Risk Assessment - Use of the Slotter machine (Buttler 14) - No.32

Reference No: GLO-45363-63
Version No: 1
Assessment Approver: Kevin Jarvis

Machine located in Machine Shop Area 2 at Toddington.
This machine has external pulleys and gears that can't be practically guarded.
This RA assess the hazards associated with this machine.

Department: Global
Date Of Assessment: 12 March 2024
Review Due Before: 07 August 2027
Lead Assessor: Geoff Goring
Team: Kevin Jarvis

Use of a specific slotter machine in a workshop environment

Gloucestershire Warwickshire Steam Railway Plc
Risk Assessment for Use of the Slotter machine (Buttler 14) - No.32 - Global

Type	Hazard Cause	Persons Affected	Control Measures	L S T Overall	Additional Control Measures	L S T Overall	Owner/Action
Health and Safety	Personal Injury Multiple causes including contact with moving parts, sharps objects, entanglement, electrical shock, heavy items.	Volunteers & Staff	1) CRITICAL - Elimination: No loose clothes, jewellery, overly long sleeves, ties or gloves to be worn. - Effective 2) CRITICAL - Elimination: Hands will be keep clear rotating parts such as the chuck and workpiece on the moving machine table during operation. - Effective 3) CRITICAL - Engineering: An 'Emergency Stop' or other stop switch should be fitted within the reach of the user. - Effective 4) CRITICAL - Engineering: Machine guards should be fitted, clean, functional and used at all times. Consider guards for the work holding jig and table if not protected by the design of the machine. Where guards are not practicable, warning signs to be fitted and users to be officially informed of the increased risk. - Effective 5) CRITICAL - Engineering: The machine should be securely fixed to the floor or other stable and unmovable surface. Those machines that are mounted on wheels should be securely fixed whilst in use to stop them from moving. - Effective 6) CRITICAL - Engineering: The machine must be switched off and power isolated and locked out where possible before any maintenance activity takes place. - Effective 7) CRITICAL - Engineering: Cutting fluids will be used as appropriate and maintained to remain in a suitable condition for use. - Effective 8) CRITICAL - Engineering: The work piece shall be mounted to the machine and properly secured. - Effective 9) CRITICAL - Engineering: The cutting tool must be carefully checked for security before starting the machine. - Effective 10) CRITICAL - Engineering: Chuck keys and any other tools are to be removed before starting the machine. - Effective 11) CRITICAL - Engineering: The machine must be stopped before the work piece is removed from the machine. - Effective 12) CRITICAL - Engineering: The machine must always be stopped before taking any measurements. - Effective 13) CRITICAL - Engineering: Coolant nozzles must not be adjusted when the machine is in operation. - Effective 14) CRITICAL - Administrative: Only competent and authorised staff should use the equipment. - Effective 15) CRITICAL - Administrative: The equipment should be mechanically and electrically maintained regularly and accurate records of maintenance activity should be kept. All safety features should be tested. - Effective 16) CRITICAL - Administrative: A hair net or cap shall be worn for staff with long hair. - Effective 17) CRITICAL - Administrative: The machine must never be left unsupervised if energised. - Effective 18) CRITICAL - Administrative: Swarf must not be allowed to accumulate or become entangled with the work piece. The machine is to be cleaned before and after working. - Effective 19) CRITICAL - Administrative: The standing area for the operator must be clean, free from debris, trip hazards and not slippery. - Effective CONTINUES ON NEXT PAGE	2 x 4 = 8 Medium - Risk to be minimised and controlled so far as is reasonably practical.	1) Engineering: Lifting aids are to be used for positioning heavy work pieces in the machine or for changing heavy chucks or faceplates.. - Improvable 2) Engineering: Consider the use of interlocked guards - Improvable 3) Engineering: If the workpiece extends beyond the end of the table it must be guarded or protected by barriers and supported as appropriate. - Improvable 4) Administrative: Be aware of the potential for swarf to be sharp and consider using gloves and a suitable implement when cleaning swarf from the machine - Effective 5) Administrative: Make sure that there is plenty of space around the machine so that persons passing do not bump into the machine operator. - Improvable	2 x 4 = 8 Medium - Risk to be minimised and controlled so far as is reasonably practical.	Machine Shop Manager - Geoff Goring - appropriate signage deployed. Carry out a toolbox talk to the operators on the unique features of this machine.
			20) CRITICAL - Administrative: Be aware of potential of swarf to be ejected from the machine. - Effective 21) CRITICAL - Administrative: Only the user and any trainees are to be near to the machine when it is in operation. - Effective 22) CRITICAL - Administrative: Loose tooling and other equipment or rags etc. must not be kept on the machine or allowed to obstruct the work area. - Effective 23) CRITICAL - PPE: Eye protection, overalls or dust coat and steel toe-capped footwear to be worn. - Effective				

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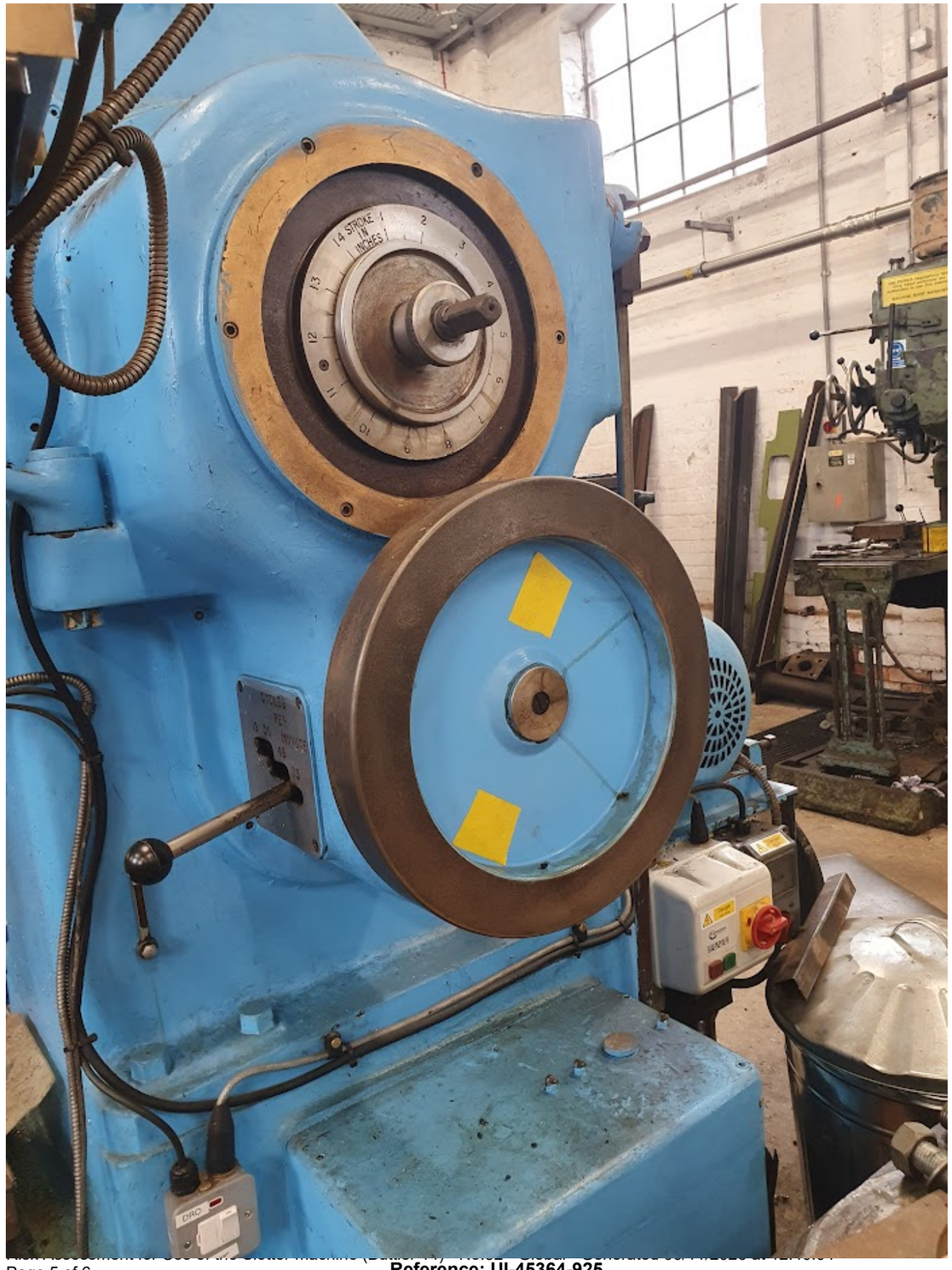
Score and Control Measure Notes.
Risk is medium due to potential injury every 5 years if not paying attention
Exposed wheels that are not guarded
All control measures must be followed.
The risk is medium as its not ideal having moving wheels where personnel may walk and its not so easy to lift large parts on to the work table using the crane that is the other side of adjacent machine. Consider re-layout

COSHH Assessments

The following COSHH assessments are applicable to this risk assessment:

• COSHH-44517-36 - Astro - Sol A
Ends

Appendix



Reference: UI-45364-925
Pic 1 - Buttler 14 risk assessment pic 1 for illustration



Reference: UI-45364-563
Pic 2 - Buttler 14 RA illustration pic



Reference: UI-45364-790
Pic 3 - Buttler 14 machine 32 pic 3 illustration for RA