

# Brighter Futures Risk Assessment - Workshop

## WORKSHOP AT 34 WELLINGTON RD

This document is being issued to assist employees, volunteers and visitors to remain as safe as possible in the workshop. The assessment will be monitored monthly against and near misses and accident reports along with feedback from users.

This assessment identifies a wide range of hazards present in a workshop and current control measures we have put in place to appropriately to control these hazards. However, this document may not identify all possible hazards and as such the monthly monitoring will be conducted by Staff.

***Employees and members are reminded to keep written records of any observations, near misses and accidents with their particular activities that can be reviewed each month.***

Further information and advice may be obtained from the Health & Safety Champion on 07778 692046 or [hello@brighterfutureshyl.co.uk](mailto:hello@brighterfutureshyl.co.uk)

## Contents

	Page
1. Use of Cutting and Rotating Machinery	1
2. Welding, Brazing and Heat Treatment	2
3. Use of Pressing, Stamping and Moulding Machinery	3
4. Assembly of Components	3
5. Fabrication and Maintenance of Electrical Equipment	4
6. Handling and Storage of Materials and Equipment	5
7. The Working Environment	6
8. Emergencies	7
9. Additional considerations	8
10. Risk Assessment Notes	9

### Abbreviations

COSHH	Control of substances hazardous to health
LEV	Local exhaust ventilation
PPE	Personal protective equipment

**THINK PINK!**

# 1. USE OF CUTTING & ROTATING MACHINERY

Hazard	Possible harm	Our Controls
Contact with cutting parts	Cuts Entanglement	Correct guarding in place. Authorised users only who are competent having had instruction and training. No loose clothing or jewellery to be worn. Long hair tied back if applicable. Use of eye protection Key references: Abrasive Wheels HS(G)17 Drilling machines HS(G)44 Turning NIS/10/02 Combination machines NIS/10/13 Sawing NIS/10/12 Guillotines HS(G)42 Bending/rolling NIS/10/07 Guidance on Equipment Provided for Use at Work GUIDANCE/1/EPUW/99
Contact with other moving parts	Cuts Entanglement Crush	
Hit by ejected material/equipment	Cuts, fracture (machine tools) Cuts, bruising (materials) Cuts (waste)	
Injury from lifting and handling materials and tools	Back strain etc.	Manual handling assessment/training Key ref: Manual Handling Policy UHSP/6/MHO/95 PPE, gloves & boots (remove gloves when machining) COSHH assessment, information, hygiene arrangements Key ref: Assessment, <i>Pro forma</i> and guidance: UHSP/15/HS/00, S 2 Making a Chemical Hazard & Risk Assessment USP/90/CHRA/16 Control Measures, Good Chemical Practice: UHSP/15/HS/00, S 3.1
	Cuts/abrasions/crush	
	Toxic/contamination (material, swarf, oils etc.)	
Exposure to harmful substances	Dermatitis from contact with cutting fluids/lubricants	COSHH assessment, information, hygiene arrangements Key ref: as above COSHH assessments, controls may include LEV and PPE Key ref: as above
	Exposure to dust/fume	
Physical hazards from the machine and the environment	Loss of hearing from noise	Noise assessment, PPE (If you cannot hear clearly what someone is saying in a normal voice 2m away a noise assessment is required.) Correct design/installation Machine guarding, warning signs, authorised users who are competent Good housekeeping Key ref: Guidance on Equipment Provided for Use at Work GUIDANCE/1/EPUW/99
	White finger from vibration	
	Burns from hot machine parts and material	
	Cuts, bruising etc. (slips, trips)	
Poor workstation design including space and working position	Muscle or joint damage, fatigue etc.	Assess work station design Key ref: Workstation Design GUIDANCE/5/WD/98
Exposure to dust from material being machined	Fire/explosion	Authorised users only who are competent, LEV, design, maintenance, good housekeeping Key ref: Guidance on Equipment Provided for Use at Work GUIDANCE/1/EPUW/99

## 2. WELDING, BRAZING & HEAT TREATMENT

Hazard	Possible harm	Our Controls <i>ALL WORK TO BE DONE BY AUTHORISED PERSONS WHO HAVE HAD INSTRUCTION AND TRAINING</i>
Compressed gasses	Fire or explosion Asphyxiation due to oxygen enriched atmosphere or excess quantity of shielding gases Toxic effects	Assess if welding/brazing/heat treatment is necessary All equipment to be maintained in good condition Use of flashback arrestors Good general ventilation COSHH assessment of toxic effects Key guidance: Assessment, <i>Pro forma</i> and guidance: UHSP/15/HS/00, S 2 Making a Chemical Hazard & Risk Assessment USP/90/CHRA/16 Control Measures, Good Chemical Practice: UHSP/15/HS/00, S 3.1
Generation of heat	Burn from contact with flame, hot material or spatter	Correct PPE including overalls, aprons, gloves, boots etc.
	Fire, explosion	Keep flammable/explosive materials away Good housekeeping
Production of fume	Risk to health if inhaled	COSHH assessment, controls will include LEV and may require PPE Key guidance: Assessment, <i>Pro forma</i> and guidance: UHSP/15/HS/00, S 2 Making a Chemical Hazard & Risk Assessment USP/90/CHRA/16 Control Measures, Good Chemical Practice: UHSP/15/HS/00, S 3.1 Control of exposure to fume from welding, brazing and similar processes HSE guidance note EH55, Assessment of exposure to fume from welding and allied processes HSE guidance note EH54
Use of electricity	Shock, burn, fire	Use correct procedures Key ref: Electrical Safety in Arc Welding HS(G)118
Exposure to ultra violet, electromagnetic, infra-red radiation	Harm to eyes and exposed skin of operator and others in vicinity	Correct selection and use of eye protection for operator. Screening to protect others. No one in the vicinity with pacemakers
Exposure to radiation (from using thoriated tungsten welding electrodes)	Effects of radiation	Use alternative type of electrodes if possible Seek advice from the Health and Safety Unit
Use of materials to clean items being worked on	Skin, eye contact or inhalation of hazardous substances	COSHH assessment, controls may require PPE Key guidance: Assessment, <i>Pro forma</i> and guidance: UHSP/15/HS/00, S 2 Making a Chemical Hazard & Risk Assessment USP/90/CHRA/16 Control Measures, Good Chemical Practice: UHSP/15/HS/00, S 3.1

### 3. USE OF PRESSING, STAMPING & MOULDING MACHINERY

Hazard	Possible harm	Our Controls
Contact with crushing parts	Amputation, fracture, bruising	Correct guarding in place Authorised users only who are competent having had instruction and training No loose clothing or jewellery long hair tied back Use of eye protection Key ref: Power press regulations 1965 & 1972
Contact with other moving parts	Cuts Entanglement Crush	
Hit by ejected material/equipment	Cuts, bruising (materials)	
Injury from lifting and handling materials and tools	Back strain etc.	Manual handling assessment/training Key ref: Manual Handling Policy UHSP/6/MHO/95
	Cuts/abrasions/crush	PPE, gloves & boots (remove gloves when machining)
	Toxic/contamination (material, swarf, oils etc.)	COSHH assessment, information, hygiene arrangements Key ref: Assessment, <i>Pro forma</i> and guidance: UHSP/15/HS/00, S 2 Making a Chemical Hazard & Risk Assessment USP/90/CHRA/16 Control Measures, Good Chemical Practice: UHSP/15/HS/00, S 3.1
Physical hazards from the machine environment	Loss of hearing from noise	Noise assessment, PPE (If you cannot hear clearly what someone is saying in a normal voice 2m away a noise assessment is required.)
	Cuts, bruising etc. (slips, trips)	Good housekeeping
Poor workstation design including space and working position	Muscle or joint damage, fatigue etc.	Assess work station design Key ref: Workstation Design GUIDANCE/5/WD/98 Guidance on Equipment Provided for Use at Work GUIDANCE/1/EPUW/99

## 4. ASSEMBLY OF COMPONENTS

Hazard	Possible harm	Our Controls
Use of adhesives	Skin contact, inhalation of fumes	COSHH assessment Key guidance: Assessment, <i>Pro forma</i> and guidance: UHSP/15/HS/00, S 2 Making a Chemical Hazard & Risk Assessment USP/90/CHRA/16 Control Measures, Good Chemical Practice: UHSP/15/HS/00, S 3.1
Finishing work (including cleaning, painting etc.)	Inhalation of dust and fumes	COSHH assessment Key guidance: As above
Poor workstation design including space and working position	Muscle or joint damage, fatigue etc.	Assess work station design Key ref: Guidance on Workstation Design GUIDANCE/5/WD/98
Manual Handling	Strain/sprains, cuts	Manual handling assessment Key ref: Manual handling operations UHSP/6/MHO/96
Use of lifting equipment	Injury due to failure of the equipment etc.	Ensure equipment is not overloaded and is regularly inspected and maintained (Lifting equipment must be inspected every 14 months) Key ref: Guidance on Equipment Provided for Use at Work GUIDANCE/1/EPUW/99
	Injury due to lack of training	Authorised users who are competent and have had instruction and training

## 5. FABRICATION & MAINTENANCE OF ELECTRICAL EQUIPMENT

Hazard	Possible harm	Our Controls
Incorrectly assembled/ faulty components	Shock, burn, fire, explosion	Work carried out by authorised persons only who have had instruction and training Live components insulated Correct fusing Use of Residual Current Devices (RCDs)
Live working	Shock, burn	Work carried out by authorised persons only who have had instruction and training Assessment made to see if live working is necessary Use of isolating transformers Earth free zones Key ref: Electricity at Work Regulations 1989
Static	Shock, explosion	Equipment designed to minimise shock Adequate earthing
Soldering	Burns from hot soldering iron, spatter and spillage from solder bath	Good working practice PPE
	Risk to health from soldering fume	COSHH assessment including the use of LEV Key ref: As above for COSHH assessments
Manufacturing of electrical components	Risk of exposure to chemicals, fume and other hazardous substances	COSHH assessment including the use of LEV, PPE Key ref: As above for COSHH assessments

## 6. HANDLING & STORAGE OF MATERIALS & EQUIPMENT (including delivery, to and from storage, to and in use and disposal)

Hazard	Possible harm	Our Controls
Delivery vehicles reversing/manoeuvring	Being struck/trapped Inhalation of exhaust fumes	Minimise need to reverse/manoeuvre Keep clear Deliver at non-busy times
Storage/disposal of hazardous substances (fire/explosion/chemical reaction etc.)	Burns etc. Pollution	COSHH assessments, compliance with University policies Key refs: As above for COSHH assessments Identification and Storage, Arrangements for Keeping and Storage of Hazardous Substances: UHSP/15/HS/00, S 5 The Keeping of Liquefied Petroleum Gases (LPG) in Cylinders & Cartridges: USP/88/LPG/10 Waste Disposal, Special Waste UHSP/15/HS/00, S7.1 Discharges of Liquid Waste to University Sewers UHSP/15/HS/00, S7.2
Exposure to harmful substances when handling (chemicals resins, oils etc.)	Contact with skin, eyes or inhalation	COSHH assessment, controls may require PPE Key ref: As above for COSHH assessments
Heavy and awkward loads, difficult travelling routes, awkward unloading and storage positions	Sprains, strains etc. to various parts of body	Carry out manual handling assessments including eliminating, mechanising and minimising manual handling. Suitable steps etc. Key ref: Manual handling operations UHSP/6/MHO/96
Materials with rough surfaces and sharp edges	Cuts mainly to hands	Eliminate/cover rough surfaces if possible Wear suitable PPE including gloves
Unsuitable storage (not strong enough unstable, too high etc.)	Injury due to collapse etc.	Ensure storage arrangements suitable e.g. do not overload, put heavy items at bottom, minimise height etc.
Use of lifting equipment	Injury due to failure of the equipment etc.	Ensure equipment is not overloaded and is regularly inspected and maintained (Lifting equipment must be inspected every 14 months)
	Injury due to lack of training	Authorised users who are competent and have had instruction and training



## 7. THE WORKING ENVIRONMENT

Hazard	Possible harm	Our Controls
Slipping and tripping	Cuts, bruising, fractures etc.	Good layout and sufficient space Dry, non slip floors Tidy access routes and work areas Regular removal of waste and rubbish Key ref: Workplace (Health, Safety & Welfare) Regs 1992 Non slip footwear Key ref: Safety Footwear-Policies & Procedures USP/90/SF/17
Unsuitable lighting e.g.: insufficient, glare, dazzle, strobe effects	Injury from contact with machinery Slipping and tripping Eye strain	Good lighting design and maintenance/cleaning of lights Carry out lighting survey if necessary Key ref: Workplace (Health, Safety & Welfare) Regs 1992, Lighting at work HS(G)38
Extreme cold	Injury when handling or using machinery due to lack of dexterity in fingers	Maintain reasonable temperatures Key ref: Workplace (Health, Safety & Welfare) Regs 1992, (Minimum temp 16°C usually)
Poor general ventilation	Build up of dust/fume, excessive heat	Ensure ventilation system is adequate and is regularly maintained Carry out ventilation survey if necessary Key ref: Workplace (Health, Safety & Welfare) Regs 1992
Lack of/inadequate maintenance of equipment	Shock/burn from electrical equipment	Maintenance system in place and up to date Key ref: Guidance on Equipment Provided for Use at Work GUIDANCE/1/EPUW/99
	Cut, bruise or fracture etc. mechanical equipment	Equipment (Equipment Rated up to 240v) UHSP/5/CITEE/95 Inspection and Testing of Electrical Equipment (Equipment rated over 240v and up to and including 415v) UHSP/12/ITEE/97 Guidance on Equipment Provided for Use at Work GUIDANCE/1/EPUW/99
Use of hand tools	Cut, bruise or fracture etc.	Keep tools in good condition Authorised users only who are competent having had instruction and training
Incorrect use of display screen equipment	Musculoskeletal problems	Assess use of display screen equipment Key ref: Display Screen Equipment Use UHSP/7/DSE/96
Entry, use of equipment by unauthorised persons	Injury from machinery, chemicals, etc.	Only authorised persons allowed entry and to use equipment Key ref: Guidance on Equipment Provided for Use at Work GUIDANCE/1/EPUW/99
Inadequate hygiene arrangements	Contamination of the skin	Good washing facilities available Clean overalls/coats available Key ref: Workplace (Health, Safety & Welfare) Regs 1992
Unsuitable work patterns	Injury due to fatigue, lack of concentration	Suitable work patterns

## 8. EMERGENCIES

Hazard	Possible harm	Our Controls
Accident	Injury	First aiders available Procedures in place and people aware of them
Fire	Injury	Fire training up to date Suitable fire fighting equipment available and in good condition Procedures in place and people aware of them Key ref: Fire Safety UHSP/4/FS/01
Bomb threats	Injury	Procedures in place and people aware of them
Chemical spills	Contamination of skin and eyes Inhalation of vapour or fumes	Procedures in place and people aware of them Remedial equipment available COSHH assessment Key ref: Assessment, <i>Pro forma</i> and guidance: UHSP/15/HS/00, S 2 Making a Chemical Hazard & Risk Assessment USP/90/CHRA/16 Control Measures, Good Chemical Practice: UHSP/15/HS/00, S 3.1
Loan/out of hours working	Being injured but no one being aware that help is required	Assess if work is suitable to be done alone (Machinery, electrical work, welding etc. should not be done alone) Key ref: Safety supervision, out of hours activities and unattended equipment and apparatus UHSP/8/SSOHA/96

## 9. ADDITIONAL CONSIDERATIONS

Hazard	Possible harm	OurControls
overcrowding	Egress restriction	Maximum of 8 persons within the workshop at any time.
Evacuation route	Slips, trips and falls	Lighting upgrades in place for exit route including final exit Photoluminescent signage also exit route Exit route checked regularly by staff for clearance Surface holes patched with cold pour Floor marks in PL paint to be applied as funds allow
Air Quality	Repository	3 stage filter installed Workstation extraction units provided PPE provided New extraction pipework installed for localised dust collection
Allotments	Infection	PPE is provided to all using the allotments area and induction brief provide by staff

## **10. RISK ASSESMENT NOTES**

FOR SIMPLICITY: "THINK PINK"

A number of the workshop tools and equipment have pink coloured stickers attached. These tools have two preconditions that **MUST** complied with;

1. Users **MUST** be aged 18 or over.
2. Users **MUST** complete an abrasive wheel's course and watch a short induction video.

ALL LEADERS **MUST** ENSURE THAT THE WORKSHOP RULES ARE FOLLOWED AT ALL TIMES, THE RULES ARE PRINTED AND PLACED IN VARIOUS LOCATIONS AROUND THE WORKSHOP, IT IS THE RESPONSIBILITY OF EMPLOYEES TO ENSURE THAT USERS HAVE READ THE RULES OR IF REQUIRED THE RULES ARE READ TO THE USERS.