

CHIPPER GUIDANCE

This document provides guidance for the safe operation of chippers on Mineral Products Association member sites. MPA is also pleased to offer this guidance to non-Members to improve safe operations across the whole industry.

Requirement	Hydrostatic	Mechanical	MPA Recommended Standard
Trough guarding	Y	Y	Fixed guard to be fitted to troughs on both chippers to eliminate access to moving points. These should be secured with fastenings which require specialist tools for removal i.e. 'star bolts'.
Hopper latches with compression springs	Y	n/a	Hydrostatic chippers to have hopper latches with compression springs
"Deadman" control	Y	Y	Hydrostatic:- Auger control to be on spring loaded "deadman" control Mechanical:- Hopper movement to be on "deadman" control
Lighting	Y	Y	Suitable lighting shall be fitted to ensure trough, controls & immediate work area adequately illuminated
Emergency stops	Y	n/a	5 no. emergency stops shall be fitted (1 on each corner & on central control panel)
Emergency stop line	Y	Y	Hydrostatic:- Emergency stop line to be fitted which isolates the power and engages the park brake Mechanical:- same as hydrostatic but stop engine only
Park brake linked to transmission	Y	n/a	A micro-switch shall be fitted on park brake to prevent drive being engaged when park brake is activated.
Signage & control markings	Y	Y	Appropriate signage & control markings to be fitted.
Operators manual	Y	Y	Operators manual shall be fitted in a waterproof box.
Independent isolator key	Y	Y	An independent isolator key shall be fitted, which should be removed prior to maintenance and repair, and at the end of each shift.
Remote/ umbilical cord control for (un)loading	Y	NA	An umbilical cord control shall be used for the loading & unloading of the chipping machine onto the trailer.
Beacon	Y	Y	The beacons should be visible through 360° in a place which does not and not impede the operator's vision.
Electric start	Y	Y	All chippers to have electronic start
Horn	Y	Y	All chippers to be fitted with horn which is audible to operators within the immediate vicinity, taking background noise levels into consideration
Inclinometer	Y	Y	All chippers to be fitted with inclinometers which is clearly visible to the operators.

Chocks	Y	Y	A minimum of 2 chocks on both chippers	
Audible prestart alarm	Y	Y	The alarm must be audible to all operators within the immediate vicinity of the chipper taking background noise levels into consideration	
All round visibility mirrors	Y	Y	All round visibility mirrors to be fitted on both types of chipper	
Chipping up access chute	Y	Y	'Chipping up' access chutes to be on both types of chippers, where practicable, but should be fitted on one side as a minimum.	
Externally fitted blanking plates	Y	Y	All chippers to have externally operated & fitting blanking plates	
Drive chain guards	Y	Y	All drive mechanisms (moving parts) to be guarded	
Management controls				
Training	Y	Y	Specific MPQC courses for hydrostatic & mechanical chippers All operatives working around chippers to receive awareness training	

The following images further illustrate operational safety:



Open parallel bar or mesh guarding which extends the full width of the chipper hopper



Star bolts must be used to secure the mesh in place, at 18" intervals



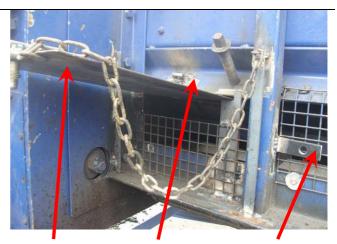
Mesh guarding to be fitted across the full width of the chipper to prevent access to moving parts



Rubber skirt fitted to the bottom of the hopper to reduce the potential of spillage



External Blanking plate secured to front of chipper



Blanking plate being inserted

Securing point for plate when not in use

Securing point for plate when not in use



Blanking plate fully in position, resting on the back apex of the chipper trough



LED lights fitted to either side of the machine to illuminate the 'chipping up' access chute(s)



Brackets fitted to hold blanking plate



LED lights fitted to either side of the machine, to give improved visibility for night working



Example of warning signs to be fitted



Emergency stop signs must be clearly displayed at all points where e-stops are fitted



Sprung hopper catches to secure catches in place and prevent accident release whilst in transit

<u>End</u>.



Mineral Products Association Ltd

Gillingham House 38 - 44 Gillingham Street London SW1V 1HU Tel +44 (0)20 7963 8000 Fax +44 (0)20 7963 8001 info@mineralproducts.org www.mineralproducts.org

The Mineral Products Association is the trade association for the aggregates, asphalt, cement, concrete, lime, mortar and silica sand industries

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