



Job Safety Analysis (JSA)

JSA Carried out for	Mechanical Phase 1 Trainees	JSA No. BF1.1	<input checked="" type="checkbox"/> NEW <input type="checkbox"/> REVISED	Page: 1 of 2
Task	Centre Square	Analysis by: Eddie Cody	Approved by:	Date: 21.09.2017
MANDATORY	Read SOP - Undertake 3 Whats Risk Assessment - Read COSHH Assessment - If in any doubt STOP! Get Assistance.			
JOB STEPS	POTENTIAL HAZARDS	RECOMMENDED SAFE JOB PROCEDURES		PPE
Prepare materials	<p><u>Material handling</u> Contact with sharp edges. Handling - heavy /slipping. Impact injuries. Overstretching ability. Slips Trips & Falls.</p> <p><u>Potential Injuries.</u> Crushing, Back strain, Lacerations, Cuts, Grazes, Eye injuries, Skin irritation.</p>	Good housekeeping; check area/route is clear. Remove any grease film. Plan movement path. Use a banks-man. Correct lifting techniques. Use mechanical assistance.		LEP Gloves Boots Overalls
Cutting materials	<p><u>Using Band Saw</u> Contact with moving blade. Falling material. Contact with sharp edges. Handling material - heavy /slipping. Overstretching ability. * Cleaning down.</p> <p><u>Potential Injuries.</u> Amputation, Crushing, lacerations, Cuts, Grazes, Eye injuries, Skin irritation.</p>	<p>NO gloves on rotating machinery. Do not operate the machine until instructed to do so. Check Machine condition - guards, controls, cables etc. Keep out the line of fire – Keep away from the blade (Danger Zone) until it has stopped & isolated. Support long sections on trestles. Keep clear of rotating parts. Avoid contact with cutting fluids. Good housekeeping safely dispose of waste, clean up spillages, safely return materials. *Avoid contact with blade / sharps when brushing down. (Gloves permitted when cleaning).</p>		LEP Boots Overalls
Marking Out	<p><u>Using Marking Tools</u> - Scribes, Dividers, Punches, height gauge, hammers. Contact with sharp edges Impact with hammers Overstretching ability</p> <p><u>Potential Injuries.</u> Lacerations, Cuts, Puncture wounds, Crushing, Grazes, Eye injuries, Skin irritation.</p>	Check condition of all tools. Ensure marking tools are sharp. Keep hands and fingers away from point of contact with the workpiece / tool. keep out the line of fire when hammering. Store tools safely – Do Not carry/store tools in pockets, Avoid contact with marking blue.		LEP Gloves Boots Overalls

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Drilling	<p><u>Using Drilling machines.</u> Contact with rotating Spindle, Drill bits. Impact with work-piece. Contact with heat source. Contact with swarf/ flying debris. Overstretching ability. * Cleaning down.</p> <p><u>Potential Injuries.</u> Amputation, Crushing, lacerations, Fractures, Cuts, Grazes, Eye injuries, Metal splinters, Burns, Skin irritation.</p>	<p>NO gloves on rotating machinery Do not operate the machine until instructed to do so. Check Machine condition - guards, controls, cables etc. Keep out the line of fire – Keep away from the spindle (Danger Zone) until it has stopped & isolated. Ensure the work-piece is fully clamped. When using a Vice ensure the its secured to the table. Handle cutting tools (Drill bits) with care – Hot /Sharp. Handle work-piece with care – Hot /Sharp. Don't handle swarf - Use a rake. Avoid contact with cutting fluids. Good housekeeping return tools /safely dispose of waste. *Always remove cutting tools before brushing down (Gloves permitted when cleaning).</p>	LEP Boots Overalls
Cutting & Shaping	<p><u>Using Hand Cutting Tools.</u> Hacksaws, Files. Slipping when hacksawing hitting the vice/ workpiece - contact with the blade. Using file with split or missing handles. Vice pinch points - handle dropping. Contact with sharp edges & burrs. Contact with heat source - workpiece. Overstretching ability.</p> <p><u>Potential Injuries.</u> Amputation, Crushing, lacerations, Cuts, Grazes, Eye injuries, Metal splinters, Burns, Skin irritation.</p>	<p><u>Hacksaw</u> Grip with two hands, Slow at the end of the cut. Left-handed –saw left side of the vice. Right-handed –saw right side of the vice. Check the condition of the blade.</p> <p><u>Files</u> Do not use a file without a handle, if the handle is split.</p> <p><u>Vice</u> Ensure the work-piece is fully clamped with minimum overhang. Vice pinch points / sharp edges / handle dropping.</p> <p>Handle work-piece with care – Hot /Sharp. Good housekeeping return tools /safely dispose of waste.</p>	LEP Gloves Boots Overalls
Riveting	<p><u>Using Hammers</u> Striking fingers/ hand, shock/vibration. Contact with sharp edges/burrs. Overstretching ability.</p> <p><u>Potential Injuries.</u> Crushing, lacerations, Cuts, Grazes, Eye injuries, Deafness, Tinnitus.</p>	<p>Check the hammer is in good condition – Head is secure, handle is not damaged, no visible damage to the hammer faces. Keep fingers hands out of the “Line of Fire” Support workpiece on hard flat surface to avoid shock/vibration. MANDATORY- Ear protection as noise levels may exceed 100dB</p>	LEP Gloves Boots Overalls Ear Plugs
Completion - Clean-up	<p><u>Using Cleaning Equipment</u> Contact with swarf / scrap materials * Contact with tools / cutters. Contact with cleaning agents. Slips Trips & Falls</p> <p><u>Potential Injuries.</u> Crushing, lacerations, Cuts, Grazes, Eye injuries, Metal splinters, Burns, Skin irritation.</p>	<p>Good housekeeping - safely dispose of waste, clean up spillages, safely return tools/materials.</p> <p>*Avoid contact with tools / sharp edges when brushing down - especially machinery. Avoid contact with cutting fluids. Don't handle swarf. - use a rake /shovel.</p>	LEP Gloves Boots Overalls