

2018 ELECTROMOBILE - TECHNICAL INSPECTION FORM (TEAM COPY)

University		Attempt (Note the time)			Vehicle #
		1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	
Team		4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	

PENALTY

	Subject	Missing/Violation	Before Race	After the Race	Conclusion
Penalty	Domestic Components				
	(Example: hood, seat, headlight etc.)				

PHYSICAL SPECIFICATION & HARDWARE

Test	Vehicle dynamic testing	Time	Value		Compatibility		NOTES
	Speedometer	Functional					
Physical Specification	Vehicle height	At least 1 m above ground level					
	Minimum height	Height of the vehicle from the ground must be a minimum of 10 cm					
	Vehicle measurements	Should fit within the lines drawn at the technical inspection					
		Technical drawing should be provided with a separate page					
	Cockpit (for driver and passenger)	A minimum height of 85 cm and width of 65 cm, will be checked by emergency evacuation performance and visually					
	Vehicle body	Hood for access to other components					
		From the top view: no open regions, the wheels inside the body					
		Fragile windows / sharp ends / protruding edges etc.					
	Door	50 cm x 80 cm frame can pass through the door					
	Door mechanism	Fixed to the body with a safe connecting element					
Can be opened from outside/no possibility of unintended opening							
Wheel width	A minimum of 70 mm						
Flag	(A minimum of 20 x 30 cm)						
Hardware	Windscreen	Transparent windows that do not shatter during collisions					
	Wiper	Working properly					
	Rearview mirrors	On both sides of the cockpit					
		with a minimum reflection area of 50 cm ² Driver can see the text shown					
	Horn	Able to sound 3 second continuously					
Headlights	2 headlights						
	Seen from a distance of 25 m						
Safety Hardware	Fire extinguishers	1x2 kg or 2x1 kg					
	Roll bars Roll cages	One roll bar in the front and one roll bar at the rear					
		A minimum yield strength of 200 MPa					
		Roll bar perpendicular to the bottom of the vehicle					
		The front roll bar starts at least 3 cm above the steering wheel					
		The rear roll bar starts at least 5 cm above the helmet					
		Closed and rolled pipe or box profiles					
		Independent from the chassis					
	Tow bars	Welding/bolts used according to specified rules.					
		One in the front and one at the rear					
		With a minimum internal diameter of 20 mm, made of steel					
	Steering wheel	Closed form					
	Safety Belts	Fixed at four or five points, compatible with FIA standards					
	Driver outfit and equipment	Compatible with FIA standards					
Seat	Driver seat is compatible with FIA standards, fixed to the chassis						
	Passenger seat is compatible with FIA standards, fixed to the chassis						
	Makes an angle of at most 30 degrees with the normal axis of the chassis						

Team:

ELECTRICAL SAFETY & BATTERY (TEAM COPY)

	Value	Compatibility		NOTES	
		✓	X		
Electrical Safety	Electrical cable connections	No bare cable/proper insulation			
	Overcurrent breaker	In the power conditioner circuit, on main power line, and with proper rated values			
	Joule meter connection	No extra battery apart from the main battery package No bypass connection			
Battery	Battery type	Li-Ion, Li-Polimer			
	Battery management system	Temperature sensors			
		Temperature test for battery cell			
	Battery temperature measurement	Flasher, buzzer and temperature indicator			
	Battery datasheet	Must be presented			
		All the data should be available			
	Battery box	Hood for access to battery package			
Proper material					
Proper design					
Fixing battery box	Fixed properly with bolts and nuts, grade 8.8 and a min. diameter of 8 mm				
Safety wall	Proper material				
Test	Brake lights	At least one brake light			
	Brake test	Seen from a distance of 25 m			
		Functional			
	Steering	Functional			
	Brake system	Dual-circuit hydraulic			
Emergency Evacuation (driver and reserve driver)	No longer than 20 seconds, without help				
Sticker	Emergency stop button	Two buttons, one inside and one outside the vehicle			

DOMESTIC PRODUCTS & TECHNICAL DESIGN REPORT (TEAM COPY)

	Sub-Component	NOTES	
Report	4 mandatory sub-components	1. Motor	
		2. Motor driver	
		3. BMS	Datasheet of battery Technical drawings of BMS Battery mapping scheme Explanation of the algorithm Q and A
		4. Emb. Rech. Unit	
	Optional sub-component	5. Battery Packaging	
		6. Elec. Diff. App.	
		7. VCU	
Other report notes	Original Design		
Final Evaluation Notes			

Academic advisor signature

Jury signature