

Job step description	Potential Hazards	Recommended Control Measures	Responsible Person	Initial
1: Transport all equipment to pool-side.	1.1: Drop of the controller box resulting in damage of equipment and injury	1.1: Ensure at least two team-members carefully transport the box.		
	1.2: Drop of any device from the transport cart	1.2: Before starting the transport, all devices have to be secured against falling off and a team member has to pay attention to possible obstacles on the floor, e.g. cracks.		
2: Connect the cables inside the control station	2.1: Potential injury of a team member by electrical discharge	2.1: Ensure the responsible person is grounded.		
	2.2: Potential damage to cables by uncareful treatment	2.2: Attentively double check if the connection to be made is correct, and in case of any doubt, discuss with a team mate. Do not rush to connect the cables.		
	2.3: Drop of a controller device	2.3: Ensure that the surface of the control station is free and ready to perform the connections.		
	2.4: Potential hazard because of tear open of the controller box	2.4: Check that there is nothing behind the control station and slowly open the case.		
3: Connect the top-side power to the control station	3.1: Incorrect treatment of connecting cables	3.1 Avoid strong forces on the tether while connecting it.		

4: Run the safety checklist for any safety risk and the MATE regulations	4.1: Missing of a checkpoint due to miscommunication	4.1: In each communication, tell the information twice to ensure correctness.		
	4.2: Injury of a team member in case that a connection is not properly revised.	4.2: Before checking, ensure that all insulation is proper and no cable is damaged.		
5: Initialize the entire system	5.1: Damage of the T200 Thrusters because of driving fast in air.	5.1: Ensure that the controller software is only started once the thrusters are in water.		
	5.2: Damage of the grabber in case it opens unexpectedly	5.2: Unity is only allowed to be started once the ROV system is in water		
	5.3: Injury due to improper handling of the Micro-Rov thrusters	5.3: Ensure the controller software is only started once the ROV systems is in water.		
6: Transport the ROV, the Micro-ROV and the tether to the pool-side.	6.1: Damage to the carbon electronics enclosure if dropped by improper holding.	6.1: The ROV system including the Micro-ROV is only allowed to be carried by at 3 team members, two of which hold the ROV and one the Micro-ROV.		
	6.2: Damage to the carbon electronics enclosure if dropped because of the tether unexpectedly getting caught somewhere.	6.2: The ROV system is only allowed to be carried if the tether is properly disconnected before transport and connected afterwards respecting the safety regulations.		
7: Introduction of the Micro-ROV into the ROV garage	7.1: Damage to the fibre-optic cable	7.1: Pay special attention winding the cable correctly. Do not apply strong forces on it.		

	7.2: Braking off of the Micro-ROV thrusters	7.2: The team member introducing the Micro-ROV has to insert it in the most central point, which is predefined.		
8: Lower the ROV system to the water	8.1: Impairment of the ROV tether because of unexpected strong forces applied to it	8.1: Ensure enough cable is provided by the corresponding team member.		
	8.2: Damage of the thruster arms by lowering the ROV system too close to the pool-side	8.2: The ROV system is only allowed to be lowered if the closest point of it has a the predefined minimal distance.		