Technology: Risk Assessment Title: **Metals** OCTOBER2015

**This is a generic Risk Assessment that must be modified to suit your place of work**. The Risk Assessment modifications should take into consideration the activity, age/stage/pupil ability, department/working environment and the experience of the teacher in charge. If Control Measures Required as described are implemented the risk is reduced to an acceptable level for mainstream students.

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| **Identify The Hazards** | **Who is at Risk?** | **What is the Harm?** | **Activity Taking Place** | **Control Measures Required** | **Additional Information** |
| Employees and learners should be made aware of the following hazards.1. Eye and Skin DamageFrom Waste Materials2. Irritation FromOils and Coolant3. Falling Materials4. Cuts or Piercing from Sharp Edges | Technology teachers, technicians and studentsTechnology teachers, technicians and studentsTechnology teachers, technicians and studentsTechnology teachers, technicians and students | **Waste materials from processing metals can damage the eyes and skin.****Coolants and cutting oils can irritate the eyes and can cause dermatitis.****Falling materials can present a hazard.****Sheet metals and rough bar can be very sharp and cut fingers or hands.**  | Using metals in the craft roomUsing metals in the craft roomUsing metals in the craft roomUsing metals in the craft room | To preserve materials in good condition and to facilitate safe handling at all times, metals should be stored in warm and dry areas. However, a comfortable working environment should be provided in these areas.Proper instruction should be given to pupils and staff on safe handling of metals and metal waste. Eye PPE conforming to BS EN 166:2002 1B should be worn when machining or using hand tools with metals. Suitable eye protection PPE conforming to BS EN 166:2002 1B should be used when handling and using oils and coolant.Hands should be washed thoroughly after contact with metals, oils and coolants.Storage of metals should be in an area separately designated and supplementary to the teaching area, typically the cutting room. The store should be adjacent to the work areas with ready access both to it and to the outside of the department to help facilitate deliveries. Adequate racking for the storage of metal rods, tubes and sheets should be provided. Ends should not protrude from the rack. Retaining bars or chains should be provided if vertical stacking is employed.Sheet metals should be held whilst wearing gloves or by using a hand vice. Pieces of metal bar with rough or sharp edges can be taped up or have a cork end placed upon them to avoided cuts or piercing injury. | Reference BS 4163:2016Metal types and their entry date into the department should be marked upon them (masking tape labelling is acceptable.)For more information see COSHH Essentials for Machining with Metalworking Fluids <http://www.hse.gov.uk/metalworking/ecoshh.htm> and HSE Working Safely with Metalworking Fluids 08/11 <http://www.hse.gov.uk/pubns/indg365.pdf>Safe and efficient storage of metals reduces the risk of injury. |
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