

# Hazard Register



|               |                       |             |   |
|---------------|-----------------------|-------------|---|
| Type          | LASER CUTTING MACHINE | Location    |   |
| Make          | -                     | Sale Number | 0 |
| Model         | -                     | Lot Number  |   |
| Serial Number |                       |             |   |

| ID        | Hazard Type                   | Hazard Description   |
|-----------|-------------------------------|--|
| 143240.1  | ENTANGLEMENT.                 | HAIR, CLOTHING, GLOVES, JEWELLERY, TOOLS, RAGS OR OTHER MATERIALS OR BODY PARTS MAY BECOME ENTANGLED WITH MOVING PARTS OF THE LASER CUTTER SHOULD THE OPERATOR, MAINTENANCE PERSONNEL OR BYSTANDERS GET TOO CLOSE TO THE MOVING PARTS OF THE LASER CUTTER. ENSURE THAT ALL INTERLOCKS AND EMERGENCY STOPS ARE FUNCTIONING CORRECTLY PRIOR TO USE INTHE WORKPLACE.  |
| 143240.2  | CRUSHING.                     | FINGERS, HANDS AND OTHER BODY PARTS CAN BE CRUSHED DUE TO MATERIAL FALLING OFF THE LASER CUTTER; THE UNCONTROLLED OR UNEXPECTED MOVEMENT OF THE LASER CUTTER OR THE MATERIALS; LACK OF CAPACITY FOR THE LASER CUTTER TO BE SLOWED, STOPPED OR IMMOBILISED; COMING IN CONTACT WITH THE MOVING PARTS OF THE LASER CUTTER DURING OPERATION, MAINTENANCE OR CLEANING; OR BEING TRAPPED BETWEEN THE LASER CUTTER AND MATERIALS OR FIXED STRUCTURES. |
| 143240.3  | CUTTING, STABBING OR PUNCHING | FINGERS, HANDS, ARMS AND OTHER BODY PARTS CAN BE CUT, STABBED OR PUNCHED DUE TO COMING IN CONTACT WITH SHARP OR FLYING OBJECTS; AND COMING IN CONTACT WITH MOVING PARTS OF THE LASER CUTTER DURING OPERATION, MAINTENANCE, CLEANING AND REPAIR OF THE LASER CUTTER.  |
| 143240.4  | SHEARING.                     | FINGERS, HANDS AND OTHER BODY PARTS CAN BE SHEARED BETWEEN TWO PARTS OF THE LASER CUTTER OR BETWEEN A PART OF THE LASER CUTTER AND THEMATERIAL BEING CUT.  |
| 143240.7  | STRIKING.                     | THE OPERATOR AND/OR BYSTANDERS MAY BE STRUCK BY MOVING OBJECTS DUE TO THE UNEXPECTED OR UNCONTROLLED MOVEMENT OF THE LASER CUTTER OR MATERIALS HANDLED BY THE LASER CUTTER.  |
| 143240.8  | HIGH PRESSURE FLUIDS          | OPERATORS, BYSTANDERS AND MAINTENANCE PERSONNEL CAN COME IN CONTACT WITH FLUIDS UNDER PRESSURE, DUE TO FAILURE OR MISUSE OF THE LASER CUTTER OR LACK OF ISOLATION PROCEDURES.  |
| 143240.9  | ELECTRICAL.                   | OPERATORS, BYSTANDERS AND MAINTENANCE PERSONNEL CAN BE INJURED BY ELECTRICAL SHOCK OR BURNT DUE TO THE OVERLOAD OF ELECTRICAL CIRCUITS; DAMAGED OR POORLY MAINTAINED ELECTRICAL EQUIPMENT, CABLES AND LEADS; DAMAGED ELECTRICAL SWITCHES, SOCKETS AND CONTROLS; WATER NEAR ELECTRICAL EQUIPMENT; MISUES OF THE LASER CUTTER AND LACK OF ISOLATION PROCEDURES.  |
| 143240.16 | HIGH TEMPERATURE              | OPERATORS AND BYSTANDERS MAY BE BURNT BY COMING INTO CONTACT WITH OBJECTS, PARTS OF THE LASER CUTTER OR MATERIALS HANDLED BY THE LASER CUTTER AT HIGH TEMPERATURES.  |
| 143240.27 | NOISE.                        | OPERATORS AND BYSTANDERS CAN BE INJURED OR SUFFER ILL-HEALTH FROM EXPOSURE TO NOISE LEVELS GREATER THAN 85db(A) CONTINUES OVER 8 HOURS OR  |

# Hazard Register



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|           |  | 140db(C) PEAK, THROUGH THE OPERATION OF THIS LASER CUTTER.   |
| 143240.28 | RADIATION, LASER                                 | OPERATORS AND BYSTANDERS CAN BE INJURED OR SUFFER ILL-HEALTH FROM EXPOSURE TO RADIATION GIVEN OFF THROUGH THE OPERATION OF THIS LASER CUTTER.  |
| 143240.30 | AUTOMATIC & REMOTELY OPERATED MACHINERY          | OPERATORS, MAINTENANCE PERSONNEL AND BYSTANDERS CAN BE INJURED DUE TO THE LASER CUTTER STARTING AUTOMATICALLY AND/OR BEING REMOTELY OPERATED AND THE LACK OF SAFETY SYSTEMS AND ISOLATION PROCEDURES.  |
| 143240.31 | PLANT OPERATION.                                 | THE LASER CUTTER SHOULD ONLY BE OPERATED BY COMPETENT, SKILLED AND TRAINED PERSONAL. ALL OPERATOR CONTROLS SHOULD BE CLEARLY LABELLED AND FUNCTIONING CORRECTLY AND THIS LASER CUTTER SHOULD NOT BE OPERATED WITHOUT ALL GUARDING IN PLACE AND ALL SAFETY SYSTEMS FUNCTIONING CORRECTLY. PEOPLE CAN BE INJURED DUE TO THE FAILURE TO FOLLOW AND LACK OF ISOLATION AND SAFE WORK PROCEDURES FOR THIS LASER CUTTER.  |
| 143240.32 | MAINTENANCE.                                     | THE LASER CUTTER SHOULD ONLY BE MAINTAINED BY COMPETENT, SKILLED AND TRAINED PERSONNEL AND ALL ENERGY SOURCES ASSOCIATED WITH THE LASER CUTTER TO BE ISOLATED AND DE ENERGISED WHILE PLANT IS BEING MAINTAINED. THE LASER CUTTER SHOULD NOT BE PUT BACK IN SERVICE WITHOUT ALL GUARDS IN PLACE AND ALL SAFETY SYSTEMS TESTED AND OPERATING CORRECTLY. PEOPLE CAN BE INJURED DUE TO THE FAILURE TO FOLLOW AND LACK OF ISOLATION AND SAFE WORK PROCEDURES FOR THIS LASER CUTTER. |
| 143240.33 | CLEANING AND CLEARING                            | THE LASER CUTTER SHOULD ONLY BE CLEANED OR HAVE BLOCKAGES REMOVED ONCE IT HAS BEEN ISOLATED FROM ALL ENERGY SOURCES AND ANY STORED ENERGY HAS BEEN RELEASED. PEOPLE CAN BE INJURED DUE TO THE FAILURE TO FOLLOW AND LACK OF ISOLATION AND SAFE WORK PROCEDURES FOR THIS LASER CUTTER.  |
| 143240.34 | INFORMATION, INSTRUCTION, TRAINING & SUPERVISION | ALL OPERATORS, MAINTENANCE PERSONNEL AND PEOPLE REQUIRED TO WORK ON THE LASER CUTTER REQUIRE INFORMATION ON THE OPERATION AND HAZARDS OF THE LASER CUTTER, INSTRUCTION AND TRAINING ON HOW TO OPERATE, CLEAN AND MAINTAIN THE LASER CUTTER AND PERSONAL SHOULD ALWAYS BE SUPERVISED WHEN OPERATING, MAINTAINING OR REQUIRED TO WORK AROUND THE LASER CUTTER.   |
| 143240.35 | DISMANTLING, REMOVAL, TRANSPORT AND INSTALLATION | DISMANTLING, REMOVAL, TRANSPORT, INSTALLATION AND COMMISSIONING OF LASER CUTTER MUST ONLY BE UNDERTAKEN BY QUALIFIED PERSONNEL.  |

Health and Safety  
Plant Safety  
Purchaser Information

This plant health and safety information has been prepared by Grays for the purchaser of the plant item as required by National WHS Legislation. Whilst every effort has been made to identify all of the hazards, it should be recognised that all reasonably practicable hazards have been identified given due consideration to:

- state of knowledge about the plant item
- the availability and suitability of ways to eliminate or control the hazards
- the cost of evaluating, eliminating or controlling the hazard

Consequently, if this plant item is being purchased for use at a place of work, the purchaser is reminded of their obligations to involve and consult with employees in identifying foreseeable hazards, assess their risks and to take action to eliminate or control the risks.

In order to assess the risk, it is necessary to consider for all the identified hazards, the chance (likelihood) of something happening that would impact (consequence) on health and safety at the workplace. The following guidelines are provided to assist the purchaser in consistently carrying out an assessment of risk:

| Likelihood   | Consequences  |
|--|---|
| <ul style="list-style-type: none"><li>• Frequency and duration of exposure</li><li>• Probability of occurrence of hazard or event (including part history of incidents)</li><li>• Possibility to avoid / minimize or limit the damage, impact or harm</li><li>• Reliability and effectiveness of existing / established systems of control</li></ul> | <ul style="list-style-type: none"><li>• Assume “worst case” injury, but also competent follow-up medical and rehabilitation support</li><li>• Consider forces or energy levels, highest belt tensions, size of gears, pulleys or other entrapment points and therefore body parts likely to be injured</li><li>• Consider sharpness of entrapment points, surrounding parts likely to exacerbate injury, and any give in the entrapment point</li><li>• Consider, will entrapment continue until plant is stopped, or can an injured part travel through the entrapment area</li><li>• Are temperatures of plant, or chemicals, likely to further injure entrapped person</li></ul> |

The outcome of the risk assessment will be a prioritised list of risk control strategies and actions consistent with the following ratings:

- Low risk- may be considered acceptable, where the existing controls in place are seen to be effective, requiring periodic monitoring for effectiveness.  
Medium risk- considered to be unacceptable and requiring additional risk controls within medium to long term.  
High risk – considered to be unacceptable and requiring action within the short to medium term.  
Extreme risk – unacceptable, where immediate action required.

In all of these cases employees/operators must be made aware of the risk controls in place to protect them from the hazards.