**Safe Job Analysis: Use of the D8 A25 Powder Diffractometers**

**RECX1 high resolution powder diffractometer**

**Room ØU34**

**General**

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| **Subtask** | **What could go Wrong** | **How to prevent consequences of this** |
| Opening radiation Cabinet | X-ray exposure | * Do not bypass safety circuits. |
| Sample handling | Chemical hazards | * Be aware of the chemical hazards and use the appropriate protection measures * Do not touch the instruments or computers with contaminated gloves! |
| Changing sample stages | Electric Shock | * Always turn off the generator and set the instrument to standby before changing sample stages. |

**Ancillary Equipment: Heat Gun**

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| **Subtask** | **What could go Wrong** | **How to prevent consequences of this** |
| Running and moving the heater | Burns and overheating | * Do not touch the heater barrel when hot * Always ensure proper air flow (??? Bar of pressure on regulator) before starting heater. |

**Safe Job Analysis: Use of the D8 A25 Powder Diffractometers**

**RECX2 Multipurpose powder diffractometer**

**Room ØU34**

**General**

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| **Subtask** | **What could go Wrong** | **How to prevent consequences of this** |
| Opening radiation Cabinet | X-ray exposure | * Do not bypass safety circuits. |
| Sample handling | Chemical hazards | * Be aware of the chemical hazards and use the appropriate protection measures * Do not touch the instruments or computers with contaminated gloves! |
| Changing sample stages | Electric Shock | * Always turn off the generator and set the instrument to standby before changing sample stages. |

**Ancillary Equipment: Flip Stick Automatic Sample Changer**

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| **Subtask** | **What could go Wrong** | **How to prevent consequences of this** |
| Changing samples and other work inside the cabinet | Sample changer motors can move when door is open | * Do not open the door when the flipstick is moving between sample positions. |
| Changing stages | Electric shock  Optical surface of stage may be damaged | * Always power down the source and the instrument before disconnecting the Flipstick. * Do not touch or otherwise contaminate the optical screen on the sample magazine. |

**Ancillary Equipment: Motorised XYZ stage**

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| **Subtask** | **What could go Wrong** | **How to prevent consequences of this** |
| Changing samples and other work inside the cabinet | Motors could cause injury if moving | Do not open the doors when the stage is moving. |

**Ancillary Equipment: Anton HTK1200 Paar Furnace**

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| **Subtask** | **What could go Wrong** | **How to prevent consequences of this** |
| Changing samples and other work inside the cabinet | Heat | * Do not touch when hot. * Always check the water flow before starting the furnace. |
| Changing Stages | Electric shock  Flood | * Always power down the source and the instrument before (dis)connecting the cables to the furnace. * Turn off the water before disconnecting the cooling water tubes. |