



Plant Standards



Construction Services UK



As part of our progress towards Zero Harm, Balfour Beatty are aiming to achieve consistent health, safety, environment and sustainability procedures across all our UK Strategic Business Units (SBUs) by creating one Balfour Beatty way of working for our common processes. Therefore, this document will be withdrawn from the current Management System on:

01st January 2017

A new set of Plant Specifications relevant to all our SBUs has been released and will be mandated for use from this date.

The new Specifications can be viewed via the following link:

[Click here to access the Balfour Beatty Plant Specification Booklet](#)

Any queries relating to the new Plant Specifications can be forwarded to Richard Mason, Product Manager, Balfour Beatty Plant and Fleet Services by email ([click here](#)) or 07791 925883.

To access the current document, please scroll down.

Any further queries can be directed to [the BMS Team by clicking here](#)

Function Owner: Heather Bryant	Document Owner: Craig McCallum		
Ref No: HSEN-RM-0062	Issue No: 4.1	Issue Date: 20/01/16	Page: 1 of 4

Construction Services UK



SPECIFICATION SHEETS FOR OPERATED PLANT

Plant Item (HSEN-RM-****)	First Introduced	Last Revised	Comment
0027 180 Excavator Loader	Oct 2011	Jul 2014	Annual review. No change in content.
0034 Air Tools	Oct 2011	Jul 2014	Annual review. No change in content.
0029 Articulated Dump Truck	Oct 2011	Jul 2014	Annual review. No change in content.
0036 Compressed Air Systems	Oct 2011	Jul 2014	Annual review. No change in content.
0037 Concrete Pumps	Oct 2011	Feb 2015	Minor amendment. Requirements for all round visibility made consistent with other plant standards.
0039 Crawler Cranes	Oct 2011	Jul 2014	Annual review. No change in content.
0031 Forward and Side Tipping Dumpers	Oct 2011	Jul 2014	Annual review. No change in content.
0028 Lorry Loader/HIAB	Oct 2011	May 2015	Minor Amendment: inclusion of requirement for visual/audible alarm in cab warning the driver that the crane boom is incorrectly stowed.
0028a Lorry Loader/HIAB – Deliveries Only	Dec 2013	May 2015	Minor Amendment: inclusion of requirement for visual/audible alarm in cab warning the driver that the crane boom is incorrectly stowed.
0032 MEWPs	Oct 2011	Apr 2015	Material Change: New requirements for shrouded controls added. With immediate effect for Balfour Beatty and by 1st October for our supply chain.

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Plant Item (HSEN-RM-****)	First Introduced	Last Revised	Comment
0041 Mini Excavator	Oct 2011	Feb 2015	Administration change: Graphic updated. Removal of timescale for Quick Hitch compliance.
0026 Mixer Truck	Oct 2011	Jul 2014	Annual review. No change in content.
0026a Mixer Truck – Deliveries Only	Dec 2013	Oct 2014	Annual review. No change in content.
0042 Mobile Crane	Oct 2011	Oct 2014	Administration Change: Spelling correction to FOPS.
0052 Road Sweeper/Collector	Oct 2011	Jul 2014	Annual review. No change in content.
0054 Telehandler	Oct 2011	Jan 2016	Annual review. No change in content.
0055 Tipper Rigid or Articulated	Oct 2011	Jul 2014	Annual review. No change in content.
0055a Tipper Rigid or Articulated – Deliveries Only	Dec 2013	Jul 2014	Annual review. No change in content.
0056 Tower Crane	Oct 2011	Jul 2014	Annual review. No change in content.
0057 Tracked Excavator	Oct 2011	Jul 2014	Annual review. No change in content.
0058 Tracked Dozer	Oct 2011	Jul 2014	Annual review. No change in content.
0059 Wheeled Excavator	Oct 2011	Jul 2014	Annual review. No change in content.
0043 Mobile Crushing Plant	Apr 2012	Jul 2014	Annual review. No change in content.
0051 Ride on Roller	Apr 2012	Jul 2014	Annual review. No change in content.
High Pressure Drain Jetting Equipment			Pending
0060 Wheeled Loading Shovel	Apr 2012	Jul 2014	Annual review. No change in content.
0050 Plant Accessories	Apr 2012	Jul 2014	Annual review. No change in content.
0045 Overhead Gantry Cranes	Apr 2012	Jul 2014	Annual review. No change in content.
Pedestrian Roller			Pending
0030 Concrete Extrusion Plant	Apr 2012	Jul 2014	Annual review. No change in content.
0164 Vacuum Excavator	Dec 2015	Dec 2015	NEW document
PILING			
0049 Piling Rig Vibro	Apr 2012	Jul 2014	Annual review. No change in content.
0047 Piling Rig Driven Piles	Apr 2012	Jul 2014	Annual review. No change in content.

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Plant Item (HSEN-RM-****)	First Introduced	Last Revised	Comment
0033 Piling Rig Large Diameter Rotary	Apr 2012	Jul 2014	Annual review. No change in content.
0046 Piling Rig CFA	Apr 2012	Jul 2014	Annual review. No change in content.
0048 Piling Rig Mini Driven Piling Rig Mini Rotary	Apr 2012	Jul 2014	Annual review. No change in content. Pending
Marine			
0035 Barge With or Without Winches	Apr 2012	Jul 2014	Annual review. No change in content.
0038 Crane Barge	Apr 2012	Dec 2014	Administration Change. Reference to Crane Plant Standard corrected.
0044 Multicat Vessel	Apr 2012	Jul 2014	Annual review. No change in content.
0053 Safety Boat	Apr 2012	Jul 2014	Annual review. No change in content.
0040 Towing Vessel	Apr 2012	Jul 2014	Annual review. No change in content.
0061 Work Boat	Apr 2012	Jul 2014	Annual review. No change in content.

GENERAL NOTES

1. All plant spec sheets will be regularly reviewed with any updates issued as required.
2. All areas where operators are required to access as part of their duties must be clean and safe
3. All moving parts should where practicable be guarded to prevent entrapment.
4. These specifications align with the requirements of the Company standard for managing the interfaces between people and plant
5. All operated plant must be regularly inspected and maintained
6. All operators will be competent and follow the Golden Rules and report all unsafe conditions and stop work if anyone encroaches into a potentially unsafe area.

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PLANT & EQUIPMENT SPECIFICATION SHEET

180 DEGREE EXCAVATOR/LOADER (JCB3CX ETC)

All Plant to be inspected prior to first use and the appropriate pre-start checks sheet completed and daily recorded inspections thereafter. Daily inspection records for site based plant to be completed and displayed (Scafftag or similar system).

A full induction must be attended prior to starting work and evidence of having signed on to the appropriate risk assessment for the task provided



MANDATORY

Plant

- Current 12 monthly LOLER thorough examination certificate
- If used on public highway - compliance with C&U regulations (lights, VED, registration plates front & rear etc.)
- Seat belts must be fitted and operational
- Cab guards and/or FOPS cab structure where there is a risk of falling objects
- Mirrors/CCTV to satisfy 1m high at 1m distance visibility criteria
- Flashing amber beacon
- Reversing alarm to be fitted working and audible at 10m radius
- Forks to be folded/secured if travelling on public highway
- Isolation switch with key
- Locking doors with key
- Evidence of regular inspection plus statement of hours to next service or next service due date
- All safety labels (decals) in place
- Use axle locks for all wheeled duties. For other duties, stabilisers must be deployed
- Isolation controls by a secondary device, such as seat rotation
- The operators manual must be present with the machine
- Safe access for refueling, maintenance and to any place where accessories stored
- Fire extinguisher fitted in cab
- Correct tyre pressure

Operator

- Shall be suitably trained and competent CPCs approved card – Category A10 (<5t) or A12 (>5t)
- Must have a current relevant driving licence (Category B) if driving on the public highway
- Authorisation to take Plant onto a Public Highway form to be completed prior to driving on public highway
- Operator to ensure that buckets are carried safely at all times
- Full site-defined PPE required - close fitting PPE required in all cases to avoid catching on controls
- Operator to be briefed on and to comply with Balfour Beatty Pre-use, Daily & Weekly Defect Reporting System. Report defects and stop machine where defect is safety critical
- Shall stop work if any unauthorised/unsupervised personnel enter their immediate work area
- Competency assessment prior to being put to work – be familiar with machine
- Do not break ground unless briefed on, have received and fully understood a Permit to Break Ground
- Engine must be turned off if approached by others and keys removed from the ignition before leaving the plant unattended for any reason
- Be briefed on the site Plant and Vehicle Management procedures and check for overhead obstructions and hazards
- Ensure machine is operated in accordance with manufactures instructions and in accordance with his/her training



PLANT & EQUIPMENT SPECIFICATION SHEET

- **Unless demonstrated that it will not be used for lifting:**
 - 6 month thorough examination on lifting accessories
 - When using a lifting eye, a swivel hook must be used to ensure load can be manoeuvred without risk of swinging back or overloading
 - Certified lifting point required for all lifting duties
 - Hydraulic check valves must be fitted to excavator boom circuits
 - SWL to be clearly marked
 - A machine specific lifting duty sheet, lift plan and risk assessment
 - If the rated lifting capacity for the backhoe portion is greater than 1 tonne, the machine must be fitted with hydraulic check valves to the boom circuit and a Rated Capacity Indicator/Safe load Indicator
- **If quick hitch fitted:**
 - Must comply with BB Group SHE Standard 002 – Safe Use of Quick Hitch Devices
 - Must be automatic double locking
 - Have an in-cab warning alarm
 - Copy of manufacturers operating instructions
 - Pre-use Inspection signed off
- **If used under overhead cables or obstructions:**
 - Height restrictors with indication on machine
 - HSE GS6 'Avoidance of danger from overhead electric power lines' must be followed
- Shall report all unsafe conditions
- Operator to mount and dismount machine using fixed access arrangements and always facing the machine
- All site speed limits must be briefed and complied with
- All hoses to be inspected regularly
- Must comply with the requirements of the site lift plan
- Must know the weights of the loads before lifting
- Seat belt must be worn
- **If quick hitch fitted:**
 - Be briefed on 'Safe Use of Quick Hitches'
 - Operator shall be trained in how to use specific quick hitch attachments
 - Daily inspection signed off
- **If used for lifting:**
 - Lift plan and/or Permit to lift must be briefed and understood
 - Operator shall be trained in how to use specific lifting attachments

DESIRABLE

- Reversing alarm to be directional and 'white noise'
- Complete people exclusion area around plant and operation
- GPS tracker unit installed
- Isolation method independent of factory fitted locks
- Locking caps/covers to fuel and all other tanks
- ROPS and FOPS cab structure
- When used for lifting a list of weights of potential items to be lifted should be maintained
- System to prevent operation in reverse at speed
- Quarry spec light to indicate when seat belt worn
- Method for preventing unintentional operation of the controls
- Coloured seat belts improve visibility
- Check valves fitted to excavators dipper circuit

RISKS/CONTROLS

- Safe and clean access into cab
- Safe and clean access for refuelling and maintenance
- No entry into exclusion zone unless signalled by operator
- Danger of crushing in slew zone
- Overturning if on uneven ground or lifting duties exceeded
- Consider risk of accessories and how they are attached/inspected – e.g. breaking hammer
- Clothes can get snagged on controls prior to release of servo isolator/safety handle
- Effect of weather on visibility and working/traffic surfaces
- Reversing alarm audible at 10m in working conditions
- Plant and personnel segregation
- Overhead obstructions – cables; bridges
- Public interface – working alongside – consider slew restrictors
- Underground services – display Permit to Break Ground
- All round visibility tools fully operational
- Transportation including loading/unloading
- COSHH assessment for fuels, oils and greases
- Controls should be secured so that unauthorised operation is effectively prevented when the machine is not in use

Note: All persons preparing risk assessments involving plant are encouraged to review previous risk assessments undertaken for similar activities and safety alerts



PLANT & EQUIPMENT SPECIFICATION SHEET

AIR TOOLS

All plant and equipment to be inspected prior to first use and the appropriate pre-start check sheet completed and daily recorded inspections thereafter.



MANDATORY

Plant

- Unique ID number to be displayed on plate
- Noise emission level to be displayed
- All tooling to have optimum silencing fitted
- All handles to have anti vibration damping
- Evidence of regular inspection
- All safety labels (decals) in place
- HAV action level to be supplied.
- All points/drill bits to be kept sharp
- All hoses to be supplied c/w whip checks
- Copy of manufacturers operating instructions

Operator

- Full induction attended prior to starting work
- Evidence of having signed on to the appropriate risk assessment for the task
- Full site-defined PPE required
- Compliance with Pre-use, Daily & Weekly Defect Reporting System
- Competency assessment prior to being put to work – be familiar with machine and HAVS monitoring requirements
- To be familiar with operating instructions and specific HAV action level for each tool
- Do not break ground unless briefed on, have received and fully understood a Permit to Break Ground

DESIRABLE

- Task assessment to identify any alternative methods not using hand held vibrating tools
- Statement on “hours to next service”

RISKS/CONTROLS

Significant Risks Identified when operating the machine and for those adjacent to machine

- Towing and lifting operations
- Flying debris, eye injury, hand injury
- Abrasive wheels
- Underground services
- Plant and personnel segregation
- Public interface – working alongside; plant crossings
- COSHH assessment for fuels and oils
- Manual handling

Note: All persons preparing risk assessments involving plant are encouraged to review previous risk assessments undertaken for similar activities and safety alerts



PLANT & EQUIPMENT SPECIFICATION SHEET

ARTICULATED DUMP TRUCK

All plant to be inspected prior to first use and the appropriate pre-start check sheet completed and daily recorded inspections thereafter.

Daily inspection records for site based plant to be completed and displayed (Scafftag or similar system).

A full induction must be attended prior to starting work and evidence of having signed on to the appropriate risk assessment for the task provided.



MANDATORY

Plant

- If used on public highway - compliance with C&U regulations (lights, VED, registration plates front & rear etc.)
- Evidence of regular inspection plus statement of hours to next service or next service due date
- ROPS Structure
- Seat belts must be fitted and operational
- Mirrors/CCTV to satisfy 1m high at 1m distance visibility criteria
- Flashing amber beacon
- Reversing alarm to be fitted, working and audible
- Articulation lock must be fitted and operational
- Wheel nut indicators must be fitted
- Mechanical prop fitted under body
- No tailgates unless specifically requested and subject to risk assessment
- SIMRET brake testing for all non-licensed tippers (site based tippers). Records to be maintained. Note - In situations where it is not feasible to carry out SIMRET brake testing, a weekly ramp/brake test must be conducted.
- Isolation switch with key
- Locking doors with key
- All safety labels (decals) in place
- The operators manual must be present with the machine
- Safe access for refuelling, maintenance and to any place where accessories are stored
- Tipping linkage – must have no excessive play
- Fire extinguisher fitted in cab

Operator

- Shall be suitably trained and competent
- CPCs or similar approved card - category A56 - Articulated & A57 Rigid Chassis
- Must have a current relevant driving licence (Category B) if driving on the public highway
- 'Authorisation to take Plant onto a Public Highway' form to be completed prior to driving on public highway
- Full site-defined PPE required - close fitting PPE required in all cases to avoid catching on controls
- Operator to be briefed on and to comply with Balfour Beatty Pre-use, Daily & Weekly Defect Reporting System. Report defects and stop machine where defect is safety critical
- Shall stop work if any unauthorized/unsupervised personnel enter their immediate work area
- Competency assessment prior to being put to work – be familiar with machine
- Body is not to be tipped while on the move
- Engine must be turned off if approached by others and keys removed from the ignition before leaving the plant unattended for any reason
- All site speed limits must be briefed and complied with
- Operator to mount and dismount machine using fixed access arrangements and always facing the machine
- Be briefed on the site Plant and Vehicle Management procedures and check for overhead obstructions and hazards
- Seat belt must be worn
- Ensure machine is operated in accordance with manufactures instructions and in accordance with his/her training
- Shall report all unsafe conditions



PLANT & EQUIPMENT SPECIFICATION SHEET

DESIRABLE

- Reversing alarm to be directional and 'white noise'
- Complete people exclusion area around plant and operation
- GPS tracker unit installed
- Locking caps/covers to fuel and all other tanks
- Isolation method independent of factory fitted locks
- Quarry spec light to indicate when seat belt worn
- Controls will not engage until the seatbelt is connected
- Coloured seat belts improve visibility

RISKS/CONTROLS

- Safe and clean access into cab
- Safe and clean access for refuelling and maintenance
- No entry into exclusion zone unless signalled by operator
- Overturning
- Loose clothes can get snagged on controls
- Effect of weather on visibility and working/traffic surfaces
- Transportation including loading/unloading
- Reversing alarm audible at 10m in working conditions
- Plant and personnel segregation
- Overhead obstructions – cables; bridges
- Public interface – working alongside
- All round visibility tools fully operational
- COSSH assessment for fuels, oils and greases
- Controls should be secured so that unauthorised operation is effectively prevented when the machine is not in use

Note: All persons preparing risk assessments involving plant are encouraged to review previous risk assessments undertaken for similar activities and safety alerts



PLANT & EQUIPMENT SPECIFICATION SHEET

COMPRESSORS/AIR SYSTEMS

All plant and equipment to be inspected prior to first use and the appropriate pre-start check sheet completed and daily recorded inspections thereafter



MANDATORY

Plant

- Unique ID number to be displayed on plate
- Noise emission to be no more than 80 DbA
- Towing/lifting weight to be clearly displayed
- Evidence of regular inspection
- All safety labels (decals) in place
- All current pressure systems regulations certification to be in place
- Canopy to have integral fuel bunding for environmental protection
- All hoses to be supplied with whip checks.
- Copy of manufacturers operating instructions

Operator

- Full induction attended prior to starting work
- Evidence of having signed on to the appropriate risk assessment for the task
- Full site-defined PPE
- Compliance with Pre-use, daily & weekly defect reporting system
- Competency assessment prior to being put to work – be familiar with machine and HAVS monitoring requirements

DESIRABLE

- Tracker unit, isolation method independent of factory fitted locks, locking caps/covers to fuel and all other tanks
- Statement on 'hours to next service'
- Security hitch lock

RISKS/CONTROLS

- Towing and lifting operations
- Safe and clean access for refuelling
- Overturning
- Loading/unloading onto transport
- Flying debris
- Open hoses when airline switched on
- Noise
- Plant and personnel segregation
- Public interface – working alongside; plant crossings
- COSHH assessment for fuels and oils

Note: All persons preparing risk assessments involving plant are encouraged to review previous risk assessments undertaken for similar activities and safety alerts



PLANT & EQUIPMENT SPECIFICATION SHEET

CONCRETE PUMPS

All plant to be inspected prior to first use and the appropriate pre-start check sheet completed and daily recorded inspections thereafter



MANDATORY

Plant

- Current 12 monthly thorough examination certificate
- Operation and maintenance manual
- Completed Operator Daily/Weekly Checklist (to include pipes)
- Mirrors and camera i.e. all round visibility
- Safe access for all maintenance activities
- Flashing amber beacon
- Reversing alarm to be fitted working and audible
- Door lock keys provided
- Locking caps and covers
- Portable 'Chocks'/Wheel Stops to be manufactured to place on the ground behind the concrete pump to prevent the concrete wagon reversing into the hopper
- Fire extinguisher in cab.

If truck mounted:

- Current VED and Operator licence displayed in cab windscreen
- Current MOT plating certificate

Operator

- Minimum of Cat C driving licence when unit over 7.5t GVW
- CPCS Card with category A06 – Truck mounted boom, A44 Trailer mounted
- Appropriate licence for the class of vehicle to be operated (Lorry mounted pumps)
- Evidence of familiarisation training for the type of pump to be operated
- Evidence that the operator is medically fit to operate the concrete pump
- Full induction attended prior to starting work
- Evidence of having signed on to the appropriate risk assessment for the task
- Full site-defined PPE required

DESIRABLE

- Nylacast Outrigger Pads
- Hands free voice activated radio communication between the pump operative and operative at the end of the line
- Illuminated pump control panel
- Spill kit.



RISKS/CONTROLS

- Boom clash with overhead obstructions – power lines, telephone lines, adjacent cranes
- Overturning – ground capable of withstanding imposed outrigger loadings, underground services
- Trapping of site operatives - a safe working area physically marked on the ground around the pump and outriggers to provide an exclusion zone to all operatives not involved with the pumping activity
- Pressurised lines – pre-use inspection of pipe clamps and pins, rigid procedure to be implemented when cleaning pipes using compressed air

Note: All persons preparing risk assessments involving plant are encouraged to review previous risk assessments undertaken for similar activities and safety alerts



PLANT & EQUIPMENT SPECIFICATION SHEET

CRAWLER CRANE

All Plant to be inspected prior to first use and the appropriate pre-start checks sheet completed and daily recorded inspections thereafter. Daily inspection records for site based plant to be completed and displayed (Scafftag or similar system).

Only Hydraulic cranes permitted, not mechanical



MANDATORY

Crane Requirements

- Pre-use crane documentation form signed off
- CE Certificate
- Current 12 monthly LOLER thorough examination certificate
- Current 6 monthly LOLER thorough examination certificate for all lifting tackle carried
- Rated Capacity Indicator (RCI)
- Operation manual provided
- Completed Operator Daily/Weekly Checklist
- Flashing amber beacon
- Reversing alarm to be fitted working and audible
- Slew alarms
- Door lock keys provided
- Aircraft warning lights (if working within the vicinity of aerodromes)
- Slew, jib height and radius restrictors if working in the vicinity of overhead power lines, railways, adjacent live traffic, etc
- Hook block over hoist cut-out facility
- Boom hoist cut-out facility
- Handrails fitted to running boards and crane upper structure
- Load bearing hydraulic cylinders fitted with check valves
- Current 6 monthly LOLER thorough examination certificate for the crane
- Crane fitted with anemometer or other device to monitor in service wind speeds
- Fire extinguisher in cab
- Perimeter edge protection, handrails etc to body of crane where access required.
- All D/Bow Shackles used above 2 metres must be the Bolt Anchor Type (i.e. bolt, nut and pin)

Operator

- Lifting plan and permit to lift in place as applicable
- CPCS card with Category A02B
- Valid medical certificate
- Competency assessment prior to being put to work
- Evidence of familiarisation training for type of crane to be operated
- Full induction attended prior to starting work.
- Evidence of having signed on to the appropriate risk assessment for the task
- Full site-defined PPE - none loose fitting.



Man Riding Requirements

- Carrier hoisting and lowering ropes minimum diameter of 8mm
- Hook fitted with safety catch
- Ability to restrict the working speed of all crane functions to 0.5m/s
- Control levers return to neutral automatically when released
- SWL of crane configuration in use is at least twice the rated capacity of the carrier
- Power lowering facility fitted to crane. If not, free-fall capability must be locked out
- Refer to BS7121 -1:2006 for further guidance

DESIRABLE

- Jib Head camera if working on sites with blind lifting issues
- Counterweight mounted CCTV
- Block stand to be provided when reeving rope into hook block whilst block is lying down
- Anemometer
- Window guards
- Audible/visual slew alarm
- All round vision system to avoid potential crushing incident
- Operator to have 3 years' operating experience
- Means for operator to monitor hoist rope tension, e.g. camera or mirror
- Red, amber and green high level illumination to indicate crane working within safe limits

RISKS/CONTROLS

- Safe and clean access into cab
- Safe and clean access for refuelling and maintenance
- Plant and personnel segregation - no entry into exclusion zone unless signalled by operator
- Load path – slewing over site personnel
- Danger of crushing in slew zone
- Overturning if lifting duties exceeded, ground capable of withstanding imposed track loadings, underground services
- Dropped loads – exclusion zone set up around the area of lifting operations, loads consisting of loose material/components to be containerized
- Reversing alarm audible at 10m
- Overhead obstructions – cables, bridges, power lines, telephone lines
- Jib clash – coordination with adjacent cranes, tall plant
- Public interface – working alongside – consider slew restrictors
- All round visibility tools fully operational
- Effect of weather on visibility and working/traffic surfaces
- Use of jib walkways to be avoided where practical
- COSHH assessment for fuels, oils and greases
- Potential excessive noise

Note: All persons preparing risk assessments involving plant are encouraged to review previous risk assessments undertaken for similar activities and safety alerts



PLANT & EQUIPMENT SPECIFICATION SHEET

FORWARD AND SIDE TIPPING DUMPER

All Plant to be inspected prior to first use and the appropriate pre-start checks sheet completed and daily recorded inspections thereafter. Daily inspection records for site based plant to be completed and displayed (Scafftag or similar system).

A full induction must be attended prior to starting work and evidence of having signed on to the appropriate risk assessment for the task provided.

To assess the suitability and selection of dumpers for particular tasks and environments, a specific risk assessment must be completed prior to work commencing. This must take account of the inclines and speeds at which they are to be used.



MANDATORY

Plant

- If used on public highway - compliance with C&U regulations (lights, VED, registration plates front & rear etc.)
- Evidence of regular inspection plus statement of hours to next service or next service due date
- ROPS Structure
- Seat belts must be fitted and operational
- Flashing amber beacon
- Collision avoidance system (movement sensor or video or similar approved) to ensure 1m high at 1m distance visibility criteria. Operating company to confirm their approved systems
- Reversing alarm to be fitted working and audible
- Mechanical prop fitted under body
- Locking caps/covers
- Isolation switch with key.
- All safety labels (decals) in place
- The operators manual must be present with the machine
- Tow hitch must have correct pin with chain attached to dumper
- Tipping linkage – must have no excessive play

Operator

- Shall be suitably trained and competent
- CPCS card - A09A – Forward tipping wheeled, A09B – Forward tipping tracked
- Must have a current relevant driving licence (Category B) if driving on the public highway
- 'Authorisation to take Plant onto a Public Highway' form to be completed prior to driving on public highway
- Full site-defined PPE required - close fitting PPE required in all cases to avoid catching on controls
- Operator to be briefed on and to comply with Balfour Beatty Pre-use, Daily & Weekly Defect Reporting System. Report defects and stop machine where defect is safety critical
- Shall stop work if any unauthorised/unsupervised personnel enter their immediate work area
- Competency assessment prior to being put to work – be familiar with machine
- Body is not to be tipped while on the move
- Engine must be turned off if approached by others and keys removed from the ignition before leaving the plant unattended for any reason
- Shall report all unsafe conditions
- Be briefed on the site Plant and Vehicle Management procedures and check for overhead obstructions and hazards
- Operator to mount and dismount machine using fixed access arrangements and always facing the machine
- Seat belt must be worn



PLANT & EQUIPMENT SPECIFICATION SHEET

• If towing required:

- Register of persons authorised to tow must be maintained
- Special care must be taken to weight towed especially for braking activities
- Operator must consider stability issues when towing and the operator must refer to operators manual prior to towing Ensure machine is operated in accordance with manufactures instructions and in accordance with his/her training


DESIRABLE

- Load measurement device
- Reversing alarm to be directional and 'white noise'
- Complete people exclusion area around plant and operation
- Hydraulic rams on engine compartment covers to prevent slamming
- Quarry spec light to indicate when seat belt worn
- Safety lever will not engage until the seatbelt is connected
- Coloured seat belts improve visibility

RISKS/CONTROLS

- Safe and clean access to seat
- Safe and clean access for refuelling
- Poor lateral stability – particularly with <1 tonne dumpers and with any dumper used on an inline
- No entry into exclusion zone unless signalled by operator
- High risk of overturning at speed and on inclines Refer to manufacturers instructions
- Consider risk of towed items – e.g. roller
- Ensure stop blocks used to prevent fall into excavation
- Maintenance below bucket hazardous and propping arrangement required
- As a rule of thumb, 25% of dumper capacity should be placed in a skip/discharge area prior to towing
- Where turntable dumpers are narrow mouth, or high lift equipment, extra training must be given to the operator so that the dumper is used correctly
- Reversing alarm audible at 10m
- Plant and personnel segregation
- Public interface – working alongside
- All round visibility tools fully operational. Loads should be struck level with the bucket to avoid restricting driver vision
- Effect of weather on visibility and working/traffic surfaces
- The buckets on side tipping dumpers can protrude significantly when turned to the side creating a hazard to pedestrians
- COSHH assessment for fuels, oils and greases
- A 3 way or side-tipping dumper must be 3 way complete left or right or forward only. Diagonal tipping should be avoided as non compliance can result in loss of stability
- Transportation including loading/unloading
- Controls should be secured so that unauthorised operation is effectively prevented when the machine is not in use

Note: All persons preparing risk assessments involving plant are encouraged to review previous risk assessments undertaken for similar activities and safety alerts



PLANT & EQUIPMENT SPECIFICATION SHEET

LORRY LOADER CRANE (HIAB)

All plant to be inspected prior to first use and the appropriate pre-start check sheet completed and daily recorded inspections thereafter. Inspection sheet to be available in cab and ideally visually displayed. Daily inspection records for site based plant to be completed and displayed (Scafftag or similar system). A full induction must be attended prior to starting work and evidence of having signed on to the appropriate risk assessment for the task provided.



MANDATORY

Plant

- Chapter 8 compliant beacons, reflective chevrons and 'Highway/Motorway Maintenance' signage
- Current VED and Operator licence displayed in cab windscreen
- If used on public highway - compliance with C&U regulations (lights, VED, registration plates etc.)
- Current MOT plating certificate
- Current 4 yearly static test certificate
- Current 12 monthly LOLER thorough examination certificate
- Current 6-monthly LOLER certification for all onboard lifting tackle and accessories
- SWL on display
- Lifting duty chart to be displayed or available in the cab
- Functional Calibrated Rated Capacity Indicator (RCI) and Rated Capacity Limiter (RCL)
- A visual or audible alarm in the cab warning the driver that the crane boom is incorrectly stowed
- Evidence of regular inspection plus statement of hours to next service or next service due date
- Seat belts must be fitted and operational
- Mirrors/CCTV to satisfy 1m high at 1m distance visibility criteria
- Reversing alarm to be fitted working and audible
- Isolation switch with key
- Locking doors with key
- All safety labels (decals) in place
- Operators manual must be present
- Safe access for refuelling, maintenance and to any place where accessories are stored
- Fall prevention and/or fall arrest arrangements where access to vehicle body required
- Fire extinguisher fitted in cab

Operator

- Shall be suitably trained and competent CPCS or ALLMI Card with relevant equipment category endorsement
- Compliance with BB Group SHE standard 001 –Working at Height section 2 – Prevention of falls from vehicles must be adhered to
- Minimum of Cat C driving licence when unit over 7.5t GVW
- Full site-defined PPE required – Close fitting PPE required in all cases to avoid catching on controls
- Operator to be briefed on and to comply with Balfour Beatty Pre-use, Daily & Weekly Defect Reporting System. Report defects and stop machine where defect is safety critical
- Shall stop work if any unauthorised/ unsupervised personnel enter their immediate work area
- Competency assessment prior to being put to work – be familiar with machine
- Engine must be turned off if approached by others and keys removed from the ignition before leaving the plant unattended for any reason
- Be briefed on the site Plant and Vehicle Management procedures and check for overhead obstructions and hazards
- Operator to mount and dismount machine using fixed access arrangements and always facing the machine
- All site speed limits must be briefed and complied with
- Must comply with the requirements of the site lift plan
- Must know the weights of the loads before lifting
- Drivers should be working towards the completion of a full CPCS driver's course within 2 years
- Ensure machine is operated in accordance with manufactures instructions and in accordance with his/her training
- Shall report all unsafe conditions
- 'Safety Critical' worker medical



PLANT & EQUIPMENT SPECIFICATION SHEET


DESIRABLE

- Reversing alarm to be directional and 'white noise'
- Complete people exclusion area around plant and operation
- GPS tracker unit installed
- Isolation method independent of factory fitted locks
- Locking caps/covers to fuel and all other tanks
- Outrigger lock-out preventing crane operation with legs in stowed position
- Sensor de-rate system if crane is used 'short-rigged'
- Traffic cones or other means of maintaining safe zone and avoiding pedestrian traffic near lifting
- When used for lifting a list of weights of potential items to be lifted should be maintained

RISKS/CONTROLS

- Plant and personnel segregation - no entry into exclusion zone unless signalled by operator
- Load path – slewing over/near pedestrians
- Overturning if lifting duties exceeded, ground capable of withstanding imposed outrigger loadings, underground services
- Dropped loads – exclusion zone set up around the area of lifting operations, loads consisting of loose material/components to be containerised
- Effect of weather on visibility and working/traffic surfaces
- Reversing alarm audible at 10m
- Overhead obstructions – cables' bridges, power lines, telephone lines
- Jib clash – coordination with adjacent cranes, tall plant
- Public interface – working alongside – consider slew restrictors
- COSHH assessment for fuels, oils and greases
- Controls should be secured so that unauthorised operation is effectively prevented when the machine is not in use

Note: All persons preparing risk assessments involving plant are encouraged to review previous risk assessments undertaken for similar activities and safety alerts



PLANT & EQUIPMENT SPECIFICATION SHEET

LORRY LOADER CRANE (HIAB) - DELIVERIES & COLLECTIONS ONLY

This Specification Sheet covers Lorry Loader Cranes (HIAB) undertaking deliveries or collections only.

A project specific Visitors Induction will be required prior to commencing deliveries or collections on site.




MANDATORY

Plant

- Appropriate Daily Inspection sheets must be available in cab and visually displayed
- When delivering into traffic controlled areas, Chapter 8 compliant beacons, reflective chevrons and 'Highway or Motorway Maintenance' signage (as appropriate) must be in use
- Current VED and Operator licence must be displayed in cab windscreen
- If used on public highways, must be compliant with C&U regulations
- Current MOT plating certificate must be displayed in cab windscreen
- Current 12 monthly LOLER thorough examination certificate must be available in the cab
- Current 6 monthly LOLER certification for all onboard lifting tackle and accessories must be available in the cab
- SWL must be on display
- Lifting duty chart must be displayed in the cab
- Functional Calibrated Rated Capacity Indicator (RCI) and Rated Capacity Limiter (RCL) must be fitted and functioning
- A visual or audible alarm in the cab warning the driver that the crane boom is incorrectly stowed
- Evidence of regular inspection plus statement of hours to next service or next service due date must be available in the cab
- Seat belts must be fitted and the operator must use at all times when in the cab
- Mirrors and CCTV to satisfy 1m high at 1m distance visibility criteria must be fitted and in good working order
- A reversing alarm must be fitted; must be in working order and must be loud and distinct enough that it does not become part of the background noise
- Doors must be lockable with keys available
- All safety labels (decals) must be in place
- The operators manual must be available at all times in the cab
- There must be safe access for refuelling, maintenance and to any place where accessories are stored
- Fall prevention and fall arrest arrangements must be in place where access to vehicle body is required

Operator

- Shall be suitably trained and competent with CPCS or ALLMI Card with relevant equipment category endorsement available for inspection.
- Shall have a minimum of Cat C driving licence when the unit is over 7.5t GVW
- Shall wear site defined PPE at all times as the vehicle enters the site, this shall be close fitting to avoid catching any controls
- Shall stop work immediately if any unauthorised or unsupervised personnel enter his or her immediate work area
- Shall immediately turn off the engine if approached by any personnel and must remove keys from the ignition before leaving the plant unattended for any reason
- Must check for overhead obstructions and hazards
- Must mount and dismount his or her machine using fixed access arrangements and always facing the machine
- Shall ensure he or she is briefed of the site speed limits, and these will be complied with at all times
- Must comply with the requirements of the site lift plan
- Must know the weights of the loads before lifting
- Must operate the machine in accordance with the manufacturer's instructions and in accordance with his or her training
- Shall report all unsafe conditions



PLANT & EQUIPMENT SPECIFICATION SHEET

MEWPS (SCISSOR LIFTS AND BOOMS)

This Plant Specification Sheet should be read in conjunction with the Balfour Beatty Safety, Health & Environmental Standard 001- Working at Height.

All plant to be inspected prior to first use and the appropriate pre-start check sheet completed and daily recorded inspections thereafter. Daily inspection records for site based plant to be completed and displayed (Scafftag or similar system).

A full induction must be attended prior to starting work and evidence of having signed on to the appropriate risk assessment for the task provided.

A MEWP co-ordinator must be formally appointed at the outset of each project or contract where MEWP's are to be used



MANDATORY

Plant

- MEWP power source/engine type as requisitioned
- 6 monthly LOLER thorough examination certificate
- Evidence of regular inspection plus statement of hours to next service or next service due date
- Flashing amber beacon (boom only)
- Reversing alarm to be fitted, working and audible (lorry mounted)
- Movement alarm to be fitted working and audible (Scissor & Boom)
- Isolation switch with key
- All safety labels (decals) in place
- Operating control functions clearly marked
- The operators manual must be present with the machine
- A daily/weekly maintenance schedule must be provided
- Door lock keys in cabs of lorry mounted booms
- Direction of travel must be clearly indicated
- Maximum gradient for safe operation must be displayed
- The machine must be suitable for the location (indoor/outdoor)
- Safe access for refuelling, maintenance and to any place where accessories are stored
- Power Failure Safe Lowering System
- SWL displayed in platform
- Maximum permitted wind-speed for safe operations must be displayed
- Outrigger/wheel loading details provided and ground bearing capacity checked (where applicable)

Operator

- Shall be suitably trained and competent
- CPCS or IPAF Card with relevant equipment category endorsement
- Operator to be briefed on and to comply with Balfour Beatty Pre-use, Daily & Weekly Defect Reporting System. Report defects and stop machine where defect is safety critical
- Full site-defined PPE required - close fitting PPE required in all cases to avoid catching on controls
- Competency assessment by site supervisor prior to being put to work
- Harness to be worn in boom type MEWP, or in scissor lift if travelling with the platform raised, and to be appropriate for the specific use
- All operators must be trained in the use of harnesses
- Evidence of familiarisation training for the particular type of MEWP to be operated, including emergency recovery from the ground
- Engine/Power must be turned off if approached by others and keys removed from the ignition before leaving the plant unattended for any reason
- Be briefed on the site Plant and Vehicle Management procedures and check for overhead obstructions and hazards
- Shall report all unsafe conditions
- Operator to mount and dismount machine using fixed access arrangements and always facing the MEWP
- Shall stop work if any unauthorised/unsupervised personnel enter their immediate work area
- Emergency lowering mechanism acceptable and exercise complete
- Ensure machine is operated in accordance with manufactures instructions and in accordance with his/her training



PLANT & EQUIPMENT SPECIFICATION SHEET

- All booms & scissor lifts (MEWP category 1a, 3a & 3b) should have shrouded protection to the platform controls designed in such a way as to guard against sustained involuntary operation of the MEWP
- All Boom type MEWPS (IPAF category 3b) must be fitted with a CE certified device to reduce the risks associated with crushing / trapping of the operator in the platform. These systems may be electronic such as SkySiren or SiOPS pressure sensitive systems or mechanical such as Sanctuary Zones.
- Harness anchorage points in boom type MEWPS

DESIRABLE

- Reversing alarm to be directional and 'white noise'
- Complete people exclusion area around plant and operation
- GPS tracker unit installed
- Isolation method independent of factory fitted locks
- Locking caps/covers to fuel and all other tanks
- Wheel nut indicators fitted
- Audible alarm for lowering
- Flashing beacon on scissor lift
- Harness anchorage point in scissor lift
- Fire suppression in engine compartment if working in zone of fire risk or if emergency basket to basket evacuation procedures not practical
- Fish eye mirrors for all round vision when travelling
- Toolbox for equipment storage in basket
- MEWPs to have 110V supply available in basket pre-wired
- Photographs of approved MEWP operators to be displayed on the exterior of the machine, e.g. a laminated photograph
- Tilt alarm fitted

RISKS/CONTROLS

- Ground conditions/underground services – ensure the ground is capable of withstanding the imposed wheel/outrigger loadings
- A clear safety zone to be maintained around the operating radius
- Overhead obstructions – electric cables, power lines, structures, etc
- Operator recovery from an incapacitated machine
- All involved in the management and operation of MEWPs need to understand how to minimise the risks of someone being trapped in the basket and the importance of having effective rescue procedures should such an entrapment occur
- Should be parked in accordance with manufacturers recommendation with the basket on the ground
- High wind speed is hazardous and must be assessed before use in all circumstances
- Falls from height
- Suitable access and egress
- Potential for clashes with other plant working within the vicinity
- Stability when travelling machine with platform raised
- Minimum clearances between buildings/ other platforms
- Uneven ground conditions and driving up ramps during travelling can create a risk of crush/impact injury
- Handling materials on MEWP platforms can overload machinery or be at risk of falling. Proprietary material handling aids are available for certain types of loads. Do not hang materials outside the basket or balance on the handrails.
- Earthing may be required if working near overhead cables
- Controls should be secured so that unauthorised operation is effectively prevented when the machine is not in use

Note: All persons preparing risk assessments involving plant are encouraged to review previous risk assessments undertaken for similar activities and safety alerts



PLANT & EQUIPMENT SPECIFICATION SHEET

MINI/COMPACT EXCAVATOR (BELOW 10 TONNES)

All plant to be inspected prior to first use and the appropriate pre-start check sheet completed and daily recorded inspections thereafter. Daily inspection records for site based plant to be completed and displayed (Scafftag or similar system).

A full induction must be attended prior to starting work and evidence of having signed on to the appropriate risk assessment for the task provided.



MANDATORY

Plant

- TOPS (Tip Over Protection Structure) cab structure for machines >1t and <6t
- Current 12 monthly LOLER thorough examination certificate
- Evidence of regular inspection plus statement of hours to next service or next service due date
- Seat belts must be fitted and operational
- Flashing amber beacon
- Mirrors/CCTV to satisfy 1m high at 1m distance visibility criteria
- Isolation switch with key
- Locking doors with key
- All safety labels (decals) in place
- The operators manual must be present with the machine
- Safe access for refuelling, maintenance and to any place where accessories are stored
- Fire extinguisher fitted in cab
- **Unless demonstrated that it will not be used for lifting:**
 - 6 month thorough examination on lifting accessories
 - Certified lifting point required for all lifting duties
 - If the rated lifting capacity for the excavator is greater than 1 tonne, the machine must be fitted with hydraulic check valves to the boom circuit and a Rated Capacity Indicator/Safe load Indicator
 - SWL to be clearly marked
 - When using a lifting eye, a swivel hook must be used to ensure load can be manoeuvred without risk of swinging back or overloading
 - A machine specific lifting duty sheet, lift plan and risk assessment

Operator

- Shall be suitably trained and competent
- CPCS - cat. A58A (<10t)
- Operator to ensure that buckets are carried safely at all times
- Full site-defined PPE required - close loose fitting PPE required in all cases to avoid catching on controls
- Operator to be briefed on and to comply with Balfour Beatty Pre-use, Daily & Weekly Defect Reporting System. Report defects and stop machine where defect is safety critical
- Shall stop work if any unauthorised/unsupervised personnel enter their immediate work area
- Competency assessment prior to being put to work – be familiar with machine
- Engine must be turned off if approached by others and keys removed from the ignition before leaving the plant unattended for any reason
- Be briefed on the site Plant and Vehicle Management procedures and check for overhead obstructions and hazards
- Operator to mount and dismount machine using fixed access arrangements and always facing the machine
- Do not break ground unless briefed on, have received and fully understood the Permit to Break Ground
- All hoses to be inspected regularly
- Seat belt must be worn
- Operator must not lean out of seat to view excavation
- Ensure machine is operated in accordance with manufactures instructions and in accordance with his/her training
- Shall report all unsafe conditions



PLANT & EQUIPMENT SPECIFICATION SHEET

- **If quick hitch fitted:**
 - Must comply with BB Group SHE Standard 002 – Safe Use of Quick Hitch Devices
 - Must be automatic double locking
 - Have an in-cab warning alarm
 - Copy of manufacturers operating instructions
 - Pre-use inspection signed off
- **If used under overhead cables or obstruction:**
 - Height restrictors with indication on machine
 - HSE GS6 'Avoidance of danger from overhead electric power lines' must be followed
- **If quick hitch fitted:**
 - Be briefed on 'Safe Use of Quick Hitches'
 - Operator shall be trained in how to use specific quick hitch attachments
 - Daily inspection signed off
- **If used for lifting:**
 - Lift plan and/or Permit to lift must be briefed, understood and complied with
 - Operator shall be trained in how to use specific lifting attachments
 - Must know the weights of the loads before lifting

DESIRABLE

- Complete people exclusion area around plant and operation
- Extendable tracks to enhance stability
- GPS tracker unit installed
- Isolation method independent of factory fitted locks
- Locking caps/covers to fuel and all other tanks
- Track adjustment, particularly slackening, by trained personnel only with appropriate tools and PPE
- Quarry spec light to indicate when seat belt worn
- Method for preventing unintentional operation of the controls
- Coloured seat belts improve visibility
- Check valves fitted to excavators boom and dipper circuits
- Safe Load Indicator or Rated Capacity Indicator
- Zero Tail swing ballast/counterweight
- When used for lifting a list of weights of potential items to be lifted should be maintained

RISKS/CONTROLS

- Safe and clean access into cab & for refuelling
- No entry into exclusion zone unless signalled by operator
- Danger of crushing in slew zone
- Overturning if lifting duties exceeded, used on incline or uneven ground
- Consider risk of accessories – e.g. hammer
- Loose clothing snagging on controls prior to release of servo isolator/safety handle
- Effect of weather on visibility and working/traffic surfaces
- Underground services – display Permit to Break Ground
- COSHH assessment for fuels, oils and greases
- Plant and personnel segregation
- Overhead obstructions – cables, bridges, etc.
- Public interface – working alongside – consider slew restrictors
- Transportation including loading/unloading
- Controls should be secured so that unauthorised operation is effectively prevented when the machine is not in use
- Without SLI's and check valves lifting is particularly hazardous
- Protected cab or FOPS where risk of falling debris

Note: All persons preparing risk assessments involving plant are encouraged to review previous risk assessments undertaken for similar activities and safety alerts



PLANT & EQUIPMENT SPECIFICATION SHEET

MIXER TRUCK

All plant to be inspected prior to first use and the appropriate pre-start check sheet completed and daily recorded inspections thereafter. Daily inspection records for site based plant to be completed and displayed (Scafftag or similar system).

An induction must be attended prior to starting work and evidence of having signed on to the appropriate risk assessment for the task provided.



MANDATORY

Plant

- Chapter 8 compliant beacons, reflective chevrons and 'Highway/Motorway Maintenance' signage
- If used on public highway - compliance with C&U regulations (lights, VED, registration plates front & rear etc.
- Current VED and operator licence displayed in cab windscreen
- Current MOT plating certificate
- Evidence of regular inspection plus statement of hours to next service or next service due date
- Seat belts must be fitted and operational
- Mirrors/CCTV to satisfy 1m high at 1m distance visibility criteria
- Reversing alarm to be fitted working and audible
- Isolation switch with key
- All safety labels (decals) in place
- The operators manual must be present with the machine
- Safe access for refuelling, maintenance and to any place where accessories are stored
- Safe access to all areas where the operator is required to work, including full edge protection/hand rail protection around drum platform
- Locking doors with key
- Fire extinguisher fitted in cab

Operator

- Shall be suitably trained and competent
- Minimum of Cat C driving licence when unit over 7.5t GVW
- Full site-defined PPE required
- Hand and skin dermatitis protection/monitoring
- Operator to be briefed on and to comply with Balfour Beatty Pre-use, Daily & Weekly Defect Reporting System. Report defects and stop machine where defect is safety critical
- Shall stop work if any unauthorised/unsupervised personnel enter their immediate work area
- Engine must be turned off if approached by others and keys removed from the ignition before leaving the plant unattended for any reason
- Be briefed on the site Plant and Vehicle Management procedures and check for overhead obstructions and hazards
- Operator to mount and dismount machine using fixed access arrangements and always facing the machine
- Seat belt must be worn
- Ensure machine is operated in accordance with manufactures instructions and in accordance with his/her training
- Shall report all unsafe conditions



DESIRABLE

Plant

- Reversing alarm to be directional and 'white noise'
- Complete people exclusion area around plant and operation
- GPS tracker unit installed
- Isolation method independent of factory fitted locks
- Locking caps/covers to fuel and all other tanks
- Safety system for avoiding cyclists in urban conditions (as mandated in Crossrail 2012)
- Statement on 'hours to next service'

Operator

- Competency assessment prior to being put to work – be familiar with machine
- Operator to be competency assessed in dealing with spills and environmental protection
- Drivers should be working towards the completion of a full CPC driver's course within 2 years
-

RISKS/CONTROLS

- Safe and clean access into cab
- Safe and clean access for refuelling
- Danger of moving parts. Nothing should be placed inside hopper as can become caught inside moving parts of rotating drum
- Danger of spills when filling/discharging or driving up steep inclines
- Reversing alarm audible at 10m
- Tripping over hoses on ground or slipping on spills
- Climbing operations into and out of the cab, inspecting the drum contents, etc.
- Collision with other plant
- Plant and personnel segregation
- Hazard from wash-out which may require special treatment before discharging
- Noise and visibility
- Driver/Operator to be clear of concrete skips being lifted
- Access on to top of tank/body
- Public interface – working alongside; plant crossings
- Permit to use on highway where site based
- COSHH assessment for concrete, fuels, oils and greases
- Controls should be secured so that unauthorised operation is effectively prevented when the machine is not in use

Note: All persons preparing risk assessments involving plant are encouraged to review previous risk assessments undertaken for similar activities and safety alerts



PLANT & EQUIPMENT SPECIFICATION SHEET

MIXER TRUCK - DELIVERIES ONLY

This Specification Sheet covers Mixer Trucks undertaking deliveries only.

A project specific Visitors Induction will be required prior to commencing deliveries on site.



MANDATORY

Plant

- Appropriate Daily Inspection sheets must be available in cab and visually displayed
- When delivering into traffic controlled areas, Chapter 8 compliant beacons, reflective chevrons and 'Highway or Motorway Maintenance' signage (as appropriate) must be in use
- Current VED and Operator licence must be displayed in cab windscreen
- If used on public highways, must be compliant with C&U regulations
- Current MOT plating certificate must be displayed in cab windscreen
- Evidence of regular inspection plus statement of hours to next service or next service due date must be available in the cab
- Seat belts must be fitted and the operator must use at all times when in the cab
- Mirrors and CCTV to satisfy 1m high at 1m distance visibility criteria must be fitted and in good working order
- A reversing alarm must be fitted; must be in working order and must be loud and distinct enough that it does not become part of the background noise
- Doors must be lockable with keys available
- All safety labels (decals) in place
- The operators manual must be available at all times in the cab
- There must be safe access for refuelling, maintenance and to any place where accessories are stored
- There must be safe access to all areas where the operator is required to work, including full edge protection/hand rail protection around drum platform

Operator

- Must be suitably trained and competent
- Shall have a minimum of Cat C driving licence when the unit is over 7.5t GVW
- Shall wear site defined PPE at all times as the vehicle enters the site, this shall be close fitting to avoid catching any controls
- Hand and skin dermatitis protection must be worn at all times
- Shall stop work immediately if any unauthorised or unsupervised personnel enter his or her immediate work area
- Shall immediately turn off the engine if approached by any personnel and must remove keys from the ignition before leaving the plant unattended for any reason
- Must check for overhead obstructions and hazards
- Must mount and dismount his or her machine using fixed access arrangements and always facing the machine
- Seat belt must be worn at all times when in the cab
- Must operate the machine in accordance with the manufacturer's instructions and in accordance with his or her training
- Must report all unsafe conditions, must stop machine where defect is safety critical



PLANT & EQUIPMENT SPECIFICATION SHEET

MOBILE CRANE

All plant to be inspected prior to first use and the appropriate pre-start check sheet completed and daily recorded inspections thereafter. Inspection sheet to be available in cab and ideally visually displayed

Daily inspections records for site based operated plant to be displayed



MANDATORY

Crane Requirements

- Pre-use crane documentation form signed off
- CE certificate and Current Test certificate
- Current 12 monthly LOLER thorough examination certificate
- Current 6 monthly LOLER thorough examination certificate for all lifting tackle carried
- FOPS Cab structure
- Rated Capacity Indicator (RCI)
- Over hoist limit device installed
- Operation manual including load charts available with the machine on site
- Mirrors and camera - to satisfy current HSE interpretation of PUWER 98 Reg 28(e), i.e. all round visibility
- Safe access for refuelling, maintenance and to any place where accessories stored
- Completed Operator Daily/Weekly Checklist
- Flashing amber beacon
- Reversing alarm to be fitted working and audible
- Anemometer (over 50 tonne)
- Locking Door with keys provided
- Aircraft warning lights (if working within the vicinity of aerodromes)
- Slew, jib height and radius restrictors if working in the vicinity of overhead power lines, railways, adjacent live traffic, etc.
- Load bearing hydraulic cylinders fitted with check valves
- Protective mesh must be in place to side of cab on jib side if window is opening type
- Carrier hoisting and lowering ropes minimum diameter of 8mm
- Hook fitted with safety catch
- Fire extinguisher in cab
- Crane fitted with anemometer or other device to monitor in service wind speeds

Operator

- Lifting Plan and Permit to lift in place as applicable
- CPCS Card with category A60C – All Duties, A- Blocked Duty only, B - Pick and Carry Duties only
- Minimum of Cat C driving licence when unit over 7.5t GVW
- Valid medical certificate
- Competency assessment prior to being put to work
- Evidence of familiarisation training for type of crane to be operated
- Full induction attended prior to starting work
- Evidence of having signed on to the appropriate risk assessment for the task
- Compliance with Pre-use, and Defect Reporting System
- Full site-defined PPE required – Close fitting



PLANT & EQUIPMENT SPECIFICATION SHEET

- Current 6 monthly LOLER thorough examination
- Sectional / lightweight or circular outrigger pads if manually handled to reduce risk to personnel.

Man Riding Requirements

- Ability to restrict the working speed of all crane functions to 0.5m/s
- Control levers return to neutral automatically when released
- SWL of crane configuration in use is at least twice the rated capacity of the carrier
- Power lowering facility fitted to crane. If not, free- fall capability must be locked out

DESIRABLE

- Camera to be fitted to cathead to give operator clear view of load when blind lifting
- Fall restraint system fitted to boom for rigging super-lift
- Block stand to be provided when reeving rope into hook block whilst block is lying down
- Operator to have 3 years operating experience
- Means for operator to monitor hoist rope tension, e.g. camera or mirror
- Red, amber and green high level illumination to indicate crane working within safe limits

RISKS/CONTROLS

Significant Risks Identified when operating the machine and for those adjacent to machine:

- Safe and clean access into cab
- Safe and clean access for refuelling and maintenance, as well as to lifting equipment storage containers
- Plant and personnel segregation - no entry into exclusion zone unless signalled by operator
- Load path – slewing over site personnel
- Danger of crushing in slew zone
- Overturning if lifting duties exceeded, ground capable of withstanding imposed outrigger loadings, underground services
- Dropped loads – exclusion zone set up around the area of lifting operations, loads consisting of loose material/components to be containerised
- Reversing alarm audible at 10m
- Overhead obstructions – cables; bridges, power lines, telephone lines
- Jib clash – coordination with adjacent cranes, tall plant
- Public interface – working alongside – consider slew restrictors
- All round visibility tools fully operational
- Effect of weather on visibility and working/traffic surfaces
- Outrigger pads can be very heavy and awkward shapes. Assessment required in lifting plan.
- COSHH assessment for fuels, oils and greases

Note: All persons preparing risk assessments involving plant are encouraged to review previous risk assessments undertaken for similar activities and safety alerts



PLANT & EQUIPMENT SPECIFICATION SHEET

ROAD SWEEPER/COLLECTOR

All plant to be inspected prior to first use and the appropriate pre-start check sheet completed and daily recorded inspections thereafter. Daily inspection records for site based plant to be completed and displayed (Scafftag or similar system).

An induction must be attended prior to starting work and evidence of having signed on to the appropriate risk assessment for the task provided.



MANDATORY

Plant

- Chapter 8 compliant beacons, reflective chevrons and 'Highway/Motorway Maintenance' signage
- If used on public highway - compliance with C&U regulations (lights, VED, registration plates front & rear etc.)
- Current VED and Operator licence displayed in cab windscreen
- Current MOT plating certificate
- Evidence of regular inspection plus statement of hours to next service or next service due date
- Seat belts must be fitted and operational
- Mirrors/CCTV to satisfy 1m high at 1m distance visibility criteria
- Reversing alarm to be fitted working and audible
- Isolation switch with key
- Locking doors with key
- All safety labels (decals) in place
- The operator's manual must be present with the machine
- Safe access for refuelling, maintenance and to any place where accessories stored
- Dual gully brush and wide main brush
- Gully sucker and hand lance
- Fire extinguisher fitted in cab

Operator

- Shall be suitably trained and competent
- Daily inspection completed and signed
- Minimum of Cat C driving licence when unit over 7.5t GVW
- 'Authorisation to take Plant onto a Public Highway' form to be completed prior to driving on public highway (if site based)
- Full induction attended prior to starting work
- Evidence of having signed on to the appropriate risk assessment for the task
- Full site-defined PPE required
- Operator to be briefed on and to comply with Balfour Beatty Pre-use, Daily & Weekly Defect Reporting System. Report defects and stop machine where defect is safety critical (if site based)
- Shall stop work if any unauthorised/unsupervised personnel enter their immediate work area
- Operator to be TM trained in 'mobile works'
- Engine must be turned off if approached by others and keys removed from the ignition before leaving the plant unattended for any reason
- Be briefed on the site Plant and Vehicle Management procedures and check for overhead obstructions and hazards
- Operator to mount and dismount machine using fixed access arrangements and always facing the machine
- Seat belt must be worn
- Ensure machine is operated in accordance with manufactures instructions and in accordance with his/her training
- Shall report all unsafe conditions
- Drivers should be working towards the completion of a full CPCs driver's course within 2 years



DESIRABLE

- Reversing alarm to be directional and 'white noise'
- Complete people exclusion area around plant and operation
- GPS tracker unit installed
- Isolation method independent of factory fitted locks
- Locking caps/covers to fuel and all other tanks
- Base colour to be conspicuous as per Highways Agency chapter 8

RISKS/CONTROLS

- Safe and clean access into cab
- Safe and clean access for refuelling and maintenance
- No entry into exclusion zone unless signalled by operator
- Affect of weather on visibility and working/traffic surfaces
- Danger of flying debris during wash out of bin and filters or using hand lance
- Danger of crushing under un-propped body
- COSHH assessment for fuels, oils and greases
- Reversing alarm audible at 10m
- Plant and personnel segregation
- Public interface – working alongside
- All round visibility tools fully operational
- Overhead obstructions – cables, bridges etc
- Working in live traffic
- High pressure water jetting
- Controls should be secured so that unauthorised operation is effectively prevented when the machine is not in use

Note: All persons preparing risk assessments involving plant are encouraged to review previous risk assessments undertaken for similar activities and safety alerts



PLANT & EQUIPMENT SPECIFICATION SHEET

TELEHANDLER

All plant to be inspected prior to first use and the appropriate pre-start check sheet completed and daily recorded inspections thereafter. Daily inspection records for site based plant to be completed and displayed (Scafftag or similar system).

A full induction must be attended prior to starting work and evidence of having signed on to the appropriate risk assessment for the task provided.



MANDATORY

Plant

- If used on public highway - compliance with C&U regulations (lights, VED, registration plates front & rear etc.)
- Current 12 monthly LOLER thorough examination certificate
- Current 6-monthly LOLER certification for all onboard lifting tackle and accessories
- Lifting duty chart to be displayed or available in the cab
- Functional Rated Capacity Indicator (RCI) and Rated Capacity Limiter (RCL)
- Evidence of regular inspection plus statement of hours to next service or next service due date
- ROPS and FOPS safety cab
- Seat belts must be fitted and operational
- Flashing amber beacon
- Mirrors/CCTV to satisfy 1m high at 1m distance visibility criteria
- Reversing alarm to be fitted, working and audible
- Forks to be folded/secured if travelling on public highway
- Isolation switch with key
- Locking doors with key
- All safety labels (decals) in place
- The operators manual must be present with the machine
- Safe access for refuelling, maintenance and to any place where accessories are stored
- If lifting from forks (underslinging) proper attachments must be fixed with heel pins (not T screws) and have specific lift plan
- No materials including lifting tackle to be stored beneath the boom
- Boom ram lock facility must be provided with the machine

Operator

- Shall be suitably trained and competent Operator – CPCS Card – Category A17 with suitable endorsement for size/slew etc.
- If using a fly-jib attachment with a rotating jib/turret telehandler, the operator must have a Mobile Crane CPCS Card – category A60 with suitable endorsement for use (A/B/C)
- Must have a current relevant driving licence (Category B) if driving on the public highway
- ‘Authorisation to take Plant onto a Public Highway’ form to be completed prior to driving on public highway
- Full site-defined PPE required - close fitting PPE required in all cases to avoid catching on controls
- Ensure machine is operated in accordance with manufactures instructions and in accordance with his/her training
- Operator to be briefed on and to comply with Balfour Beatty Pre-use, Daily & Weekly Defect Reporting System. Report defects and stop machine where defect is safety critical
- Shall stop work if any unauthorised/unsupervised personnel enter their immediate work area
- Competency assessment prior to being put to work – be familiar with machine
- Machine levelling devices must be used in all cases if fitted
- Engine must be turned off if approached by others and keys removed from the ignition before leaving the plant unattended for any reason
- Must comply with the requirements of the site lift plan
- Must know the weights of the loads before lifting
- Be briefed on the site Plant and Vehicle Management



PLANT & EQUIPMENT SPECIFICATION SHEET

- Protective mesh must be in place to jib side of cab if window is opening type
- Fire extinguisher fitted in cab
- procedures and check for overhead obstructions and hazards
- Operator must ensure the boom is carried at a safe level at all times in accordance with manufactures recommendations
- Operator to mount and dismount machine using fixed access arrangements and always facing the machine
- Check for ground conditions prior to lifting and must consider using stabilisers where appropriate
- All site speed limits must be briefed and complied with
- Competent to check Rated Capacity Indicator (RCI)
- Shall report all unsafe conditions
- Seat belt must be worn

DESIRABLE

- Reversing alarm to be directional 'white noise'
- Complete people exclusion area around plant and operation
- GPS tracker unit installed
- Isolation method independent of factory fitted locks
- Locking caps/covers to fuel and all other tanks
- Tyre pressure indicators
- When used for lifting a list of weights of potential items to be lifted should be maintained
- Quarry spec light to indicate when seat belt worn
- Safety lever will not engage until the seatbelt is connected
- Coloured seat belts to improve visibility
- Boom angle indicator
- Wheel nut indicators fitted

RISKS/CONTROLS

Significant Risks Identified when operating the machine and for those adjacent to machine:

- Safe and clean access into cab & for refuelling
- No entry into exclusion zone unless signalled by operator
- Overturning if lifting duties exceeded, used on incline, uneven ground or travelling at speed
- Loose clothing snagging on controls
- Effect of weather on visibility and working/traffic surfaces
- COSHH assessment for fuels, oils and greases
- Reversing alarm audible at 10m
- Plant and personnel segregation
- Overhead obstructions – cables, bridges etc
- Public interface – working alongside
- All round visibility tools fully operational
- Transportation including loading/unloading
- Controls should be secured so that unauthorised operation is effectively prevented when the machine is not in use

Note: All persons preparing risk assessments involving plant are encouraged to review previous risk assessments undertaken for similar activities and safety alerts



PLANT & EQUIPMENT SPECIFICATION SHEET

TIPPER RIGID OR ARTICULATED

This Plant and Equipment Specification Sheet does not cover Transit-type pickups. All plant to be inspected prior to first use and the appropriate pre-start check sheet completed and daily recorded inspections thereafter. Daily inspection records for site based plant to be completed and displayed (Scafftag or similar system).

A full induction must be attended prior to starting work and evidence of having signed on to the appropriate risk assessment for the task provided.



MANDATORY

Plant

- Chapter 8 compliant beacons, reflective chevrons and 'Highway/Motorway Maintenance' signage
- If used on public highway - compliance with C&U regulations (lights, VED, registration plates front & rear etc.)
- Current VED and Operator licence displayed in cab windscreen
- Current VED and Operator licence displayed in cab windscreen
- Current MOT plating certificate
- Evidence of regular inspection plus statement of hours to next service or next service due date
- Seat belts must be fitted and operational
- Mirrors/CCTV to satisfy 1m high at 1m distance visibility criteria
- Reversing alarm to be fitted, working and audible
- SIMRET brake testing for all non-licensed tippers (site based tippers). Records to be maintained. Note - In situations where it is not feasible to carry out SIMRET brake testing, a weekly ramp/brake test must be conducted
- Isolation switch with key
- All safety labels (decals) in place
- The operators manual must be present with the machine
- Safe access for refuelling, maintenance and to any place where accessories stored
- Tipping linkage – must have no excessive play
- All ancillary equipment and tools to be secured when tipping
- Automated operation for tailgate.
- Fire extinguisher fitted in cab

Operator

- Shall be suitably trained and competent
- Minimum of Cat C driving licence when unit over 7.5t GVW
- Operator to be briefed on and to comply with Balfour Beatty Pre-use, Daily & Weekly Defect Reporting System. Report defects and stop machine where defect is safety critical (site based plant)
- Full site-defined PPE required – close fitting PPE required in all cases to avoid catching on controls
- Shall stop work if any unauthorised/ unsupervised personnel enter their immediate work area
- Competency assessment prior to being put to work – be familiar with machine
- Body is not to be tipped while on the move
- Engine must be turned off if approached by others and keys removed from the ignition before leaving the plant unattended for any reason
- Be briefed on the site Plant and Vehicle Management procedures and check for overhead obstructions and hazards
- Operator to mount and dismount machine using fixed access arrangements and always facing the machine
- All site speed limits must be briefed and complied with
- Seat belt must be worn
- Ensure machine is operated in accordance with manufactures instructions and in accordance with his/her training
- Shall report all unsafe conditions
- Tailgate should be released and locked open, or completely removed, before tipping starts
- Operator must ensure that no pedestrians are in the vicinity of the machine when tipping



DESIRABLE

- Reversing alarm to be directional and 'white noise'
- Complete people exclusion area around plant and operation
- GPS tracker unit installed
- Isolation method independent of factory fitted locks
- Locking caps/covers to fuel and all other tanks
- Tipper body up alarm in cab
- Coloured seat belts improve visibility
- Inclinometer safety stops on articulated tipping body
- Safety system for avoiding cyclists in urban conditions (as mandated in Crossrail 2012)
- All tippers to have automatic sheeting
- Quarry spec light to indicate when seat belt worn
- Safety lever will not engage until the seatbelt is connected

RISKS/CONTROLS

Significant Risks Identified when operating the machine and for those adjacent to machine:

- A clear exclusion zone around the operating area – Danger of crushing from the plant overturning, the articulation area and under un-propped body
- No entry into exclusion zone unless signalled by operator
- High risk of overturning at speed and on inclines. Refer to manufacturers instructions
- Overhead obstructions – electric cables, power lines, phone lines, etc
- Do not demount the cab when near heavy plant particularly dozers
- Reversing alarm audible at 10m
- Public interface – working alongside
- All round visibility tools fully operational
- Effect of weather on visibility and working/traffic surfaces
- COSHH assessment for fuels, oils and greases
- Articulated tippers not to be supplied unless prior approval granted and additional control procedure and risk assessment applied
- Falls from height when sheeting
- Controls should be secured so that unauthorised operation is effectively prevented when the machine is not in use

Note: All persons preparing risk assessments involving plant are encouraged to review previous risk assessments undertaken for similar activities and safety alerts



PLANT & EQUIPMENT SPECIFICATION SHEET

TIPPER RIGID OR ARTICULATED - DELIVERIES & COLLECTIONS ONLY

This Specification Sheet covers Tipper, Rigid or Articulated Lorries undertaking deliveries or collections only. It does not cover Transit-type pickups.

A project specific Visitors Induction will be required prior to commencing deliveries or collections on site.



MANDATORY

Plant

- Appropriate Daily Inspection sheets must be available in cab and visually displayed
- When delivering into traffic controlled areas, Chapter 8 compliant beacons, reflective chevrons and 'Highway or Motorway Maintenance' signage (as appropriate) must be in use
- Current VED and Operator licence must be displayed in cab windscreen
- If used on public highways, must be compliant with C&U regulations
- Current MOT plating certificate must be displayed in cab windscreen
- Evidence of regular inspection plus statement of hours to next service or next service due date must be available in the cab
- Seat belts must be fitted and the operator must use at all times when in the cab
- Mirrors and CCTV to satisfy 1m high at 1m distance visibility criteria must be fitted and in good working order
- A reversing alarm must be fitted; must be in working order and must be loud and distinct enough that it does not become part of the background noise
- Doors must be lockable with keys available
- All safety labels (decals) in place
- The operators manual must be available at all times in the cab
- There must be safe access for refuelling, maintenance and to any place where accessories are stored
- The tipping linkage must have no excessive play
- All ancillary equipment and tools must be secured when tipping
- The tailgate must have automated operation.

Operator

- Must be suitably trained and competent
- Shall have a minimum of Cat C driving licence when the unit is over 7.5t GVW
- Shall wear site defined PPE at all times as the vehicle enters the site, this shall be close fitting to avoid catching any controls
- Shall stop work immediately if any unauthorised or unsupervised personnel enter his or her immediate work area
- The load must not to be tipped whilst the vehicle is on the move
- Shall immediately turn off the engine if approached by any personnel and must remove keys from the ignition before leaving the plant unattended for any reason
- Must check for overhead obstructions and hazards
- Must mount and dismount his or her machine using fixed access arrangements and always facing the machine
- Shall ensure he or she is briefed of the site speed limits, and these will be complied with at all times
- Seat belt must be worn at all times when the operator is in the cab
- Must operate machine in accordance with the manufacturer's instructions and in accordance with his or her training
- Must report all unsafe conditions, must stop machine where defect is safety critical
- The Operator shall ensure the tailgate is released and locked open, or completely removed, before tipping commences
- Must ensure that no pedestrians are in the vicinity of the machine when tipping



PLANT & EQUIPMENT SPECIFICATION SHEET

TOWER CRANE

All plant & lifting equipment to be inspected prior to first use and the appropriate pre-start check sheet completed and daily recorded inspections thereafter



MANDATORY

Crane Requirements

- Must comply with BB Group SHE Standard 003 – Safe Operation of Tower Cranes and BB Group Manual for Tower Crane Procurement and Operation (MTCPO)
- CE Certificate
- Proof & Overload test on installation
- Current 12 monthly LOLER thorough examination certificate
- Current 6 monthly LOLER thorough examination certificate for all lifting tackle carried
- Rated Capacity Indicator (RCI)
- Operation manual available on site
- Jib Head/Trolley Camera on sites with blind lifting issues
- Anti-collision/Zoning system on multi-crane sites or sites which oversail public property
- Mast lighting particularly where the mast is situated in a court yard/lift shaft
- Anemometer
- Door lock keys provided
- Aircraft warning lights (if working within the vicinity of aerodromes)
- Access Ladder Trap Door and Tower Anti Climb Fan
- Operator/Maintenance Worker Emergency Rescue Kit
- Pre-erection inspection approval certificate

Operator

- Must comply with BB Group SHE Standard 003 – Safe Operation of Tower Cranes and BB Group Manual for Tower Crane Procurement and Operation (MTCPO)
- Daily inspection signed off (crane hire company specific form as a min MTCPO 4.3.1)
- CPCS Card with category of crane to be operated A04A – Trolley Jib, A04B – Lifting Jib, A63 – Self Erectors
- Full induction attended prior to starting work
- Evidence of having signed on to the appropriate risk assessment for the task
- Full site-defined PPE required
- Compliance with Pre Use, Daily & Weekly Defect Reporting System
- Competency assessment prior to being put to work – Evidence of familiarisation training for type of crane to be operated
- Medical Certificate – renewal dates as per guidelines in MTCPO section 4.3.5.1
- All new Appointed Persons and all relevant crane personnel involved in planning to attend BBPFS 1 day Tower Crane Appreciation Course or equivalent
- Previous operating experience with anti-collision systems when working on multi crane sites



PLANT & EQUIPMENT SPECIFICATION SHEET

Man Riding Requirements

- Current 6 monthly LOLER thorough examination certificate for the crane
- Ability to restrict the working speed of all crane functions to 0.5m/s
- Control levers return to neutral automatically when released
- SWL of crane configuration in use is at least twice the rated capacity of the carrier
- Power lowering facility fitted to crane. If not, free-fall capability must be locked out
- Load bearing hydraulic cylinders fitted with check valves
- Carrier hoisting & lowering ropes minimum diameter of 8mm
- Hook fitted with safety catch
- Crane fitted with anemometer or other device to monitor in service wind speeds

Refer to BS7121 -1:2006 for further guidance

DESIRABLE

- Trolley and jib cameras fitted
- Hands-free radio communication for slinger/signalers.
- Enhanced welfare facilities in cabs such as drinking water, window sunscreens, air conditioning – where appropriate
- Operator to have 3 years operating experience

RISKS/CONTROLS

Significant Risks Identified when operating the machine and for those adjacent to machine:

- Dropped loads – exclusion zone set up around the area of lifting operations, loads consisting of loose material/components to be containerised
- Overturning – SWL not to be exceeded, strict maintenance regime, crane to be operated in accordance with manufacturers instructions
- Base failure – Base designed, checked and constructed in accordance with relevant loadings and BBMCE Temporary works procedures, ground capable of withstanding imposed loads, weekly checks of base in service
- Loads oversailing public property – zoning system to be fitted where this is an issue
- Jib clash – co-ordination with adjacent cranes, tall plant, concrete pump booms, buildings, power lines
- Trespass – Robust base enclosures, to remain locked at all times
- Load Path – slewing over site personnel
- Stricken Operator/Maintenance Worker – an emergency recovery procedure to be developed and implemented by site with trained personnel available

Note: All persons preparing risk assessments involving plant are encouraged to review previous risk assessments undertaken for similar activities and safety alerts



PLANT & EQUIPMENT SPECIFICATION SHEET

TRACKED 360° EXCAVATOR

All plant to be inspected prior to first use and the appropriate pre-start check sheet completed and daily recorded inspections thereafter. Inspection sheet to be available in cab and ideally visually displayed

Daily inspections records for site based operated plant to be displayed.



MANDATORY

Plant

- Pre-use inspection signed off
- 12 month thorough examination
- Protected cab or FOPS cab structure where risk of falling objects
- Seat belts must be fitted
- Mirrors/CCTV to satisfy 1m high at 1m distance visibility criteria
- Flashing amber beacon
- Evidence of regular inspection plus “next service due” date
- Safe access for refuelling and maintenance
- Operators instructions must be available on the machine
- All safety labels (decals) in place
- Fire extinguisher in cab
- Handrails on body where access required
- Track direction indicator
- **Unless demonstrated that it will not be used for lifting:**
 - 6 Month thorough examination on lifting accessories
 - Certified lifting point required for all lifting duties
 - Safe Load Indicator or Rated Capacity Indicator
 - When using a lifting eye, a swivel hook must be used to ensure load can be manoeuvred without risk of swinging back or overloading
 - SWL to be clearly marked
 - A machine specific lifting duty sheet, lift plan and risk assessment
 - Check valves must be fitted to excavators boom and dipper circuits
- **If Quick hitch fitted:**
 - Must comply with BB Group SHE Standard 002 – Safe Use of Quick Hitch Devices

Operator

- Daily inspection signed off
- Correct CPCS card category
- Full induction attended prior to starting work
- Evidence of having signed on to the appropriate risk assessment for the task
- Operator to ensure that buckets are carried safely at all times
- All hoses to be inspected regularly
- Full site-defined PPE must be worn – close fitting
- Compliance with Pre-use, and Defect Reporting System
- Competency assessment prior to being put to work – be familiar with machine
- Do not break ground unless briefed on, received and fully understood a Permit to Break Ground
- Seat belt must be worn
- Engine must be turned off if approached by others and keys removed from the cab before leaving the cab unattended for any reason
- **If Quick hitch fitted:**
 - Be briefed on “Safe Use of Quick Hitches”
 - Operator shall be trained in how to use specific quick hitch attachments
- Daily inspection signed off
- **If used for lifting:**
 - Lift plan and/or Permit to lift must be briefed and understood
 - Operator shall be trained in how to use specific lifting attachments
 - CPCS card category A58A (<10t) / A59A (>10t)



PLANT & EQUIPMENT SPECIFICATION SHEET

- Must be automatic double locking
- Have an in-cab warning alarm
- Copy of Manufacturers Operating Instructions
- Pre-use inspection signed off
- **If used under overhead cables or obstruction:**
 - Height restrictors with indication on machine
 - HSE GS6 "Avoidance of danger from overhead electric power lines" must be followed

DESIRABLE

- Tracker unit, isolation method independent of factory fitted locks, locking caps/covers to fuel and all other tanks
- Complete people exclusion area around plant and operation
- Zero Tail swing ballast/counterweight
- Reversing alarm to be fitted working and audible
- Quarry spec light to indicate when seat belt worn. Some machines have also been wired so that safety lever will not engage until the seatbelt is connected. Coloured seat belts improve visibility
- ROPS cab structure
- When used for lifting, a list of weights of potential items to be lifted should be maintained

RISKS/CONTROLS

- Safe and clean access into cab
- Safe and clean access for refuelling and maintenance
- No entry into exclusion zone unless signalled by operator
- Danger of crushing in slew zone. Use of CCTV or other proximity devices should be considered when planning activities
- Overturning if lifting duties exceeded
- Consider risk of accessories – e.g. hammer
- Clothes snagged on controls prior to release of servo isolator/safety handle
- Controls can be caught inadvertently if near to safety lever
- Effect of weather on visibility and working/traffic surfaces
- COSHH assessment for fuels, oils and greases
- Operator to ensure buckets are carried and secured safely when travelling or being transported
- Reversing alarm audible at 10m
- Plant and personnel segregation
- Overhead obstructions – cables; bridges
- Public interface – working alongside – consider slew restrictors
- Underground services – display Permit to Break Ground
- All round visibility equipment fully operational
- Transportation including loading/unloading
- Large machines 45t plus competent operator required to extend/withdraw tracks for transportation

Note: All persons preparing risk assessments involving plant are encouraged to review previous risk assessments undertaken for similar activities and safety alerts



PLANT & EQUIPMENT SPECIFICATION SHEET

TRACKED DOZER

All plant to be inspected prior to first use and the appropriate pre-start check sheet completed and daily recorded inspections thereafter.

Because of the particular hazard of this item of plant with pedestrians all areas of operation must be segregated from personnel unless a specific risk assessment is undertaken. Operators must stop their machine if any person including dumper/tipper drivers dismount cabs in worksite



MANDATORY

Plant

- Pre-use inspection signed off
- Reversing alarm to be fitted working and audible
- Seat belts must be fitted
- Mirrors/CCTV to satisfy 1m high at 1m distance visibility criteria
- Flashing amber beacon
- Evidence of regular inspection plus 'next service due' date
- All safety labels (decals) in place
- If Winch fitted:
- Associated lifting gear to have current 6 monthly thorough examination record
- Fire extinguisher in cab

Operator

- Daily inspection signed off
- CPCS card category A34
- Full induction attended prior to starting
- Evidence of having signed on to the appropriate risk assessment for the task
- Full site-defined PPE required – none loose fitting
- Compliance with Pre-use, daily & weekly defect reporting system
- Competency assessment prior to being put to work – be familiar with machine
- Do not break ground unless briefed on, received and fully understood a Permit to Break Ground
- Seat belt must be worn

DESIRABLE

- Complete people exclusion area around plant and operation
- Reversing alarm to be directional and 'white noise'
- Tracker unit, isolation method independent of factory fitted locks, locking caps/covers to fuel and all other tanks
- Track adjustment particularly slackening by trained personnel only with appropriate tools and PPE
- Two-way radio system to communicate with operator
- Coloured card system for operator to acknowledge presence of other persons or vehicles
- Protected cab or FOPS where risk of falling debris
- Proximity detection system
- GPS controls for blade as this will reduce the need for people on the ground surveying

RISKS/CONTROLS

- Avoid any personnel on the ground when operating a dozer. This includes dumper drivers and tipper drivers
- Safe and clean access into cab
- Safe and clean access for refuelling
- Reversing alarm audible at 10m
- Plant and personnel segregation
- Public interface – working alongside
- Underground services – display Permit to Break Ground



PLANT & EQUIPMENT SPECIFICATION SHEET

- No entry into exclusion zone unless signalled by operator
- Consider risk of towed items – e.g. roller
- Speed of machine movement – consider need for or position of vehicle marshal
- Clothes snagged on controls prior to release of servo isolator/safety handle
- COSHH assessment for fuels, oils and greases
- All round visibility tools fully operational
- Effect of weather on visibility and working/traffic surfaces

Note: All persons preparing risk assessments involving plant are encouraged to review previous risk assessments undertaken for similar activities and safety alerts



PLANT & EQUIPMENT SPECIFICATION SHEET

WHEELED 360° EXCAVATOR

All Plant to be inspected prior to first use and the appropriate pre-start checks sheet completed and daily recorded inspections thereafter.

Daily inspection records for site based plant to be completed and displayed (Scafftag or similar system).

A full induction must be attended prior to starting work and evidence of having signed on to the appropriate risk assessment for the task provided.



MANDATORY

Plant

- If used on public highway - compliance with C&U regulations (lights, VED, registration plates front & rear etc.)
- Current 12 monthly LOLER thorough examination certificate
- Evidence of regular inspection plus statement of hours to next service or next service due date
- Cab guards and/or FOPS cab structure where there is a risk of falling objects
- Seat belts must be fitted and operational
- Flashing amber beacon
- Mirrors/CCTV to satisfy 1m high at 1m distance visibility criteria
- Isolation switch with key
- Locking doors with key
- All safety labels (decals) in place
- The operators manual must be present with the machine
- Safe access for refuelling, maintenance and to any place where accessories are stored
- Handrails on body where access required
- Fire extinguisher in cab
- Correct tyre pressure
- **Unless demonstrated that it will not be used for lifting:**
 - 6 month thorough examination on lifting accessories
 - Safe Load Indicator or Rated Capacity Indicator
 - When using a lifting eye, a swivel hook must be used to ensure load can be manoeuvred without risk of swinging back or overloading
 - Certified lifting point required for all lifting duties
 - Hydraulic check valves must be fitted to excavator

Operator

- Shall be suitably trained and competent
- Correct CPCS card category
- Ensure machine is operated in accordance with manufactures instructions and in accordance with his/her training
- Shall report all unsafe conditions
- Must have a current relevant driving licence (Category B) if driving on the public highway
- Operator to ensure that buckets are carried safely at all times
- 'Authorisation to take Plant onto a Public Highway' form to be completed prior to driving on public highway
- Full site-defined PPE required - none loose fitting PPE required in all cases to avoid catching on controls
- Operator to be briefed on and to comply with Balfour Beatty Pre-use, Daily & Weekly Defect Reporting System. Report defects and stop machine where defect is safety critical
- Shall stop work if any unauthorised/unsupervised personnel enter their immediate work area
- Competency assessment prior to being put to work – be familiar with machine
- Do not break ground unless briefed on, have received and fully understood a Permit to Break Ground
- Engine must be turned off if approached by others and keys removed from the ignition before leaving the plant unattended for any reason
- Be briefed on the site Plant and Vehicle Management procedures and check for overhead obstructions and hazards
- Operator to mount and dismount machine using fixed



PLANT & EQUIPMENT SPECIFICATION SHEET

- boom circuit
- SWL to be clearly marked
- A machine specific lifting duty sheet, lift plan and risk assessment
- **If quick hitch fitted:**
 - Must comply with BB Group SHE Standard 002 – Safe Use of Quick Hitch Devices
 - Must be automatic double locking – Fully manual acceptable until December 31st 2012
 - Have an in-cab warning alarm
 - Copy of manufacturers operating instructions
 - Pre-use inspection signed off
- **If used under overhead cables or obstruction:**
 - Height restrictors with indication on machine
 - HSE GS6 'Avoidance of danger from overhead electric power lines' must be followed
- access arrangements and always facing the machine
- All hoses to be inspected regularly
- Must comply with the requirements of the site lift plan
- Must know the weights of the loads before lifting
- Seat belt must be worn
- **If quick hitch fitted:**
 - Be briefed on 'Safe Use of Quick Hitches'
 - Operator shall be trained in how to use specific quick hitch attachments
 - Daily inspection signed off
- **If used for lifting:**
 - Lift plan and/or Permit to Lift must be briefed and understood
 - Operator shall be trained in how to use specific lifting attachments
 - CPCS card category A58B (<10t) / A59B (>10t)

DESIRABLE

- Complete people exclusion area around plant and operation
- GPS tracker unit installed
- Isolation method independent of factory fitted locks
- Locking caps/covers to fuel and all other tanks
- ROPS cab structure
- When used for lifting a list of weights of potential items to be lifted should be maintained
- Proximity detection sensors to be fitted and operational
- Fire extinguisher fitted in cab
- Quarry spec light to indicate when seat belt worn
- Method for preventing unintentional operation of the controls
- Coloured seat belts improve visibility
- Check valves must be fitted to excavators dipper circuit
- Zero tail swing ballast/counterweight
- System to prevent operation at speed in reverse
- Hydraulic rams on engine compartment covers to prevent slamming

RISKS/CONTROLS

- Safe and clean access into cab
- Safe and clean access for refuelling
- No entry into exclusion zone unless signalled by operator
- Danger of crushing in slew zone. Use of CCTV or other proximity devices should be considered when planning activities
- Overturning if lifting duties exceeded
- Consider risk of accessories – e.g. hammer
- Clothes snagged on controls prior to release of servo isolator/safety handle
- Effect of weather on visibility and working/traffic surfaces
- COSHH assessment for fuels, oils and greases
- Operator to ensure buckets are carried and secured safely when travelling or being transported
- Plant and personnel segregation
- Overhead obstructions – cables, bridges etc
- Public interface – working alongside – consider slew restrictors
- Underground services – display Permit to Break Ground
- All round visibility tools fully operational
- Transportation including loading/unloading
- Controls should be secured so that unauthorised operation is effectively prevented when the machine is not in use

Note: All persons preparing risk assessments involving plant are encouraged to review previous risk assessments undertaken for similar activities and safety alerts



PLANT & EQUIPMENT SPECIFICATION SHEET

MOBILE CRUSHING PLANT

All Plant to be inspected prior to first use and the appropriate pre-start checks sheet completed and daily recorded inspections thereafter.

Daily inspection records for site based plant to be completed and displayed (Scafftag or similar system).

A full induction must be attended prior to starting work and evidence of having signed on to the appropriate risk assessment for the task provided.



MANDATORY

Plant

- Evidence of regular inspection plus statement of hours to next service or next service due date
- Isolation switch with key
- All safety labels (decals) in place
- The operators manual must be present with the machine
- All exposed, contactable, moving parts guarded
- Main control panel lockable by multi locking arrangement to facilitate safe maintenance
- Emergency stop controls to be available at various locations round the machine
- Trip wires required along conveyor at any sections not fully shrouded
- Guards to be fitted with interlocking switches to prevent operation with guards removed
- Plant to be operated from a remote location by remote control
- Ramp to loading hopper to be effectively bunded
- Physical exclusion, e.g. 2m high Heras panels to be erected around the crushing area
- Working platforms on machine, for maintenance and inspection, in good order, edge protection intact
- All control functions clearly marked, machine and remote control
- Procedure for clearing blockages from the hopper, which does not require a person to enter the hopper - to be in place. Power must be switched off and isolated if any tools are to be used to dislodge material
- Water bar fitted and operational
- Safe access for refuelling, maintenance and to any place where accessories are stored

Operator

- Shall be suitably trained and competent
- CPCS card, A42*
- Ensure machine is operated in accordance with manufactures instructions and in accordance with his/her training
- Shall report all unsafe conditions
- Full site-defined PPE required - close fitting PPE required in all cases to avoid catching on controls
- Operator to be briefed on and to comply with Balfour Beatty Pre-use, Daily & Weekly Defect Reporting System. Report defects and stop machine where defect is safety critical
- Shall stop work if any unauthorised/unsupervised personnel enter their immediate work area
- Record of familiarisation training for particular machine
- Engine must be turned off if approached by others and keys removed from the ignition before leaving the plant unattended for any reason
- Be briefed on the site Plant and Vehicle Management procedures and check for overhead obstructions and hazards
- Operator to mount and dismount machine using fixed access arrangements and always facing the machine
- No access to crusher when operational
- * Crusher operation is often carried out by machine operator, wheeled loader or excavator operator all of whom will be required to be in possession of the relevant competency for that machine



DESIRABLE

- Hydraulic rams on engine compartment covers to prevent slamming
- Motion alarms for tracking to be fitted and operational
- Water mist dust suppression, rather than directional jets
- Breaker/pecker mounted on machine to deal with hopper blockages, operated remotely

RISKS/CONTROLS

- No personnel on the ground within the exclusion zone when crusher operational or loading machines working
- Clear signage in place
- Dust – suppression kit available to damp down stockpiles or roadways in addition to arrangements on plant
- Extended exclusion zone required when magnet ejector in use e.g. crushing demolition waste
- Operator to have access to an elevated viewing position e.g. seat of loading machine to assess from a place of safety, any blockage to the jaws.
- Clear lines of communication and hierarchical controls in place for interfaced activities e.g. drilling and blasting in a quarry environment.
- Noise – exclusion zones to take account of noise action levels
- Risk from ejected material
- Maintain material stockpiles at manageable heights and restrict pedestrian access
- Maintain berms on loading ramps to prevent loading machine from driving/sliding down ramp.
- Clear any accumulated waste from platforms and area around the machine before carrying out maintenance/blockage clearance operation
- Ensure proper means of communication are available for emergency situations e.g. phones, radios etc. N.B. Crushing operations are often carried out in remote locations - quarries, borrow pits etc.
- Controls should be secured so that unauthorised operation is effectively prevented when the machine is not in use

Note: When preparing or reviewing Method statements or risk assessments reference should be made to the guidance in ProCEL, Technical Indexes and the HSE web site to ensure the latest standards are applied



PLANT & EQUIPMENT SPECIFICATION SHEET

RIDE ON COMPACT ROLLER

All Plant to be inspected prior to first use and the appropriate pre-start checks sheet completed and daily recorded inspections thereafter. Daily inspection records for site based plant to be completed and displayed (Scafftag or similar system)

A full induction must be attended prior to starting work and evidence of having signed on to the appropriate risk assessment for the task provided.



MANDATORY

Plant

- If used on public highway - compliance with C&U regulations (lights, VED, registration plates front & rear etc.)
- Evidence of regular inspection plus statement of hours to next service or next service due date
- Cab guards and/or FOPS cab structure where there is a risk of falling objects
- ROPS (cab structure or roll-bar)
- Seat belts must be fitted and operational
- Flashing amber beacon
- Mirrors/CCTV to satisfy 1m high at 1m distance visibility criteria
- Reversing alarm to be fitted working and audible
- Isolation switch with key
- All safety labels (decals) in place
- The operators manual must be present with the machine
- Fire extinguisher in cab
- A clear safety zone around the operating areas
- Safe access for refuelling, maintenance and to any place where accessories are stored
- Locking doors with key (if fitted with cab)
- Fire extinguisher in cab

Operator

- Shall be suitably trained and competent
- CPC or similar approved card – Category A31
- Ensure machine is operated in accordance with manufactures instructions and in accordance with his/her training
- Shall report all unsafe conditions
- Must have a current relevant driving licence (Category B and G) if driving on the public highway
- Evidence of having signed on to the appropriate risk assessment for the task
- Full site-defined PPE required - close fitting PPE required in all cases to avoid catching on controls
- Operator to be briefed on and to comply with Balfour Beatty Pre-use, Daily & Weekly Defect Reporting System. Report defects and stop machine where defect is safety critical
- Shall stop work if any unauthorised/unsupervised personnel enter their immediate work area
- Engine must be turned off if approached by others and keys removed from the ignition before leaving the plant unattended for any reason
- Be briefed on the site Plant and Vehicle Management procedures and check for overhead obstructions and hazards
- Operator to mount and dismount machine using fixed access arrangements and always facing the machine
- Seat belt must be worn
- 'Safety Critical' worker medical



DESIRABLE

- Reversing alarm to be directional and 'white noise'
- Complete people exclusion area around plant and operation
- GPS tracker unit installed
- Isolation method independent of factory fitted locks
- Locking caps/covers to fuel and all other tanks
- Quarry spec light to indicate when seat belt worn
- Controls will not engage until the seatbelt is connected
- Coloured seat belts improve visibility
- Whole body vibration monitoring
- Competency test prior to starting on site
- Under seat, starter isolator, pressure switch
- Locking caps/covers

RISKS/CONTROLS

Significant Risks Identified when operating the machine and for those adjacent to machine:

- Safe and clean access into cab
- Safe and clean access for refuelling
- No entry into exclusion zone unless signalled by operator
- Loose clothing snagging on controls
- Effect of weather on visibility and working/traffic surfaces
- COSHH assessment for fuels, oils and greases • Reversing alarm audible at 10m
- Plant and personnel segregation
- Overhead obstructions – cables, bridges etc
- Public interface
- All round visibility tools fully operational
- Transportation including loading/unloading
- Significant risk of crushing
- Controls should be secured so that unauthorised operation is effectively prevented when the machine is not in use

Note: All persons preparing risk assessments involving plant are encouraged to review previous risk assessments undertaken for similar activities and safety alerts



PLANT & EQUIPMENT SPECIFICATION SHEET

WHEELED LOADING SHOVEL

All plant to be inspected prior to first use and the appropriate pre-start checks and daily inspections must be completed and recorded thereafter

Daily inspections records for site based operated plant to be displayed



MANDATORY

Plant

- Pre-use inspection signed off
- Flashing amber beacon
- Safe access for refuelling and maintenance
- White reversing light and audible reversing alarm.
- Functioning seat belt
- Locking caps/covers
- Power isolation switch with key
- All safety labels (decals) in place
- Operating/maintenance instructions available with the machine
- On public highway - taxed and registered
- Current 12 month LOLER thorough examination certificate.
- Brake tests to be carried out and records provided
- Current 6 month LOLER certification for all on- board lifting tackle or handling attachments
- Lifting duty chart displayed on boom or in cab
- 360° vision must be assessed. Must be achieved by mirrors as a minimum
- Articulation lock must be fitted and operational
- Fire extinguisher in cab

Operator

- Operators must hold a CPCS Card with category A21 along with the appropriate endorsement
- Operator must have a current relevant driving licence (Category B) if driving on the public highway and be a minimum of 18 years of age
- Appropriate mandatory PPE to be worn
- Operator to be briefed and to comply with Balfour Beatty Pre-use, Daily & Weekly Defect Reporting System
- 'Authorisation to take Plant onto a Public Highway' form to be completed prior to driving on public highway
- All site speed limits must be briefed and complied with
- Operator to receive full site induction prior to commencing work
- A record of familiarisation training on particular model of plant must be kept.
- Machine lifting points/tie down points must be clearly labelled and in good condition

DESIRABLE

- Dependant on size of machine a visibility assessment must be carried out (Red Stick Test) and a record kept. CCTV may be required
- Competency test prior to starting on site
- Have passed D&A test on induction or within 2 years on BB CSUK site



RISKS/CONTROLS

- Safe and clean access into cab
- Safe and clean access for refuelling and maintenance
- People and plant moving into the loading shovel's operating areas
- Visibility may be restricted for operators on larger machines
- Limited visibility if travelling with the bucket raised to high
- Risk of overturning on inclines, soft and uneven surfaces. Refer to manufacturers instructions
- Closing door trapping the operators hand or fingers. The door must be closed when the machine is operating to prevent accidental closure
- Reversing alarm audible at 10m
- Pedestrians must not approach the machine unless the operator is aware and has signalled for you to approach.
- People accessing and alighting the machine must use the correct steps, have three points of contact and face the machine
- Operator falling from the machine when mounting or dismounting. Hand rails and steps must be secure; three points of contact maintained and operator must face the machine
- Automatic Braking Systems are available which stop the machine if obstruction detected
- COSHH assessment for fuels, oils and greases

Note: All persons preparing risk assessments involving plant are encouraged to review previous risk assessments undertaken for similar activities and safety alerts



PLANT & EQUIPMENT SPECIFICATION SHEET

PLANT ACCESSORIES AND ATTACHMENTS

This specification is intended to be used with accessories manufactured by a different organisation to the host item of plant. These can create situations of particular hazard as specific instructions may not be available. Examples include piling hammers, breakers, flails, spreading hoppers and agricultural attachments. Where specific guidance exists, e.g. with quick hitches, this should be prioritised ahead of this generic document.

Daily inspection records for site based plant to be completed and displayed (Scafftag or similar system)



MANDATORY

Plant

- All accessories should be installed and tested by a competent person preferably from the supplier
- All accessories must be designed for the purpose for which they are proposed to be used and for the item of plant and connection system to which they are to be connected. No ad-hoc arrangements will be acceptable
- CE marked plant and equipment
- Accessory manufacturer's instructions for installation and correct sequence must be followed
- Accessory manufacturer's instructions for operation and maintenance of the equipment must be present with the machine
- Accessories to be installed and maintained on a hard level surface
- Where a Balfour Beatty pre-use checklist for a non-standard accessory is not available then one should be prepared in conjunction with the supplier
- Check compatibility with quick hitches if they are to be used
- All moving parts to be adequately guarded

Operator

- Shall be suitably trained and competent
- Operator CPCS card for host item of plant
- Ensure machine and ancillary equipment is operated in accordance with manufacturer's instructions and in accordance with his/her training
- Shall report all unsafe conditions
- Must have a current relevant driving licence if driving on the public highway
- Evidence of having signed on to the appropriate risk assessment for the task
- Full site-defined PPE required
- Operator to be briefed on and to comply with Balfour Beatty Pre-use, Daily & Weekly Defect Reporting System. Report defects and stop machine where defect is safety critical
- Shall stop work if any unauthorised/unsupervised personnel enter their immediate work area
- Competency test prior to starting on site
- All hoses to be inspected regularly



PLANT & EQUIPMENT SPECIFICATION SHEET

DESIRABLE

- Instructions from plant supplier for connecting specific accessory to specific item of plant
- It is desirable that all accessories are installed in the suppliers yard and only by exception and with the appropriate risk assessment are they installed in the field
- All attachments/accessories to be hydraulically powered (not mechanical)

RISKS/CONTROLS

- Installing and operating accessories can create hazards of entrapment between plant item and accessory
- Installing accessories can reduce plant operator visibility and additional aids may be required
- Accessories can increase instability in plant and consideration must be given to ground conditions when preparing working method statements and risk assessments and to the impact of loading from equipment
- A number of accessories are unsuitable for use with quick hitches, including excavator mounted vibration units for sheet piles. When using this method of connection always refer to the manufacturer's recommendations, and note the frequency of equipment inspection may need to be increased
- Hydraulic hoses and cables can become trapped between moving parts or between accessories and plant
- Some equipment has operational controls (such as three point couplings) outside the cab. A specific risk assessment must be undertaken in these cases either to isolate or to operate
- Care must be taken when operating accessories to segregate equipment from people in accordance with CSUK standard for managing the interfaces between people and plant
- Entanglement from Power Take Off (P.T.O) - Guards must be fitted

Note: When preparing or reviewing method statements or risk assessments reference should be made to the guidance in each OpCo management system, to ensure the latest standards are applied



PLANT & EQUIPMENT SPECIFICATION SHEET

OVERHEAD GANTRY CRANES

All plant, equipment, attachments and accessories must be inspected prior to first use and the appropriate pre-start check sheet completed. Daily inspection records must be recorded each day immediately after completing the inspection



MANDATORY

Plant

- Pre-use inspection must be signed off and records maintained
- 12 monthly thorough examination certificate
- 6 monthly thorough examination certificate for all accessories and attachments
- 5 yearly electrical test and thorough examination must be carried out on the installation
- Busbars or live conductors must be positioned in such a way that people or equipment cannot come into contact with them
- Electrical wiring must be installed in such a way to prevent damage or potential trip hazard
- Safe Working Load must be clearly displayed
- Over-hoist and over-lowering devices must be fitted
- Double rail end stops must be supplied and fitted and include rubber guards
- Operating controls must include a red 'E' stop button and be clearly labelled
- Gantry cranes should have two operating speeds. Creep speed and full speed must be provided for hoist, lower, long travel and short travel
- Automatic creep speed operates when the crane approaches the end stops for both short and long travel
- Gantry cranes sharing the same rails must be fitted with proximity detectors and automatic cut outs
- Flashing beacons and motion alarms must be fitted
- Crane hook must be fitted with a safety catch
- Pendant controls must move freely on the rail without fouling or snagging
- The wire and pendant control casing must be free from damage. The wire must be armoured
- If working outdoor, the crane must be fitted with lockable

Operator

- RTITB, ITSSAR or equivalent certificate of training for the overhead crane
- Daily inspections must be recorded and signed off
- Demonstrate full compliance with pre-use, daily & weekly defect reporting system
- Must be trained in slinging and signalling or safe use of any handling attachment
- Full induction must be attended prior to starting work and must pass an Alcohol & Drugs test
- Evidence of having been briefed to the method statement and risk assessment must be available
- Must comply with the requirements of the site lift plan
- PPE, as required by site rules and/or the risk assessment must be worn
- Familiarisation training and competency assessment must be carried out prior to being put to work
- Operate the crane to prevent excessive swing of the load during movement
- Must know the weights of the loads before lifting



PLANT & EQUIPMENT SPECIFICATION SHEET

rail end clamps

- Power isolation switch must be accessible and so designed so it can be locked off
- Sufficient background lighting must be in place
- Intermediate platforms and/or trap doors when accessing the cab on 'man-up' gantry cranes by ladders over 9m
- SSOW for 'out of service' working must be in place. A permit system must be in place for maintenance personnel. No maintenance work must take place on the crane while the power is still live
- Loads must never be left suspended with crane unattended

DESIRABLE

- An automatic safe load indicator or load cell installed to warn of potential overload
- Task lighting fitted to the short travel beam or winch trolley
- If pedestrian operated; hand held radio controls are preferred over pendant controls
- Pedestrian footpaths and storage areas/bays should be clearly visible
- If working outdoor, a wind speed alarm or anemometer could be supplied

RISKS/CONTROLS

- Sufficient space not provided for operatives to move between loads in the storage area
- Entrapment due to operative working in close proximity to the load
- Operative struck by a swinging load
- Operative lowers the load on to his/her feet
- Vehicle collision with crane hook block
- Vehicle height restriction under gantry
- Pedestrian trips and slips on floor mounted rails
- Crane being used unintentionally while being repaired
- Lifting and manoeuvring loads over other workers or pedestrian areas
- Contact with other loads in restricted areas
- Lifting equipment or accessory failure
- Failure of over-hoist limiter
- Failure of creep speed travel interlocks
- Failure of rail end stops
- High wind speeds for outdoor cranes
- Overloading or shock loading the crane

Note: All persons preparing risk assessments involving plant are encouraged to review previous risk assessments undertaken for similar activities and safety alerts



PLANT & EQUIPMENT SPECIFICATION SHEET

CONCRETE EXTRUSION MACHINES

All Plant to be inspected prior to first use and the appropriate pre-start checks sheet completed and daily recorded inspections thereafter. Daily inspection records for site based plant to be completed and displayed (Scafftag or similar system). A full induction must be attended prior to starting work and evidence of having signed on to the appropriate risk assessment for the task provided.



MANDATORY

Plant

- 12 month thorough examination
- Evidence of regular inspection plus statement of hours to next service or next service due date
- Flashing amber beacon
- Mirrors/CCTV to satisfy 1m high at 1m distance visibility criteria
- Reversing alarm to be fitted working and audible
- 'Elephant ears' rubber guards fitted to sides of concrete feeder hopper
- Fixed guards on horizontal auger incorporating isolation switches to immobilise auger when guards are removed
- Flashing amber beacons - front & rear at a height not to interfere with driver visibility
- Isolation switch with key
- All safety labels (decals) in place
- The operators manual must be present with the machine
- Emergency stops
- Storage facilities for hand tools and lubricants etc
- Podium steps for access to inclined auger access steps & to be included in check sheet
- Access platform around horizontal auger to access front of auger for cleaning & maintenance complete with guard rail
- Pressure washer for cleaning off
- Guard rails around mould platform & driving platform (not chains)

Operator

- Shall be suitably trained and competent
- Ensure machine is operated in accordance with manufactures instructions and in accordance with his/her training
- Shall report all unsafe conditions
- Evidence of appropriate training for slip form pavers
- Full site-defined PPE required - close fitting PPE required in all cases to avoid catching on controls
- Operator to be briefed on and to comply with Balfour Beatty Pre-use, Daily & Weekly Defect Reporting System. Report defects and stop machine where defect is safety critical
- Record of familiarisation training for particular machine
- Engine must be turned off if approached by others and keys removed from the ignition before leaving the plant unattended for any reason
- Be briefed on the site Plant and Vehicle Management procedures and check for overhead obstructions and hazards
- Operator to mount and dismount machine using fixed access arrangements and always facing the machine



MANDATORY (CONTINUED)

Plant

- Rubber track bumper guards
- Working platforms to be kept clear of debris and litter
- Fixed access ladder to mould & driving platforms
- Travel/movement alarm fitted (working & audible for maximum of 5 seconds)
- Exclusion zone between tracks and adjacent to structures
- Fixed hinged guards (4#) to inclined auger
- Fixed hinged guard & access steps across concrete feeder hopper
- Handrail to sides of inclined auger to facilitate use of access steps
- Safe access for refuelling, maintenance and to any place where accessories are stored
- Adequate working lights

DESIRABLE

- GPS tracker unit installed
- Isolation method independent of factory fitted locks
- Locking caps/covers to fuel and all other tanks
- Proximity detection sensors to be fitted and operational
- Hydraulic rams on engine compartment covers to prevent slamming
- Improved communication between crew members
- Training records to be developed to show course contents
- Guards on conveyors
- Motion alarms for tracking to be fitted and operational
- Adjusting compensation plate

RISKS/CONTROLS

- Ground conditions/underground services ensure the ground is capable of withstanding the imposed track loading
- Entrapment by inserting limbs into moving machinery
- No entry into exclusion zones unless signaled by operator
- Suitable access and egress
- Controls should be secured so that unauthorised operation is effectively prevented when the machine is not in use
- Clothing snagging on chute leading into auger
- COSHH assessment for fuels, oils, greases and concrete
- Plant and personnel segregation
- Transportation of paver including loading/unloading
- Transportation, loading/unloading & fitting of moulds
- Overhead services
- Fire extinguisher available at work location.

Note: All persons preparing risk assessments involving plant are encouraged to review previous risk assessments undertaken for similar activities



PLANT & EQUIPMENT SPECIFICATION SHEET

PILING RIGS - VIBRO

All plant, equipment, attachments and accessories must be inspected prior to first use and the appropriate pre-start check sheet completed and daily recorded inspections thereafter.

Daily inspection records for site based plant to be completed and displayed (Scafftag or similar system).

A full induction must be attended prior to starting work and evidence of having signed on to the appropriate risk assessment for the task provided.



MANDATORY

Plant

- Piling rig must be CE certificated
- Current 12 monthly LOLER thorough examination certificate
- Current 6-monthly LOLER certification for all onboard lifting tackle and accessories
- Evidence of regular inspection plus statement of hours to next service or next service due date
- ROPS and FOPS cab structure
- Protective mesh must be in place to side of cab on jib side if window is opening type
- Flashing amber beacon
- Mirrors/CCTV to satisfy 1m high at 1m distance visibility criteria. Where this is not achievable, an exclusion zone must be in place
- Motion alarms for slew and tracking must be fitted and operational along with a flashing amber beacon
- Isolation switch with key
- Locking doors with key
- All safety labels (decals) in place
- The operators manual must be present with the machine
- Safe access for refuelling, maintenance and to any place where accessories are stored
- Safe and clean access into cab
- Aircraft warning lights (if working within the vicinity of aerodromes)
- Must be fitted with 'hold to run' levers
- Over-hoist cut out device must be fitted and operational
- The auxiliary line must be fitted with an over-hoist limit switch
- A sledge over hoist knock out system must be fitted
- Load bearing hydraulic cylinders fitted with check valves

Operator

- Shall be suitably trained and competent
- CPCS Piling Rig driven above or below 15 tonnes or equivalent certificate of training
- Ensure machine is operated in accordance with manufactures instructions and in accordance with his/her training
- Shall report all unsafe conditions
- Hold a current and valid medical certificate
- Full site-defined PPE required - none loose fitting PPE required in all cases to avoid catching on controls
- Operator to be briefed on and to comply with Balfour Beatty Pre-use, Daily & Weekly Defect Reporting System. Report defects and stop machine where defect is safety critical
- Record of familiarisation training for particular machine
- Do not break ground unless briefed on, have received and fully understood a Permit to Break Ground
- Engine must be turned off if approached by others and keys removed from the ignition before leaving the plant unattended for any reason
- Be briefed on the site Plant and Vehicle Management procedures and check for overhead obstructions and hazards
- Operate the rig to prevent excessive swing of the load during movement
- Operator to mount and dismount machine using fixed access arrangements and always facing the machine
- Operator must be familiar with the pile jointing method and safe systems of work
- Shall be trained in lifting operations if using the auxiliary winch



PLANT & EQUIPMENT SPECIFICATION SHEET

- Hand rails must be fitted to the upper structure and running boards if access to height is required
- Safe Working Load must be clearly displayed
- No modifications to the machines 'Dead Man's Handle'
- An external 'E Stop' must be fitted
- Fire extinguisher fitted in cab
- All D/Bow Shackles used above 2 metres must be the Bolt Anchor Type (i.e. bolt, nut and pin)
- Have passed D&A test on induction or within 2 years on BB CSUK site

DESIRABLE

- Complete people exclusion area around plant and operation (5m)
- GPS tracker unit installed
- Isolation method independent of factory fitted locks
- Locking caps/covers to fuel and all other tanks Proximity detection sensors to be fitted and operational
- Fire extinguisher fitted in cab
- Complete people exclusion area around plant and operation (5m)
- GPS tracker unit installed
- Isolation method independent of factory fitted locks
- Locking caps/covers to fuel and all other tanks Proximity detection sensors to be fitted and operational

RISKS/CONTROLS

- Excessive noise and vibration from repeated driving with the flot
- Installing stone columns adjacent to the site hoarding or 3rd parties
- Zone testing engineers being trapped or crushed due to working in close proximity to piling rig
- A rope failure causing a runaway flot sledge on the mast
- Spray of hydraulic oil due to hose burst
- Instability of the rig due to operating on poorly prepared piling platforms
- Concrete flexible hose burst at height
- Safe and clean access into cab
- Controls should be secured so that unauthorised operation is effectively prevented when the machine is not in use
- Rig instability in strong winds
- Air hose failure
- Multiple rigs and cranes working in close proximity
- Instability of the mast or rig due to failure to follow the manufacturer's guidelines on mat inclination
- Concrete or stone falling from height
- Exclusion zones being ignored by other operatives on site
- Overhead and underground obstructions
- Rig Attendant not monitoring the exclusion zone effectively and keeping others clear
- Lorry Loader instability during flot changes
- Safe and clean access for refuelling and maintenance

Note: All persons preparing risk assessments involving plant are encouraged to review previous risk assessments undertaken for similar activities



PLANT & EQUIPMENT SPECIFICATION SHEET

PILING RIGS - DRIVEN

All plant, equipment, attachments and accessories must be inspected prior to first use and the appropriate pre-start check sheet completed and daily recorded inspections thereafter.

Daily inspection records for site based plant to be completed and displayed (Scafftag or similar system).

A full induction must be attended prior to starting work and evidence of having signed on to the appropriate risk assessment for the task provided.



MANDATORY

Plant

- Piling Rig must be CE Certificated
- Current 12 monthly LOLER thorough examination certificate
- Current 6-monthly LOLER certification for all onboard lifting tackle and accessories
- Load chart must be clearly displayed
- Safe Working Load must be clearly displayed
- Evidence of regular inspection plus statement of hours to next service or next service due date
- ROPS and FOPS cab structure
- Protective mesh/guard must be installed to the window on the jib side of the cab if window is opening type
- Flashing amber beacon
- Mirrors/CCTV to satisfy 1m high at 1m distance visibility criteria. Where this is not achievable, an exclusion zone must be in place
- Pile gates must be fitted and fully operational
- Motion alarms for slew and tracking must be fitted and operational along with a flashing amber beacon
- Isolation switch with key
- Locking doors with key
- All safety labels (decals) in place
- The operators manual must be present with the machine
- Safe access for refuelling, maintenance and to any place where accessories are stored
- Safe and clean access into cab
- Aircraft warning lights (if working within the vicinity of aerodromes)
- A hammer over-hoist knock out mechanism must be fitted
- Over-hoist cut out device must be fitted and operational

Operator

- Shall be suitably trained and competent
- Ensure machine is operated in accordance with manufactures instructions and in accordance with his/her training
- Shall report all unsafe conditions
- Hold a current and valid medical certificate
- Shall receive a site specific briefing of the method statement, risk assessments and lift plans
- Full site-defined PPE required –close fitting PPE required in all cases to avoid catching on controls
- Operator to be briefed on and to comply with Balfour Beatty Pre-use, Daily & Weekly Defect Reporting System. Report defects and stop machine where defect is safety critical
- Record of familiarisation training for particular machine
- Do not break ground unless briefed on, have received and fully understood a Permit to Break Ground
- Engine must be turned off if approached by others and keys removed from the ignition before leaving the plant unattended for any reason
- Be briefed on the site Plant and Vehicle Management procedures and check for overhead obstructions and hazards
- Operate the rig to prevent excessive swing of the load during movement
- Operator to mount and dismount machine using fixed access arrangements and always facing the machine
- Operator must be familiar with the pile jointing method and safe systems of work
- Shall be trained in lifting operations if using the auxiliary winch



PLANT & EQUIPMENT SPECIFICATION SHEET

- The auxiliary line must be fitted with an over-hoist limit switch
- A dual system brake release for the hammer winch must be fitted
- A hammer safety rest must be fitted
- Auxiliary winch hook must be fitted with a safety catch
- Rig instrumentation must have an automatic set taking device
- Load bearing hydraulic cylinders fitted with check valves
- Hand rails must be fitted to the upper structure and running boards if access to height is required
- No modifications to the machines 'Dead Man's Handle'
- Must be fitted with 'hold to run' levers
- An external 'E Stop' must be fitted
- Fire extinguisher fitted in cab
- All D/Bow Shackles used above 2 metres must be the Bolt Anchor Type (i.e. bolt, nut and pin)
- Must not operate the rig unless under the direction from a designated rig attendant

DESIRABLE

- Complete people exclusion area around plant and operation
- GPS tracker unit installed
- Isolation method independent of factory fitted locks
- Locking caps/covers to fuel and all other tanks
- Proximity detection sensors to be fitted
- Hydraulic rams on engine compartment covers to prevent slamming
- Rear facing, counterweight mounted CCTV cameras
- A crane supervisor to be on site
- The rig operator to be slinger/signaller trained
- Computer monitored piling system to be fitted

RISKS/CONTROLS

Significant Risks identified when operating the machine and for people working in proximity

- A pre-cast concrete pile shearing while being driven
- Excessive noise and vibration from repeated blows of the pile
- Installing piles adjacent to the site hoarding or 3rd parties
- Dynamic testing engineers being trapped or crushed due to working in close proximity to piling rig
- A rope failure causing a runaway hammer on the mast
- Instability of the rig due to failure to extend the ballast when using the rig to unload piles (where applicable)
- Spray of hydraulic oil due to hose burst
- Instability of the rig due to installing piles on excessive longitudinal and lateral rake
- Instability of the rig due to operating on poorly prepared piling platforms
- Rig ballast colliding with previously driven piles
- Piles swinging while being lifted or unloaded for lorries
- Rig or pile instability in strong winds
- Multiple rigs and cranes working in close proximity
- Helmet detaching from the hammer due to retaining bolts vibrating loose
- Timber packers falling from height
- Instability of the mast or rig due to failure to follow the manufacturer's guidelines on mat inclination
- Concrete falling from height
- Instability of the rig due to the rig being manoeuvred on its jack up legs
- Exclusion zones being ignored by other operatives on site
- Rig attendant not monitoring the exclusion zone effectively and keeping others clear
- Controls should be secured so that unauthorised operation is effectively prevented when the machine is not in use

Note: All persons preparing risk assessments involving plant are encouraged to review previous risk assessments undertaken for similar activities and safety alerts



PLANT & EQUIPMENT SPECIFICATION SHEET

PILING RIGS – LARGE DIAMETER ROTARY

All plant, equipment, attachments and accessories must be inspected prior to first use and the appropriate pre-start check sheet completed. Daily inspection records must be recorded each day immediately after completing the inspection



MANDATORY

Plant

- Pre-use inspection must be signed off and records maintained
- Piling Rig must be CE certificated
- A current 12 month thorough examination certificate
- 6 month thorough examination certificate for all accessories and attachments
- The rig shall be within 6 months of having its thorough examination if the single line is to be used to lift people
- Safe Working Load must be clearly displayed
- Over-hoist cut out device must be fitted and operational
- The operators manual must be present with the machine
- Motion alarms for slew and tracking must be fitted and operational along with a flashing amber beacon
- Hand rails must be fitted to the upper structure and running boards if access to height is required
- Auxiliary winch hook must be fitted with a safety catch
- Rig instrumentation shall be fitted to the rig to control/aid with the construction of the piles and meet the required specification
- The auxiliary line must be fitted with an over-hoist limit switch
- Aircraft Warning Lights (if working in the vicinity of airports or aerodromes)
- Must be fitted with 'hold to run' levers
- No modifications to the machines 'Dead Man's Handle'
- Fire extinguisher fitted in cab
- All D/Bow Shackles used above 2 metres must be the Bolt Anchor Type (i.e. bolt, nut and pin)

Operator

- Shall be suitably trained and competent
- Shall be in receipt of CPCS card which references the category of Piling Rig Bored above or 15 tonnes
- Shall provide evidence of familiarization training for the type of rig being operated
- Shall carry out daily and weekly inspections and maintenance in accordance with the company/manufacturers requirements
- Shall make a record of all inspections and maintenance in line with the company requirements
- Shall be compliant with Pre-use, Daily & Weekly Defect reporting system
- Shall not operate the rig unless in receipt of the permit to dig and permit to work
- Shall report all unsafe conditions
- Shall stop work if any unauthorized/unsupervised personnel enter their immediate work area
- Shall not track or slew the rig unless under direction from a designated rig attendant
- Shall be trained in line with all associated works instructions/procedures/processes which shall include but are not limited to: boring under fluids, coring, obstructions, dry bores
- Shall be trained in lifting operations if using the auxiliary winch
- Shall, prior to recruitment, pass an Alcohol and Drugs Test
- Shall receive a full company induction following recruitment, prior to operating a LDP rig
- Shall have a current and valid medical certificate
- Shall receive a site specific briefing of the method statement, risk assessments and lift plans
- Shall wear PPE as specified in the site rules and company risk assessment at all times when on site



DESIRABLE

- Proximity detection equipment to be fitted to the rig
- The rig operator to be slinger/signaller trained
- Rig operator to hold a current driving license
- A crane supervisor to be on site
- Mobile elevating work platform in full time attendance to assist in rigging up, routine inspections and other maintenance operations

RISKS/CONTROLS

Significant Risks identified when operating the machine and for people working in proximity

- Instability of the rig in strong winds **MUST HAVE AN ANEMOMETER ON SITE**
- Instability of the mast or rig due to failure to follow the manufacturer's guidelines on mast inclination
- Instability of the rig caused by poor definition of the edge of the piling platform
- Instability of rig whilst travelling on inappropriate access ramps where gradients are not within the stability constraints of the rig
- Instability of the rig due to operating on inadequately prepared piling platforms
- Instability of rig whilst travelling on inappropriate access ramps where gradients are not within the stability constraints of the rig
- Instability of the rig due to operating on inadequately prepared piling platforms
- Instability of the rig caused by soft spots
- Instability of the rig caused by the removal of obstructions
- Instability of the rig caused by bores that have not been suitably backfilled
- Striking underground services
- Striking overhead services
- Being struck by plant and vehicles or piling rig hitting plant or vehicles
- Being struck by items falling from height
- Component failure caused by rig maintenance not being carried out in line with the manufacturers guidelines
- Installing piles adjacent to the site hoarding or 3rd parties
- Being struck by bore spoil while spinning off pile arisings
- Spray of hydraulic oil due to hose burst
- Over rotation of the auger resulting in undermining and subsequent damage of adjacent structures
- Over rotation/dig of the auger that affects the stability of the rig during pre-bore
- Hydraulic hose failure caused by worn hoses
- Operatives falling into bores that have not been suitably back filled or suitably fenced off
- Falling into open bore because the pile casings are too low during digging, cage placement and concreting operations
- Entrapment between pile casings and rig ballast
- Safe and clean access into cab
- Safe and clean access for refuelling and maintenance

Note: All persons preparing risk assessments involving plant are encouraged to review previous risk assessments undertaken for similar activities



PLANT & EQUIPMENT SPECIFICATION SHEET

PILING RIGS - CFA

All plant, equipment, attachments and accessories must be inspected prior to first use and the appropriate pre-start check sheet completed and daily recorded inspections thereafter. Daily inspection records for site based plant to be completed and displayed (Scafftag or similar system).

A full induction must be attended prior to starting work and evidence of having signed on to the appropriate risk assessment for the task provided.



MANDATORY

Plant

- Piling rig must be CE Certificated
- The rig shall be within 6 months of having its thorough examination if the single line is to be used to lift people
- Current 12 monthly LOLER thorough examination certificate
- Current 6-monthly LOLER certification for all onboard lifting tackle and accessories
- Pre-use inspection must be signed off and records maintained
- Evidence of regular inspection plus statement of hours to next service or next service due date
- ROPS and FOPS cab structure
- Protective mesh/guard must be installed to the window on the jib side of the cab if window is opening type
- Flashing amber beacon
- Mirrors/CCTV to satisfy 1m high at 1m distance visibility criteria. Where this is not achievable, an exclusion zone must be in place
- Motion alarms for slew and tracking must be fitted and operational along with a flashing amber beacon
- Isolation switch with key
- Locking doors with key
- All safety labels (decals) in place
- The operators manual must be present with the machine
- Safe access for refuelling, maintenance and to any place where accessories are stored
- Aircraft warning lights (if working within the vicinity of aerodromes)
- Over-hoist cut out device must be fitted and operational
- Shall have a mechanical auger cleaner fitted
- An auger cleaner must be fitted to prevent spoil flying up the auger string

Operator

- Shall be suitably trained and competent
- Ensure machine is operated in accordance with manufactures instructions and in accordance with his/her training
- Shall report all unsafe conditions
- Hold a current and valid medical certificate
- Full site-defined PPE required - close fitting PPE required in all cases to avoid catching on controls
- Operator to be briefed on and to comply with Balfour Beatty Pre-use, Daily & Weekly Defect Reporting System. Report defects and stop machine where defect is safety critical
- Record of familiarisation training for particular machine
- Do not break ground unless briefed on, have received and fully understood a Permit to Break Ground
- Engine must be turned off if approached by others and keys removed from the ignition before leaving the plant unattended for any reason
- Be briefed on the site Plant and Vehicle Management procedures and check for overhead obstructions and hazards
- Operate the rig to prevent excessive swing of the load during movement
- Operator to mount and dismount machine using fixed access arrangements and always facing the machine
- The auxiliary line must be fully lowered to ground to prevent the wire rope or hook assembly fouling on the rotary table
- Shall be trained in the operation of the auxiliary winch in association of all lifting operations
- Shall be trained in lifting operations if using the auxiliary winch



PLANT & EQUIPMENT SPECIFICATION SHEET

- The auger cleaner must be fitted with a secondary restraint to prevent components falling from it
- Auger guarding shall be fitted to the mast ensuring that no one comes in contact with the rotating auger
- Rig instrumentation shall be fitted to the rig to control / aid with the construction of the piles and meet the required specification
- Load bearing hydraulic cylinders fitted with check valves
- The concrete Loop hose over its entire length shall be doubled bagged
- Rubber concrete pipes fitted at height on the rig shall have whip checks fitted to all joints
- Blow out adaptors shall have two air exhaust valves fitted and a pressure gauge to clearly identify the pressure within the pumping lines
- Hand rails must be fitted to the upper structure and running boards if access to height is required
- Safe Working Load must be clearly displayed
- No modifications to the machines 'Dead Man's Handle'
- Must be fitted with 'hold to run' levers
- An external 'E Stop' must be fitted
- All D/Bow Shackles used above 2 metres must be the Bolt Anchor Type (i.e. bolt, nut and pin)

DESIRABLE

- Complete people exclusion area around plant and operation (5m)
- GPS tracker unit installed
- Isolation method independent of factory fitted locks
- Locking caps/covers to fuel and all other tanks
- Proximity detection sensors to be fitted
- Hydraulic rams on engine compartment covers to prevent slamming
- Rear facing, counterweight mounted CCTV cameras
- Audible/visual slew alarm
- Motion alarms for tracking to be fitted and operational
- A crane supervisor to be on site
- Shall, prior to recruitment, pass an Alcohol and Drugs test
- The rig operator to be slinger signaller trained
- Mobile elevating work platform in full time attendance to assist in rigging up, routine inspections and other maintenance operations
- Fire extinguisher fitted in cab
- Auger gate canopy fitted to cover the rig attendant when placing the auger cap
- Computer monitored piling system to be fitted

RISKS/CONTROLS

- Safe and clean access into cab
- Safe and clean access for refuelling and maintenance
- Instability of the rig in strong winds
- Instability of the mast or rig due to failure to follow the manufacturer's guidelines on mast inclination
- Instability of the rig caused by poor definition of the edge of the piling platform
- Instability of the rig due to the rig being manoeuvred on its jack up legs
- Instability of rig whilst travelling on inappropriate access ramps where gradients are not within the stability constraint of the rig
- Component failure caused by Rig Maintenance not being carried out in line with the manufacturers guidelines
- Rig malfunction
- Installing piles adjacent to the site hoarding or 3rd parties
- Spray of hydraulic oil / Concrete due to hose burst
- Flighting - over rotation of the auger resulting in undermining and subsequent damage of adjacent structures
- Flighting - over rotation of the auger that effects previously constructed fluid piles
- Flighting - over rotation of the auger that affects the stability of the rig.



RISKS/CONTROLS

- Instability of the rig due to operating on inadequately prepared piling platforms
- Instability of the rig caused by soft spots
- Instability of the rig caused by the removal of obstructions
- Instability of the rig caused by bores that have not been suitably backfilled
- Striking underground services
- Being struck by plant and vehicles
- People and property being struck by concrete during the clearing of blockages from within the pumping lines
- People and property being struck by concrete during the cleaning of the pumping lines
- Being struck by items of plant falling from height
- Being struck by Spoil falling from height
- Entrapment caused by coming into contact with the rotating auger
- Slumping of piles due to inadequate pile sequencing
- Concrete hose failure caused by worn hoses
- Unauthorised personnel within the piling area
- Operatives falling into bores that have not been suitably backfilled/suitably fenced off.
- Reinforcing cages/bars falling from height during the cage installation process
- Piles constructed do not meet the required specification
- Not following company procedure
- Controls should be secured so that unauthorised operation is effectively prevented when the machine is not in use

Note: All persons preparing risk assessments involving plant are encouraged to review previous risk assessments undertaken for similar activities



PLANT & EQUIPMENT SPECIFICATION SHEET

PILING RIGS – MINI DRIVEN RIG

All plant, equipment, attachments and accessories must be inspected prior to first use and the appropriate pre-start check sheet completed and daily recorded inspections thereafter.

Daily inspection records for site based plant to be completed and displayed (Scafftag or similar system).

A full induction must be attended prior to starting work and evidence of having signed on to the appropriate risk assessment for the task provided.



MANDATORY

Plant

- Piling Rig must be CE Certificated
- Current 12 monthly LOLER thorough examination certificate
- Current 6-monthly LOLER certification for all onboard lifting tackle and accessories
- Evidence of regular inspection plus statement of hours to next service or next service due date
- Pile gates must be fitted and fully operational
- Isolation switch with key
- All safety labels (decals) in place
- The operators manual must be present with the machine
- Safe access for refuelling, maintenance and to any place where accessories are stored
- Auxiliary winch hook must be fitted with a safety catch
- Safe Working Load must be clearly displayed
- Dead man's button must be fitted and in an easily accessible position
- Must be fitted with 'hold to run' levers
- An external 'E Stop' must be fitted
- All D/Bow Shackles used above 2 metres must be the Bolt Anchor Type (i.e. bolt, nut and pin)

Operator

- Shall be suitably trained and competent
- CPCS Piling Rig driven above or below 15 tonnes or equivalent certificate of training
- Ensure machine is operated in accordance with manufactures instructions and in accordance with his/her training
- Shall report all unsafe conditions
- Hold a current and valid medical certificate
- Full induction attended prior to starting work
- Full site-defined PPE required - close fitting PPE required in all cases to avoid catching on controls
- Operator to be briefed on and to comply with Balfour Beatty Pre-use, Daily & Weekly Defect Reporting System. Report defects and stop machine where defect is safety critical
- Record of familiarisation training for particular machine
- Do not break ground unless briefed on, have received and fully understood a Permit to Break Ground
- Engine must be turned off if approached by others and keys removed from the ignition before leaving the plant unattended for any reason
- Be briefed on the site Plant and Vehicle Management procedures and check for overhead obstructions and hazards
- Operate the rig to prevent excessive swing of the load during movement
- Operator must be familiar with the pile jointing method and safe systems of work



PLANT & EQUIPMENT SPECIFICATION SHEET

DESIRABLE

- Complete people exclusion area around plant and operation (5m)
- GPS tracker unit installed
- Isolation method independent of factory fitted locks
- Locking caps/covers to fuel and all other tanks
- Retractable tracks to allow for better access in restricted areas
- Proximity detection sensors to be fitted and operational
- Hydraulic rams on engine compartment covers to prevent slamming
- Motion alarms for tracking to be fitted

RISKS/CONTROLS

- Access to and around the rig due to poor or uneven surfaces
- Safe and clean access into cab
- Safe and clean access for refuelling and maintenance
- No exclusion zone in place or not being complied with by others
- Rig collapsibility due to poor working platform
- Crushing/trapping of rig attendant or site operatives
- Rig overturn due to lifting excessive loads
- Sudden rig movement during operation can injure operator
- Changing or attaching the pile hammer
- Loose clothing snagged on control levers
- Effect of weather on visibility and working/traffic surfaces
- Exposure to hazardous substances such as fuels, oils and greases
- Exposure to excessive noise from plant and the piling process
- Poor plant and personnel segregation – display plant & vehicle management plan
- Overhead obstructions – cables; bridges; ceilings
- Public interface – working alongside and plant crossings
- Underground services – display Permit to Dig
- Transportation including loading/unloading
- Poor all round visibility, particularly in restricted spaces
- Collisions with other plant working within the vicinity
- Controls should be secured so that unauthorised operation is effectively prevented when the machine is not in use

Note: All persons preparing risk assessments and lift plans involving plant are encouraged to review previous risk assessments and lift plans undertaken for similar activities and safety alerts



PLANT & EQUIPMENT SPECIFICATION SHEET

BARGES (WITH & WITHOUT WINCHES ON-BOARD)

All Plant, equipment, attachments and accessories must be inspected prior to first use and the appropriate pre-start check sheet completed. Daily inspection records must be recorded each day immediately after completing the inspection



MANDATORY

Plant

- Vessel to be licensed by an approved authority with respect to the area of operation.
- Vessels name to be displayed on barge.
- Vessel has been surveyed out of the water within the last 5 years.
- Vessel is designed to meet current stability regulations.
- Vessel is to be seaworthy.
- Vessel should have draft marks and load lines clearly visible port and starboard.
- Valid insurance for the vessel including Third Party Liability Cover.
- Sufficient number of mooring bollards fitted on deck.
- Lashing points / eye pads (lay-flat-type) of required capacity, to be welded to the deck of the vessel and tested to the appropriate test load.
- Sufficient number of ropes onboard.
- Life Saving Appliances onboard
- Required Navigation lights as per COLREGS.
- SSOW for all activities.
- Current test certificate for winches. (When Winches on-board)
- Winches permanently anchored to the deck of barge. (When Winches on-board)
- Drip trays under diesel engines. (When Winches on-board)
- Spill kit available onboard. (When Winches or other mechanical equipment on-board)
- Fire extinguishers available onboard. (When Winches on-board)
- Fairleads. (When Winches on-board) SSOW for using winches. (When Winches on-board)

Operator

- Slinger / Signaller to be CPC certified together with a letter of marine competency from their employer.
- Daily / Pre start checks to be conducted.
- Routine maintenance to be undertaken.
- PPE as required by site rules and/or the risk assessment must be worn
- Evidence of having been briefed to the method statement, risk assessments and lift plans.



DESIRABLE

- Fendering system around vessel.
- Fire extinguishers onboard.
- Hand railing (Combisafe or similar) together with access gates / chains around perimeter of barge.
- Welfare facilities onboard.
- Ladders on side of barge together with boarding / grab posts.
- Snatch blocks. (When Winches on-board)
- Wire guides on deck. (When Winches on-board)

RISKS/CONTROLS

- Drowning.
- Grounding.
- Collision with other vessels or structure.
- Pollution due to oil spillage.
- Asphyxiation in confined spaces.
- Slips trips and falls on deck.
- Wire parting. (When Winches on-board)
- Fire. (When Winches on-board)
- Entrapment with gear mechanism. (When Winches on-board)

Note: All persons preparing risk assessments involving barges (with or without winches on-board) or similar plant are encouraged to review previous risk assessments undertaken.



PLANT & EQUIPMENT SPECIFICATION SHEET

CRANE BARGE

All Plant, equipment, attachments and accessories must be inspected prior to first use and the appropriate pre-start check sheet completed. Daily inspection records must be recorded each day immediately after completing the inspection.



MANDATORY

Plant

- Vessel to be licensed by an approved authority with respect to the area of operation.
- Vessels name to be displayed on barge.
- Vessel has been surveyed out of the water within the last 5 years.
- Vessel is designed to meet current stability regulations.
- Vessel is to be seaworthy.
- Vessel should have draft marks and load lines clearly visible port and starboard.
- Valid insurance for the vessel including Third Party Liability Cover.
- Sufficient number of mooring bollards fitted on deck.
- Lashing points / eye pads (lay-flat-type) of required capacity, to be welded to the deck of the vessel and tested to the appropriate test load.
- Sufficient number of ropes onboard.
- Life Saving Appliances onboard
- Required Navigation lights as per COLREGS.
- SSOW for all activities.
- Current test certificate for winches.
- Winches permanently anchored to the deck of barge.
- Drip trays under diesel engines.
- Spill kit available onboard.
- Fire extinguishers available onboard.
- Fairleads.
- SSOW for using winches.
- Biodegradable oils.
- Careen test.
- Stability Calculations.
- Letter of approval from manufacturers of hydraulic telescopic cranes.

Operator

- Slinger / Signaller to be CPCS certified together with a letter of marine competency from their employer.
- Crane operator to be CPCS certified together with a letter of marine competency from their employer. (see also requirements for mobile cranes in HSEN-RM-0042)
- Daily / Pre start checks to be conducted.
- Routine maintenance to be undertaken.
- Evidence of having been briefed to the method statement, risk assessments and lift plans
- PPE as required by site rules and/or the risk assessment must be worn
- Familiarisation training and competency assessment must be carried out prior to being put to work



PLANT & EQUIPMENT SPECIFICATION SHEET

DESIRABLE

- Fendering system around vessel.
- Hand railing (Combisafe or similar) together with access gates / chains around perimeter of barge.
- Welfare facilities onboard.
- Ladders on side of barge together with boarding / grab posts.
- Snatch blocks.
- Wire guides on deck.

RISKS/CONTROLS

Significant Risks identified when operating the machine and for people working in proximity

- Drowning.
- Grounding.
- Collision with other vessels or structure.
- Pollution due to oil spillage.
- Asphyxiation in confined spaces.
- Slips trips and falls on deck.
- Wire parting.
- Fire.
- Entrapment with gear mechanism of winch

Note: All persons preparing risk assessments involving crane barges or similar plant are encouraged to review previous risk assessments undertaken.



PLANT & EQUIPMENT SPECIFICATION SHEET

MULTICAT VESSEL

All Plant, equipment, attachments and accessories must be inspected prior to first use and the appropriate pre-start check sheet completed. Daily inspection records must be recorded each day immediately after completing the inspection.



MANDATORY

Plant

- Vessel to be licensed by an approved authority with respect to the area of operation
- Vessels name and port of register clearly displayed on stern and vessels head.
- Vessel has been surveyed out of the water within the last 5 years.
- Vessel is designed to meet current stability regulations.
- Vessel is to be seaworthy.
- Visibility astern from bridge.
- Vessel should have draft marks and load lines clearly visible port and starboard.
- Valid insurance for the vessel including Third Party Liability Cover.
- Anchor and suitable amount of chain for area of operation.
- Lashing points / eye pads (lay-flat-type) of required capacity, to be welded to the deck of the vessel and tested to the appropriate test load.
- Vessel must hold an Ofcom marine fixed VHF licence.
- Required Life Saving Appliances onboard for ships complement.
- Appropriate number and type of Fire Extinguishers onboard for the size of vessel.
- Required Navigation lights as per COLREGS.
- VHF Communication system.
- Hydraulic crane certified and tested taking into account vessels stability when carrying loads.
- Deck is strengthened to take expected loads in correlation with the vessels load line.
- Sound signals.
- Main and emergency steering system fitted and regularly

Operator

- Captain to hold BML license (towing & pushing endorsement) or STCW – appropriate to the vessel and the area of operation.
- Captain to be experienced in operating required craft, knowing limitations of the Multicat.
- Required number of trained / qualified crew onboard.
- Operator of hydraulic crane to be ALLMI certified (or BB approved alternative) certified together with a letter of marine competency from their employer.
- Slinger / Signaller of hydraulic crane to be ALLMI certified (or BB approved alternative) certified together with a letter of marine competency from their employer.
- Crew trained and familiarised on the specific vessel.
- Daily / Pre start checks to be conducted.
- Routine maintenance to be undertaken.



PLANT & EQUIPMENT SPECIFICATION SHEET

tested, steering system should be so designed to give the required turning rates as per the current regulations.

- Bilge pumping and alarm system sounding on the bridge.
- Main engine should have sufficient horse power for the required vessel with remote alarm system.
- Fendering system around vessel.
- Hand railing all around vessel to current standards.
- First Aid equipment onboard to the required standard.
- AIS system consisting of a Class 'A' transponder. (when engaged in towing/pushing activities)
- Isophase control box for navigating through bridges. (Specific to the River Thames)
- SSOW for all activates.
- Welfare facilities onboard.

DESIRABLE

- Tow hock with remote release.
- Capstan
- Winch automatically controlled from wheelhouse
- GPS tracking system.
- DSC Radio System.
- Deck communication system.
- Radar.
- Fresh water tanks sufficient to bunker other vessels or installations.
- Fuel oil tanks sufficient to bunker other vessels or installations.
- Electric power suitable to operate portable machinery on deck.

RISKS/CONTROLS

Significant Risks identified when operating the machine and for people working in proximity

- Hazards associated with using a crane.
- Drowning.
- Grounding.
- Collision with other vessels or structure.
- Pollution due to oil spillage.
- Fire.
- Asphyxiation in confined spaces.
- Slips trips and falls on deck.

Note: All persons preparing risk assessments involving Multicat or similar plant are encouraged to review previous risk assessments undertaken.



PLANT & EQUIPMENT SPECIFICATION SHEET

SAFETY BOAT

All Plant, equipment, attachments and accessories must be inspected prior to first use and the appropriate pre-start check sheet completed. Daily inspection records must be recorded each day immediately after completing the inspection.



MANDATORY

Plant

- Vessel to be licensed by an approved authority with respect to the area of operation.
- Vessels name and port of register clearly displayed on stern and vessels head.
- Vessel has been surveyed out of the water within the last 5 years.
- Vessel is designed to meet current stability regulations.
- Vessel is to be seaworthy.
- Vessel should have draft marks and load lines clearly visible port and starboard.
- Visibility astern from bridge.
- Valid insurance for the vessel including Third Party Liability Cover.
- Anchor and suitable amount of chain for area of operation.
- Vessel must hold an Ofcom marine fixed VHF licence.
- Required Life Saving Appliances onboard for vessels complement.
- Appropriate number and type of Fire Extinguishers onboard for the size of vessel.
- Required Navigation lights as per COLREGS.
- VHF Communication system.
- Sound signals.
- Steering system fitted and regularly tested, steering system should be so designed to give the required turning rates as per the current regulations.
- Bilge pumping and alarm system sounding on the bridge.
- Main engine should have sufficient horse power for the required vessel with remote alarm system.
- First Aid equipment onboard to the required standard.
- SSOW for all activities.

Operator

- Skipper to hold BML license - appropriate to the vessel and the area of operation.
- Skipper to be experienced in the vessel.
- Required number of trained / qualified crew onboard.
- Crew trained and familiarised on the specific vessel.
- Daily / Pre start checks to be conducted.
- Routine maintenance to be undertaken.



PLANT & EQUIPMENT SPECIFICATION SHEET

DESIRABLE

- Fendering system around vessel.
- Welfare facilities onboard.
- AIS system consisting of a Class 'A' transponder.
- Bow Thruster.
- GPS tracking system.
- DSC Radio System.
- Deck communication system.
- Radar.
- Davit Arm.
- Jason's Cradle.
- MOB Ladder

RISKS/CONTROLS

Significant Risks identified when operating the machine and for people working in proximity

- Drowning.
- Grounding.
- Collision with other vessels or structure.
- Pollution due to oil spillage.
- Fire.
- Asphyxiation in confined spaces.
- Slips trips and falls on deck.

Note: All persons preparing risk assessments involving Safety boat or similar plant are encouraged to review previous risk assessments undertaken.



PLANT & EQUIPMENT SPECIFICATION SHEET

INSHORE TOWING VESSEL

All Plant, equipment, attachments and accessories must be inspected prior to first use and the appropriate pre-start check sheet completed. Daily inspection records must be recorded each day immediately after completing the inspection



MANDATORY

Plant

- Vessel to be licensed by an approved authority with respect to the area of operation.
- Vessels name and port of register clearly displayed on stern and vessels head.
- Vessel has been surveyed out of the water within the last 5 years.
- Vessel is designed to meet current stability regulations.
- Vessel is to be seaworthy.
- Visibility astern from bridge.
- Vessel should have draft marks and load lines clearly visible port and starboard.
- Valid insurance for the vessel including Third Party Liability Cover.
- Anchor and suitable amount of chain for area of operation.
- Vessel must hold an Ofcom marine fixed VHF licence.
- Required Life Saving Appliances onboard for ships complement.
- Appropriate number and type of Fire Extinguishers onboard for the size of vessel.
- Certified tow lines onboard.
- Vessel has either dedicated H post or towing hock.
- Required Navigation lights as per COLREGS.
- VHF Communication system.
- Sound signals.
- Main and emergency steering system fitted and regularly tested, steering system should be so designed to give the required turning rates as per the current regulations.
- Bilge pumping and alarm system sounding on the bridge.
- Main engine should have sufficient horse power for the required vessel with remote alarm system.

Operator

- Captain to hold BML license (towing & pushing endorsement) or STCW – appropriate to the vessel and the area of operation.
- Captain to be experienced in towing required craft, knowing limitations of the tug.
- Required number of trained / qualified crew onboard.
- Crew trained and familiarised on the specific vessel.
- Daily / Pre start checks to be conducted.
- Routine maintenance to be undertaken



PLANT & EQUIPMENT SPECIFICATION SHEET

- Fendering system around vessel.
- First Aid equipment onboard to the required standard.
- AIS system consisting of a Class 'A' transponder.
- Isophase control box for navigating through bridges. (Specific to the River Thames)
- SSOW for towing and pushing activities.
- Welfare facilities onboard.

DESIRABLE

- Tow hock with remote release.
- Pushing winches automatically controlled from wheelhouse.
- Stern winch automatically controlled from wheelhouse
- Bow Thruster.
- GPS tracking system.
- DSC Radio System.
- Deck communication system.
- Radar.

RISKS/CONTROLS

Significant Risks identified when operating the machine and for people working in proximity

- Tow line breaking.
- Drowning.
- Grounding.
- Collision with other vessels or structure.
- Pollution due to oil spillage.
- Fire.
- Asphyxiation in confined spaces.
- Slips trips and falls on deck.

Note: All persons preparing risk assessments involving in-shore towing vessel or similar plant are encouraged to review previous risk assessments undertaken.



PLANT & EQUIPMENT SPECIFICATION SHEET

WORK BOAT

All Plant, equipment, attachments and accessories must be inspected prior to first use and the appropriate pre-start check sheet completed. Daily inspection records must be recorded each day immediately after completing the inspection.



MANDATORY

Plant

- Vessel to be licensed by an approved authority with respect to the area of operation.
- Vessels name and port of register clearly displayed on stern and vessels head.
- Vessel has been surveyed out of the water within the last 5 years.
- Vessel is designed to meet current stability regulations.
- Vessel is to be seaworthy.
- Vessel should have draft marks and load lines clearly visible port and starboard.
- Visibility astern from bridge.
- Valid insurance for the vessel including Third Party Liability Cover.
- Anchor and suitable amount of chain for area of operation.
- Vessel must hold an Ofcom marine fixed VHF licence.
- Required Life Saving Appliances onboard for vessels complement.
- Appropriate number and type of Fire Extinguishers onboard for the size of vessel.
- Required Navigation lights as per COLREGS.
- VHF Communication system.
- Sound signals.
- Steering system fitted and regularly tested, steering system should be so designed to give the required turning rates as per the current regulations.
- Bilge pumping and alarm system sounding on the bridge.
- Main engine should have sufficient horse power for the required vessel with remote alarm system.
- First Aid equipment onboard to the required standard.
- SSOW for all activities.

Operator

- Skipper to hold BML license - appropriate to the vessel and the area of operation.
- Skipper to be experienced in the vessel.
- Required number of trained / qualified crew onboard.
- Crew trained and familiarised on the specific vessel.
- Daily / Pre start checks to be conducted.
- Routine maintenance to be undertaken.



PLANT & EQUIPMENT SPECIFICATION SHEET

DESIRABLE

- Fendering system around vessel.
- Welfare facilities onboard.
- AIS system consisting of a Class 'A' transponder.
- Bow Thruster.
- GPS tracking system.
- DSC Radio System.
- Deck communication system.
- Radar.

RISKS/CONTROLS

Significant Risks identified when operating the machine and for people working in proximity

- Drowning.
- Grounding.
- Collision with other vessels or structure
- Pollution due to oil spillage.
- Fire.
- Asphyxiation in confined spaces.
- Slips trips and falls on deck.

Note: All persons preparing risk assessments involving Work boat or similar plant are encouraged to review previous risk assessments undertaken.