minutes or more may result in lack of blood flow to the area and professional medical help should be sought before releasing.
Entrapment [10]	Entrapment is the term used for getting the body or a body part trapped in a position where you are unable to get free without assistance. It can be a result of confined space working where you have reached into an area that your hand fitted but doesn't come out, or due to something moving (like crushing) altering the size of the space to the extent where you are trapped but not crushed. Lack of blood flow to the area is possible (like crush injury) if period of entrapment is extended and casualty has lost feeling in the extremity.
Burns & Scalds [11]	Burns / scalds can result from a body part encountering anything with an extreme temperature (hot or cold). Examples include • Hot – Exhaust, engine & turbo components, bearings, electrical components – motors etc., fluids – engine oil, coolant, hydraulic oils • Cold – LPG systems, air conditioning gases, nitrogen from accumulators. Short circuiting of electrical systems can result in rapid heat build-up which may result in fire or burns.

Electric Shock [13]	No task carried out that is covered by this Risk Assessment should involve working on any equipment that is connected to live mains electricity therefore fatal electric shock should not occur, however, even when disconnected from the mains there are sources of stored energy capable of delivering an electric shock. If not properly discharged, modules and other capacitor containing units can deliver an electric shock when totally disconnected and whilst the shock should not cause significant injury, side effects e.g. involuntary muscle spasm may cause the engineer to be injured from other hazards - falls from height, collision with objects inc. moving vehicles. Sudden discharge of electrical current may also be accompanied by rapid heat build-up and an electric arc capable of causing temporary blindness.
Lifting Operations [14]	Due to the weight of FLT components and the requirement to avoid Manual Handling, our engineers regularly carry out lifting operations to remove / refit components for repair, to gain access or to get spare parts from the Service Vehicle to the job. In most occasions this will involve using a FLT but in certain circumstances cranes, hoists or other equipment may be used.
Environmental Damage [15]	The highest risk to the environment from our activities is hazardous liquids reaching permeable ground, drains or watercourses. Other risks include the escape to atmosphere of gases from fuel and air conditioning systems as well as noise and nuisance.
Fire [16]	Whilst low there is still a risk of a fire within a forklift truck as there are fuels, combustible oils and sources of ignition (electrics). There is also a risk of fire when carrying out hot work.
Explosion [17]	Our engineers have occasions to work in ATEX controlled areas where the atmosphere is already, or has the potential to become, explosive. LPG fuel systems and battery charging systems as well as some of the chemicals used during the servicing / repair of trucks may create an explosive atmosphere.
Dermatitis [18]	Working with oils and other fluids which may come in contact with the skin could result in skin infections such as dermatitis.
Vibration [19]	Our engineers may need to work with hand held power tools or operate equipment which may cause exposure to hand, arm and whole-body vibration.
Noise [20]	Some of the environments that the engineers work in may mean they are exposed to a noise hazard. They may also need to operate equipment that emits noise levels that need to be considered as hazardous.
Dusts / Fumes [21]	Our engineers work in environments where dusts / fumes may be an issue, paint shops, welding fabrication areas, chemical plants etc. Certain chemicals they use in their normal job may give off fumes that need to be considered e.g. aerosols cleaners etc. The internal ventilation system on the truck has the capacity to draw dusts into the chassis compartments where they gather and settle. Air filtration systems filter the air, removing the dust which then consolidates in the housing.
Radiation [22]	Arc welding gives off ultraviolet radiation capable of having a detrimental effect on the eyes and skin. The same electric arc is emitted from unintentional discharge of high current electrical circuits (short circuiting). High intensity lights such as Blue Spot emit a light which may cause injury to the eyes.
E.M.F. [23]	Electromagnetic fields are produced whenever a piece of electrical or electronic equipment is used. In certain circumstances these fields may cause a detrimental effect, however, these effects are extremely rare and there is currently no scientific evidence of long-term effects.
Viral Infection [24]	Infection caused by the presence of a virus in the body. Depending on the virus and the person's state of health, various viruses can infect almost any type of body tissue, from the brain to the skin. These infections are commonly transmitted through direct person-to-person contact or via airborne transmission (e.g. coughing, sneezing etc.), but some can be transmitted through contact with common surfaces. This can happen before an infected person is aware of the illness.
Entanglement / Drawing in [25]	Entanglement involves getting caught up in equipment, usually moving and can result in getting “drawn into” the equipment. The usual cause of this is loose-fitting clothing, or long hair which can get wrapped up in the equipment. Any lanyards worn by engineers must have safety release clips or be worn inside overalls to prevent becoming a hazard.
Friction / Abrasion [26]	Friction / Abrasion is the result of contact with a moving part, which builds up heat or cuts into the body part touching the item e.g. an unguarded abrasive wheel.
Ejection / Projectiles[27]	Ejection is the process of something getting thrown, or ejected from machinery, usually because something has failed e.g. a shattered abrasive wheel where the complete wheel, or parts of it, are ejected at high speed into the surrounding area. The result could be impact injuries, cuts, stab wounds etc.
Chemical burns[28]	Battery acid and some other chemicals used for the maintenance and repairs of forklift trucks have the ability to cause burns to the skin, eyes, airways and internal organs. These chemicals can come in the form of liquids but also fumes and are not always easily identifiable.