

Company CEO: _____

Company Name

Product demonstration station officials: _____

Safety

Check here if the company has their PASSED safety inspection card

Companies without their safety inspection PASSED card cannot participate in the product demonstration.

Fuses: ROV systems are allowed one replacement fuse during the product demonstration. In the event that the ROV system blows the second fuse during the demonstration, time will stop, the demonstration run will be over, and no additional points will be earned. Companies should have adequate replacement fuses on hand, MATE will not provide replacements.

Task # 1: Marine Renewable Energy (up to 50 points)	Points																
Judges' Notes: Companies must complete the steps of task 1.1 "Install a floating solar panel array" in order. Companies must complete task 1.3 "Pilot into resident ROV docking station" as the final task.																	
1.1 up to 40 points – Install a floating solar panel array <ul style="list-style-type: none"> 10 points – position a solar panel array amongst floating wind turbines 10 points – moor the panel array to an anchor point 5 points – remove the power port cover 10 points – install the power line connector into the power port 	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;"></td> <td style="width: 10%; text-align: center;">0</td> <td style="width: 10%;"></td> <td style="width: 10%; text-align: center;">10</td> </tr> <tr> <td></td> <td style="text-align: center;">0</td> <td></td> <td style="text-align: center;">10</td> </tr> <tr> <td></td> <td style="text-align: center;">0</td> <td></td> <td style="text-align: center;">5</td> </tr> <tr> <td></td> <td style="text-align: center;">0</td> <td></td> <td style="text-align: center;">10</td> </tr> </table>		0		10		0		10		0		5		0		10
	0		10														
	0		10														
	0		5														
	0		10														
1.2 up to 15 points - Remove biofouling from the foundation and mooring lines of floating wind turbines <ul style="list-style-type: none"> 5 points – remove 1 to 2 biofouling from turbines 10 points – remove 3 to 5 biofouling from turbines 15 points – remove 6 biofouling from turbines 	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;"></td> <td style="width: 10%; text-align: center;">0</td> <td style="width: 10%; text-align: center;">5</td> <td style="width: 10%; text-align: center;">10</td> <td style="width: 10%; text-align: center;">15</td> </tr> </table>		0	5	10	15											
	0	5	10	15													
Total Task # 1 (out of 50)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;"></td> <td style="width: 10%; text-align: center;">Total</td> </tr> <tr> <td style="height: 20px;"></td> <td></td> </tr> </table>		Total														
	Total																

Task # 2: Heathy Environments From the Mountains to the Sea (up to 120 points)	Points	
2.1 up to 20 points – Identify reef organisms using eDNA		
5 points – collect a water sample from above the coral head	0	5
5 points – return the water sample to the surface, side of the pool	0	5
5 points each, 10 points total – use the eDNA data to identify coral reef fish species	0	5 10
2.2 up to 30 points – Administer Rx to diseased corals		
10 points – irradiate the diseased area of coral with simulated UV light	0	10
10 points – place a tent over the diseased area of coral	0	10
10 points – insert a syringe filled with "probiotic" fluid into the port	0	10
2.3 up to 10 points - Monitor and protect seagrass habitat		
5 points – install an Eco-Mooring system to protect habitat	0	5
5 points – secure the Eco-Mooring by rotating it 360 degrees	0	5
2.4 up to 20 points - Reintroduce endangered native Northern Redbelly Dace fry		
5 points – transport the fry to the release area	0	5
5 points – allow the fry to acclimate to local conditions	0	5
5 points each, 10 points total – release the fry	0	5 10
2.5 up to 30 points - Ensure the health and safety of Dillon Reservoir		
5 points – recover a damaged buoy rope	0	5
5 points – place a new buoy rope and bouy in the designated area	0	5
10 points – attach a lift bag to the container	0	10
5 points – inflate the lift bag to lift the container	0	5
5 points – return the container to the surface, side of the pool	0	5
2.6 up to 10 points - Monitor endangered Lake Titicaca giant frogs		
10 points – install a long term camera into a designated area	0	10
Total Task # 2 (out of 120)		Total

Task # 3: MATE Floats! 2023 (up to 30 points)	Points	
3.1 up to 60 points – MATE Floats!		
10 points – Pull a pin to simulate the float ascending to the surface	0	10
5 points – recover the float to the surface, side of the pool	0	5
15 points – graph water temperature versus data	0	15
Total Task # 3 (out of 30)		Total

Penalty Points (deduct 5 points for each infraction)	No. of Infractions	
<p>Safety: Product demonstration officials may deduct points for safety violations. Minor violations are a 5 point penalty. Major violations may be 10 or more points. Product demonstration officials may also disqualify a company for extreme safety violations. Note: An official's decision to disqualify a company due to safety concerns is final. If there is a safety concern, please contact the lead safety inspector or competition coordinator.</p>		
<p>Tether Pulling: Company members cannot pull on the tether to assist in moving or turning the vehicle. Judges should issue a warning for the first infraction and begin deducting points AFTER the first infraction.</p>	a	
<p>Debris: Companies that leave debris (e.g. parts of their ROV, including weights and flotation) in the pool at the end of the product demonstration time, or leave debris that a diver must retrieve will receive penalty points. Product demonstration props are NOT considered debris. A company constructed collection basket is considered debris if it is still in the water, not under control of the ROV, when product demonstration time ends.</p>	c	
<p>Diver Assistance: Any diver assistance (if available) must be requested by the company and will result in a 5 point penalty. The clock does not stop during diver assistance.</p>	d	
<p>Total Penalty Points</p>	<p>(total a + b + c + d) plus safety violations</p> <p><input type="text"/> X 5 =</p>	<p>Total</p> <p><input type="text"/></p>

TIME BONUS (1 point for every minute and 0.01 point for every second under 15 minutes)		
Duration of Product Demonstration: _____		
Minutes under 15 remaining: _____ X 1 point = _____		
Seconds remaining: _____ X 0.01 point = _____		
<p>Time bonus</p>		<p>Total</p> <p><input type="text"/></p>

<p>TOTAL PRODUCT DEMONSTRATION SCORE</p>	<p>Grand Total</p> <p><input type="text"/></p>
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Official's initials: _____

Company CEO's initials: _____