Kart1 Design Challenge 2023

OFFICIAL RULE BOOK

1. ABOUT KART1 DESIGN CHALLENGE & THE ORGANISERS

Kart1 is a flagship brand of MVR Motorsports. The karting activities around the country are organised under the umbrella of Kart1. The major aspects of Kart1 are preparing the race engineers and racers for the future of karting in India. Our prime initiative in this direction is to start with the concept of Kart Design Challenge. Providing an opportunity to the top 10 teams to compete as a category in the Kart1 Championship. The idea here is to support the top teams every year from the Design Challenge commercially and technically to become self-reliant karting teams.

Kart1 design challenge is mainly dedicated to the budding talent from various Engineering Colleges & Universities. It is one of a kind event to harness the talent, provide them the necessary support and a platform to showcase their innovation.

2. PHILOSOPHY BEHIND KART1 DESIGN CHALLENGE

The aim of the Kart1 Design Challenge is to test the working models designed and developed by the young engineers. It is imperative to say that the karts developed by the engineers will be judged mainly on the performance and not on the theory. The team behind its product will also be judged on the quick thinking, improvisation, coordination of the members and their properly defined roles within the team.

"A product without an application is a show piece"

3. COMPETING CATEGORIES

There are two categories to compete in Kart1 Design Challenge.

A) Internal Combustion Engine **(ICE)**
B) Electric Motor Drive **(EMD)**

4. DEFINITIONS

4.1 Kart

A kart is a single-seater land vehicle with bodywork elements but without a roof, cockpit or suspension. It has four non-aligned wheels that are in contact with the ground: the two front wheels control the steering, while the two rear wheels (connected by a one-piece axle) propel the kart. Only the tyres may come into contact with the ground when the driver is on board.

The main parts of a kart are the chassis, including the bodywork, the wheels and the power unit.

The driving position is on the seat, with feet to the front. Cable or tube connections between a kart and its driver are not allowed.

4.2 Chassis

The overall structure of a kart comprises the mechanical components and the bodywork. It includes any part that is interdependent of this overall structure.

4.3 Chassis Frame

The main supporting part of the kart is made of one piece and serves as a connecting base for the main and auxiliary chassis parts.

4.4 Wheel

Defined by the rim with a mounted pneumatic tyre.

4.5 Power Unit

In case of ICE power unit refers to a single cylinder petrol powered internal combustion engine determined by the bore and stroke of the engine's cylinder. The volume (V) is the swept volume of the piston between the top dead centre and the bottom dead centre. This volume is specified in cubic centimetres (cm^3). And includes the important components like carburettor, inlet & outlet valves and radiator and as optional component.

In case of EMD it refers to Electric Motor (AC/DC) along with its components like tractive system, accumulators and the supporting components.

4.6 Data Processing

4.6.1 Logging or Acquisition

Any system (with or without memory) installed on a kart, allowing the driver to read, indicate, obtain or transmit data.

4.6.2 Telemetry

Transmission of data between a kart and another entity.

4.6.3 Radio

Radio communication system used to transmit voice data between a driver on the track and another entity.

4.6.4 Signalisation

Data provided to a driver by optical or acoustic means.

TECHNICAL REGULATIONS

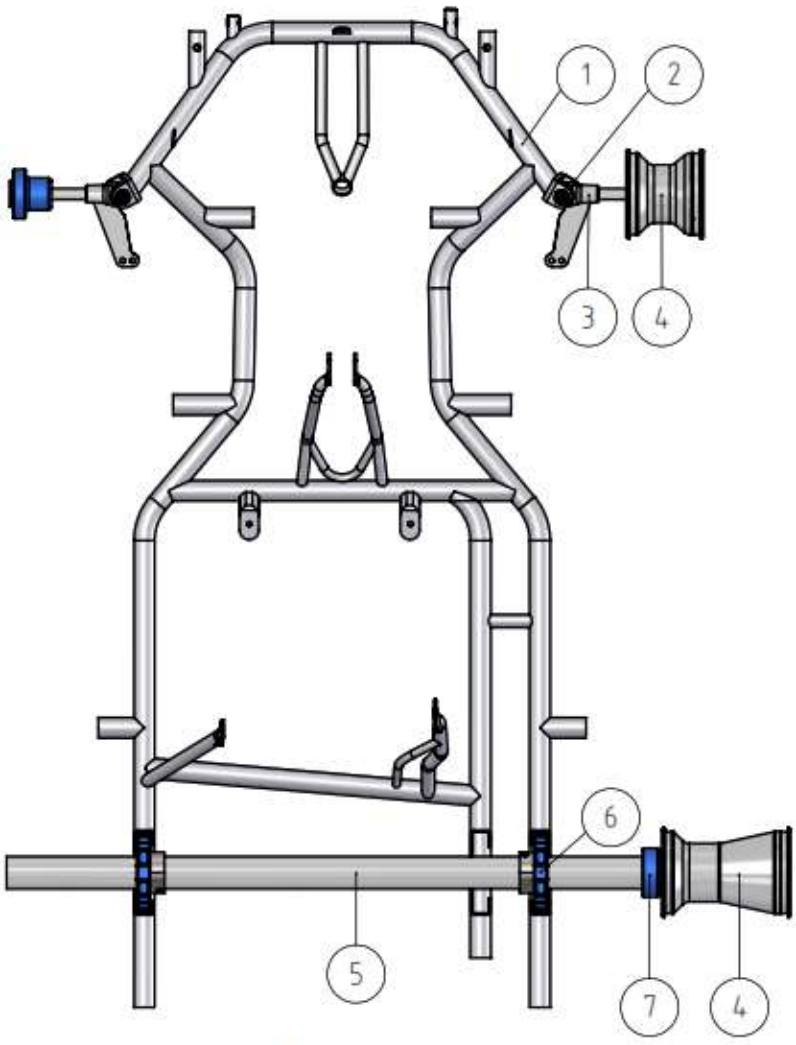
5. CHASSIS REGULATIONS

5.1 Chassis

The chassis is composed of the chassis frame and its main and auxiliary parts.

5.2 Chassis Frame

The chassis frame is the main supporting part of the kart. It serves as a base for the chassis main parts and incorporates the chassis auxiliary parts. It must be manufactured to absorb the forces produced when the kart is in motion. The flexibility and suspension of the frame come from the elastic properties of the tubular construction and material. The chassis frame is made of steel tubes with a cylindrical cross-section. It includes the front and rear axle supports and is welded in one piece so it cannot be dismounted.



Caption

1	Front axle supports
2	King-pin
3	Steering knuckles
4	Rims
5	Rear axle
6	Rear axle supports
7	Hubs

5.3 Chassis Main Parts

The chassis main parts transmit the track forces to the chassis frame through the tyres.

They include:

- the wheels with hubs;

- the rear axle;

- the steering knuckle;

- the king pin.

5.3.1 Requirements

The chassis main parts must be securely attached to each other or to the chassis frame. A rigid construction is mandatory: no articulations or flexible joints are allowed. Articulated connections are only allowed for the steering knuckle (through the king pin) and the steering.

5.4 Rear Axle

The rear axle diameter must comply with the category in which the kart is entered. In all categories, the rear axle must be made of magnetic steel. Each rear axle must have, on the inside and outside, a rounded edge or a chamfer with a maximum diameter corresponding to the axle thickness. The chamfer must not have sharp edges. The rear axle used on the chassis does not need to come from the same manufacturer as the chassis itself.

The axle wall thickness depends on the outside diameter of the axle. It must comply with the following criteria at all points (except the keyways):

Max. external diameter (mm)	Min. thickness (mm)	Max. external diameter (mm)	Min. thickness (mm)
50	1.9	38	3.2
49	2.0	37	3.4
48	2.0	36	3.6
47	2.1	35	3.8
46	2.2	34	4.0
45	2.3	33	4.2
44	2.4	32	4.4
43	2.5	31	4.7
42	2.6	30	4.9
41	2.8	29	5.2
40	2.9	>28	full
39	3.1		

5.5 Chassis Auxiliary Parts

Chassis auxiliary parts include all elements that are not part of the main chassis and contribute to the proper functioning of the kart. These are attachments of the steering, pedals and pedal kits, seat, intake silencer, engine, exhaust, exhaust silencer, radiator, brakes and bumpers and their corresponding connections, attachment points, reinforcement tubing and sections. Seat stays and anti-roll bars are included. Anti-roll bars must only be connected to the main tubes of the chassis frame.

Chassis auxiliary parts also include the inner reinforcement of the chassis main tubes (maximum length 150 mm) between the axle bracket and the engine support.

Requirements

Auxiliary parts must be securely attached, not fall off while the kart is in motion and not present a risk to the driver or other competitors. Flexible connections are permitted.

5.6 Pedals/Pedal Kits

Whatever their position, pedals must never protrude in front of the chassis, including the bumper. The brake pedal must be placed in front of the master cylinder. The accelerator pedal must be equipped with a return spring. A mechanical link between the accelerator pedal and the carburettor is mandatory.

5.7 Steering System

The steering system consists of a steering wheel, steering wheel hub, steering column, steering column bracket and two steering arms connected to the steering knuckles. A spacer may be used between the steering wheel and the hub. Although it is an articulated connection, the steering system must only move in one axis when the kart is in motion. All other axes are only accepted within their normal mechanical range of play. All parts must be securely attached to each other with screws. The method of attachment must offer maximum safety (split pins, self-locking nuts).

5.7 Steering Wheel

The steering wheel must be made of a continuous rim, not incorporating any obtuse angles (180-360 °) in its basic shape. The upper and lower thirds of the circumference may be straight or of a different radius to the rest of the wheel. Steering wheel rims are manufactured with a metallic structure made of steel or aluminium.

The steering wheel hub must be securely attached to the column with at least one M6 screw (minimum grade 8.8) and a self-locking nut.

5.8 Steering Column

The steering column must be mounted to the chassis with a bracket and an articulated joint. It must be fixed with a safety clip system for the lower bearing restraint nut and/or two collars between the column bracket. The steering column must have a minimum diameter of 18 mm, a minimum wall thickness of 1.8 mm and be made of magnetic steel.

5.9 Steering Arms

Steering arms may be made adjustable with rose joints on each end of the arm. They must be made of aluminium or steel and securely attached with self-locking nuts and bolts.

5.10 Steering Wheel Devices

No steering wheel device (such as a display or fuel cock) mounted on the steering wheel may protrude by more than 10 mm from the plane defined by the front of the steering wheel or have sharp edges.

5.11 Floor Tray

It is mandatory to have a floor tray made of rigid material stretching from the central strut to the front of the chassis frame. It must be laterally edged by a tube or a rim preventing the driver's feet from

sliding off the floor tray. The floor tray may be perforated, but the holes must not have a diameter of more than 10 mm and they must be separated by four times their diameter as a minimum. In addition, one hole with a maximum diameter of 35 mm is allowed for steering column access. The floor tray may be made of composite material.

5.12 Fuel Tank

Any receptacle containing fuel flowing to the engine. The fuel tank must be securely fixed to the chassis and designed in such a way that neither the tank nor the pipes (that must be flexible) present any danger of leakage during the competition. A quick attachment to the chassis is strongly recommended. The fuel tank must in no way be shaped to act as an aerodynamic device.

It must supply the engine only under normal atmospheric pressure. This means that, apart from the fuel pump located between the fuel tank and the carburettor, any system (mechanical or not) that may have an influence on the internal pressure of the fuel tank is not allowed.

It is mandatory to place the fuel tank between the main tubes of the chassis frame, ahead of the seat and behind the rotation axis of the front wheels.

5.13 Seat

The driver's seat must be designed to prevent him from moving towards the sides or front when cornering or braking. It may be made of composite material. The use of seatbelts or any type of fastening belts to constraint the driver is strictly prohibited.

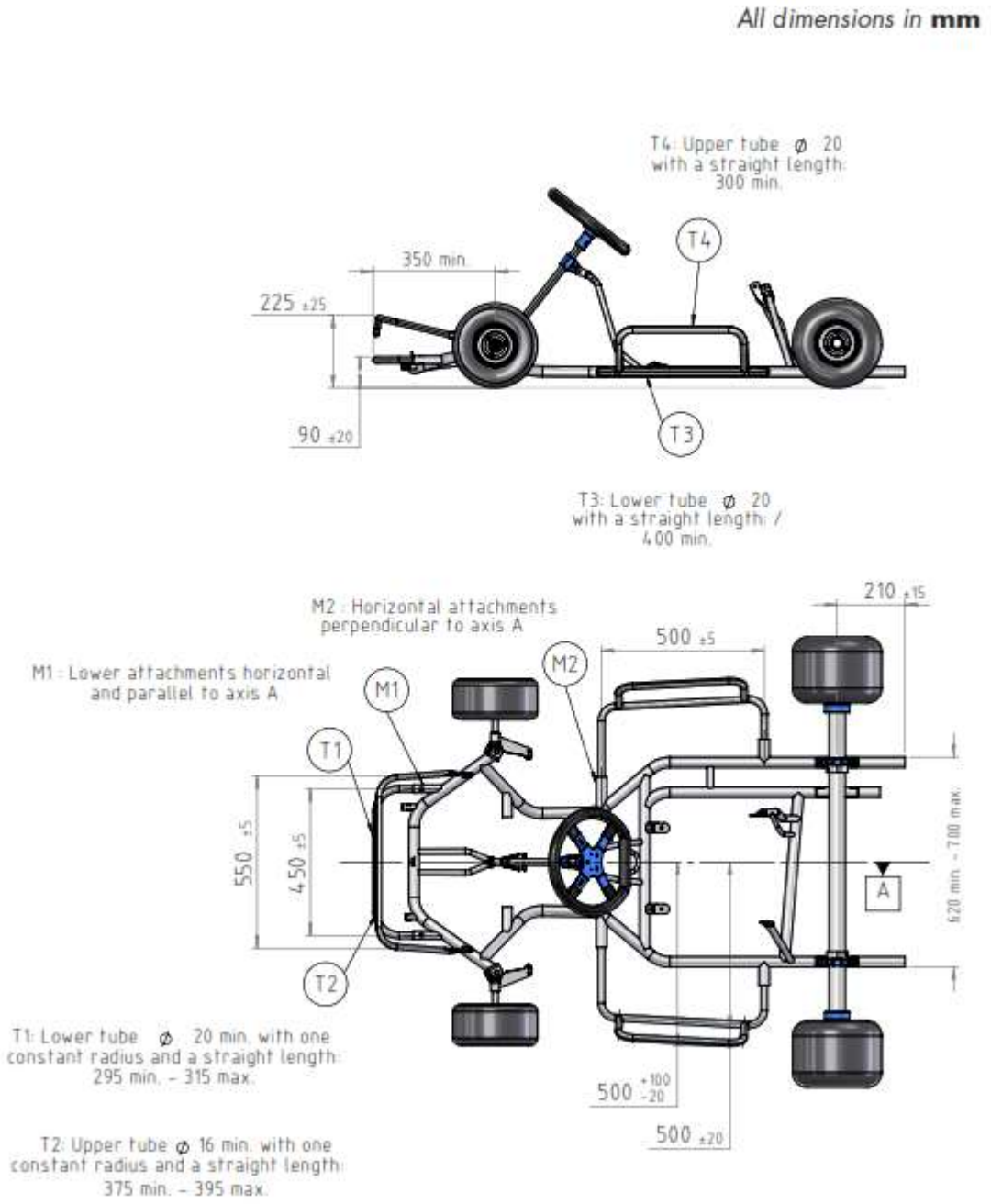
Reinforcement plates are required to support the upper part of the seat. They must have a minimum thickness of 1.5 mm, a minimum surface of 13 cm2 and a minimum diameter of 40 mm.

5.14 Seat Supports and Stays

All seat supports and stays must be bolted or welded at each end. If they are not used, these seat supports and stays must be removed from the chassis frame and seat.

5.15 Bumpers

Front, side and rear protections are compulsory. They must be made of magnetic steel round tubing.

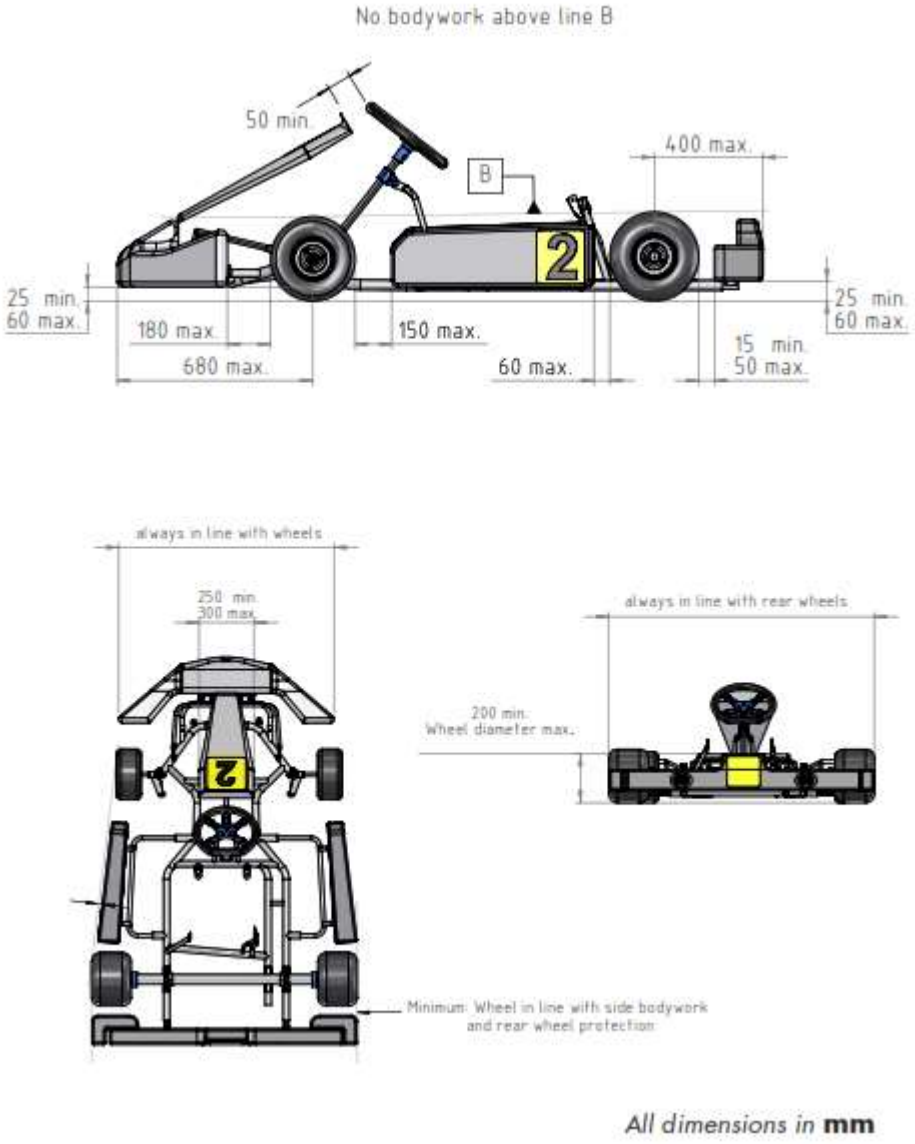


5.16 Bodywork

The bodywork is made of all the kart parts that are in contact with air other than the mechanical parts as described, the fuel tank and the number plate.

5.17 Bodywork Elements

The bodywork must comply with the category in which the kart is entered. According to the class, it must be made of one front fairing, one front fairing mounting kit, one front panel, two side bodyworks and one rear wheel protection/rear bumper.



5.17.1 Material

Only carbon fibre, glass fibre and Kevlar are allowed. The bodywork must be impeccably finished, not be of a makeshift nature and have no sharp edges. The minimum radius of any angles or corners is 5 mm. If plastic is used, it must not splinter or form sharp edges as a result of possible breakage. It may be of any colour.

5.17.2 Rear Wheel Protection

The rear wheel protection must be made by injection blow moulding, without foam filling, and must not present any risk with regard to safety. Under no circumstance may it be located above the plane defined by the top of the rear wheels. The surface of the rear wheel protection must be uniform and smooth; the rear wheel protection must not comprise cuttings. The rear wheel protection must be fastened to the chassis by at least two points using supports with the protection. These supports must be mounted (possibly by means of a flexible system) on the two main tubes of the chassis.

5.18 Brakes

5.18.1 Function

Brake systems must be hydraulic. Brake lines must have a steel or stainless-steel outer cover. The brake must work on the rear axle only and therefore on both rear wheels simultaneously.

5.18.2 Brake Discs

Brake discs from steel, stainless steel or cast iron are allowed. The surface of the brake discs may be modified by grinding, drilling, grooving, but only on sole responsibility.

5.18.3 Brake control

The brake control, i.e. the link between the pedal and the pump(s), must be doubled for safety.

5.18.4 Brake Disc Protective Pad

An efficient rear brake disc protective pad (in nylon, carbon fibre, Teflon, Kevlar, Delrin or equivalent hard plastic) is mandatory if the brake disc protrudes below or is level with the main chassis frame tubes nearest to the ground. This protection must be placed laterally in relation to the disc, in the longitudinal axis of the chassis or under the disc.

5.19 Wheels

A wheel consists of a rim that is fitted with a pneumatic tyre, with or without an inner tube. «Set of wheels» means two front and two rear wheels. Only the tyres may come into contact with the ground when the driver is sitting in the kart. Any system or valve to adjust, limit or monitor the tyre pressure when the wheel is in use is not allowed. Only tyres of the same make and type are allowed at any one time. The attachment of the wheels to the hubs and axles must be done via M8 self-locking nuts and bolts.

5.20 Tyres

Standard kart tyres manufactured in India or imported from any country are allowed with no after-market modifications or alterations done to them.

5.21 Chain Guard

A chain guard is mandatory in both categories. Chain guards may be made of composite material. In direct drive, the chain guard must provide an effective protection over the top and on both sides of the exposed chain and sprockets, and extend at least to the lower plane passing to the rear axle.

6. GENERAL POWER UNIT REGULATIONS

6.1 Internal Combustion Engine (ICE)

Teams competing in this category are free to use any engine meeting the following conditions,

Engine Type	**:** Single Cylinder
Maximum Engine Capacity	**:** 200 CC
Engine Cycle	**:** 4 Strokes

Fuel Type **:** Petrol (97 octane or lower is permitted)

6.1.1 Engine Modification:

Any modifications which do not exceed the maximum Cubic Capacity of the engine is permitted.

6.1.2 Ignition Cut-off Switch:

In case of emergency or parc-ferme situation the driver or the track marshal should be able to kill the ignition using a push switch. The same must be located between the steering wheel and the seat's bottom-front edge on the steering wheel support members.

6.1.3 Radiators:

Use of liquid cooled heat exchanger/ Radiator is permitted. Water (H2O) is the only cooling liquid allowed. Only one cooling circuit for engine, radiator and water pump is allowed.

Radiators must be placed above the chassis frame at a maximum height of 400 mm from the ground and at a maximum distance of 550 mm ahead of the rear-wheel axle. They must not interfere with the seat.

All tubing must be made of a material designed to withstand heat (150 °C) and pressure (10 bar).

6.1.4 Fuel Lines:

Only one fuel line from the tank to the carburettor/fuel pump is allowed, as well as one fuel filter before the fuel pump. The carburettor must not be pressurised by any means other than the fuel pump.

6.1.5 Exhaust:

The exhaust must be made of magnetic steel. Minimum sheet metal thickness is 0.75 mm. The exhaust system must discharge behind the driver and not operate at a height of more than 45 cm from the ground.

It is mandatory for the exhaust to pass rearward and not cross the plane defined by the driver seated in the normal driving position. The exhaust silencer outlet, of which the external diameter must be more than 3 cm, must not exceed the outer limits of the kart.

6.1.6 Noise:

In order to reduce noise, efficient exhaust silencers are mandatory. Controls may be carried out at any time during the event. It is a moral responsibility rather than regulatory article to keep the Decibel limit to 108 db. Innovations in achieving the lower levels of noise will be rewarded.

6.2 Electric Motor Drive (EMD)

Electric Motor Type - DC/AC

Maximum Power - 8 kW

6.2.1 Tractive System

The system of the kart that connects every part that is electrically connected to the motor(s) and tractive system accumulators.

6.2.2 Tractive System Accumulator

The Tractive system accumulator is defined as all the battery cells or super-capacitors that store the electrical energy to be used by the tractive system.

All types of accumulators except molten salt and thermal batteries are allowed. E.g.: Batteries, Super-capacitors, etc. Fuel cells of any kind are prohibited.

6.2.3 Tractive System Accumulator Container

All accumulator containers must be secured within the frame of the chassis and should not extend on to the bumpers or outer body work of the Kart.

The container must be completely closed and covered with the fire-retardant material.

All the electric wiring and connecting points must be properly insulated and marked with proper stickers or paint indicating “Caution” sign. Any accumulators that may vent an explosive gas must have a ventilation system or pressure relief valve.

6.2.4 Accumulator Isolation Relay or cut off

Every accumulator container must be fitted with cut off or isolation relay switch to isolate High Voltage battery in case of any emergency.

The fuse protecting the accumulator tractive system circuit must have a rating lower than the maximum switch-off current of the isolation relays.

6.2.5 Accumulator Management System (AMS)

Each accumulator must be monitored by an accumulator management system whenever the tractive system is active or the accumulator is connected to a charger.

The AMS must continuously measure the cell voltage of every cell, in order to keep the cells inside the allowed minimum and maximum cell voltage levels. If single cells are directly connected in parallel, only one voltage measurement is needed.

The AMS must shutdown the tractive system by opening the relays or cut off switch, if critical voltage or temperature values according to the cell manufacturer and taking into account the accuracy of the measurement system are detected. If the AMS does perform a shutdown, then a red LED marked AMS must light up in the cockpit to confirm this.

6.2.6 Activating the Tractive System

The driver must be able to activate or reactivate or reset the tractive system from the steering wheel or the system located between the steering wheel and the seat’s bottom-front edge on the steering wheel support members without external assistance.

Closing only the shutdown circuit must not set the kart to ready-to-drive mode. Additional actions are required by the driver to set the kart to ready-to-drive-mode e.g. pressing a dedicated start button after the tractive system has been activated.

6.2.7 Power Shutdown Switch (PSS)

There must be two PSS in the kart one accessible to the driver near the steering wheel and the other on the left side of the kart, which can be operated by anybody from outside, this PSS must be easily visible to someone standing near the kart.

7. MINIMUM WEIGHT CRITERIA

The minimum weight of the kart along with the power unit but without the driver must be 60 Kg for both the categories.

7.1 Ballast

Karts weighing under minimum limit mentioned will have to carry ballast equal the weight deficit required to level off to the minimum weight limit. The same will have to be arranged by the teams at their own cost. Team will only be permitted to compete in the dynamic challenge fulfilling the minimum weight criteria.

7.2 Right to Disqualification

The organisers reserve the right to disqualify the team not fulfilling the minimum weight criteria.

8. DRIVER SAFETY EQUIPMENT

The driver must at all times wear a homologated helmet and overall, as well as gloves, boots and a karting body protection. Wearing a scarf, muff or any loose clothes around the neck, even inside the overalls, is not allowed. Long hair must be completely contained in the helmet.

8.1 Helmets

Helmets must comply with the following prescriptions:

Recommended - DOT, Snell K2000, K2005, K2010, M2000, M2005, M2010, SA2000, SA2005, SA2010, SFI 31.2A, SFI 31.1/2005

Helmets must have an efficient and unbreakable visor for the eye opening. Visors must feature the logo of the manufacturer and the production date.

8.2 Driver's Karting Overalls

A fire-resistant one-piece suit, made from a at least 1 layer that covers the body from the neck down to the ankles and the wrists. The minimum acceptable certification required –

Recommended - SFI 3-2A/1 (equivalent or higher)

8.3 Gloves

Gloves must completely cover the hands and wrists. Leather gloves are prohibited.

Recommended - SFI 3-2A/1 (equivalent or higher)

8.4 Boots

Boots must cover the feet and protect the ankles. The shoes should preferably be of fire-resistant material. Sport shoes/Canvas shoes/Leather shoes/Industrial safety shoes are not allowed.

SPORTING REGULATIONS

9. KART1 DESIGN CHALLENGE 2023 SCHEDULE

Date	Activity	Remarks
20-May-23	Entry Open	
20-June-23	Entry Close	
02-July-23	Doubt clearing session (online)	Open Forum for Registered Teams only
10-July-23	Team Member list submission	Details of team members along with their college certified ID card copy
29-July-23	College Support dossier submission	Form will be e-mailed to the teams on their registered e-mail
01-August-23	Visitor Pass Registration	For non-team members
17-August-23	Primary Participation Report	Summary with document covering all the aspects
31-August-23	Perp Video Submission	A video created by the team members covering their journey
14-September to 16-September-23	Final Event	3-day event at the venue as described

Registered teams will be informed about the timings and all the relevant details on their registered e-mail address.

10. ENTRY FEE

The entry fee to compete in the event is as indicated on the official website **www.kart1.in**

11. VENUE:

Track Name: Traction Motodrome, Vadodara, Gujrat

Location: https://goo.gl/maps/xUU62JALuo58Y4kZ9

12. FLOW OF EVENT

Day 1 - Thursday (17 August 2023)

A. Check-in
B. Scrutiny *(Mandatory)*

C. Team Briefing *(Mandatory)*
D. Presentation Challenge

Day 2 - Friday (18 August 2023)

A. Drivers Briefing *(Mandatory)*
B. Acceleration Challenge
C. Handling Challenge
D. Apex Speed Challenge

Day 3 - Saturday (19 August 2023)

A. Endurance Challenge
B. Race of the Titans
C. Prize & Award Ceremony

13. POINTS SCORING SYSTEM

There will be uniform points scoring system for all the challenges. For each challenge the points will be awarded as per the order mentioned in the table below,

Finishing Position	1	2	3	4	5	6	7	8	9	10
Points Awarded	20	17	15	13	11	9	7	5	3	1

The overall points tally will be displayed on the official notice board at the venue after every Challenge. And the final overall points will be displayed at the notice board after the Endurance Challenge.

"Second place means you're the first among the losers" – Dale Earnhardt

14. CHECK-IN

On the Day 1 of the final event, the teams must report for a mandatory check-in procedure at the venue. The reporting time will be notified to the teams 15 days in advance. The team(s) failing to report for mandatory check-in may not be allowed to take part in the rest of the competition.

15. SCRUTINY

The teams must present their Kart for a mandatory scrutiny. The scrutiny will be carried out by the official stewards/organisers at the venue post check-in to confirm the safety aspect of the kart & the driver. The karts will be weighed for the minimum weight criteria. The teams will be given a "SCRUTINY OK" sticker which must remain pasted on the seat of the kart at all times during the event. The team(s) failing the scrutiny may not be allowed to compete in the rest of the event. However, the scrutineers will allow a specific time frame to correct or rectify any possible short comings. The team(s) must again get their karts scrutinised to get "SCRUTINY OK" stickers confirming their legitimacy of the kart as per the regulations.

16. OFF-TRACK CHALLENGE

16.1 Presentation Challenge

The teams once cleared by the scrutineers the team should prepare for the Presentation Challenge. Each team will be given a 10-minute slot to present. Each presentation will be followed by a Question & Answer (Q&A) session. The key aspects to be covered in a presentation by the team include,

a) Interpretation of the Rulebook
b) Design considerations
c) Saleability of the Karts
d) Innovations
e) Sponsorship strategy

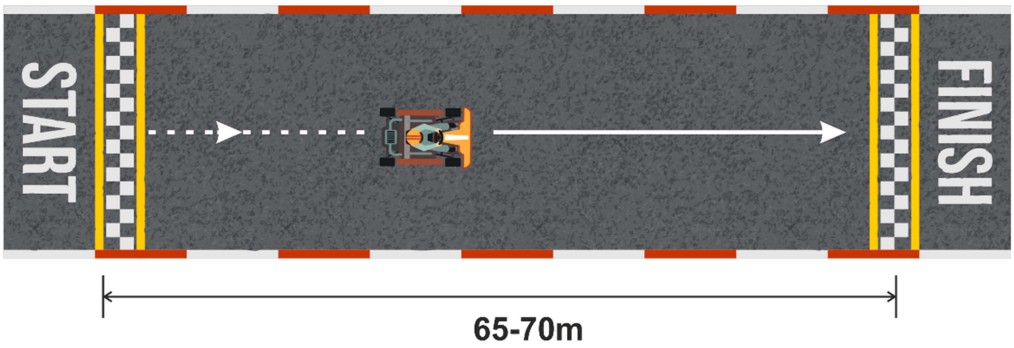
17. ON-TRACK CHALLENGES

17.1 Acceleration Challenge

The aim of this challenge is to test the acceleration ability of the kart.

A straight section of the track will be demarcated measuring the length of 65-70 metre for this challenge.

The teams will line up the kart to a standstill position at the start line, the kart must accelerate to the finish line in the least amount of time. The timing will be taken from the moment the flag drops at the start line to the point when the front most part of the kart hits the finish line.



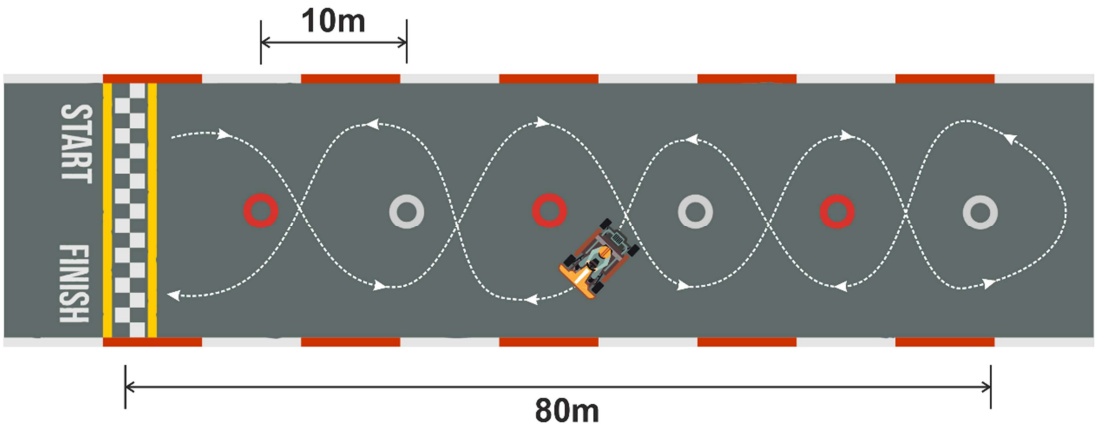
17.2 Handling Challenge

The aim of this challenge is to test the stability & handling of the kart. The Challenge also aims to test the capability of the driver to manoeuvre the kart with constant change of direction.

A straight section of the track will be demarcated for this challenge measuring 90 metre in length. The course will have pylons/cones placed at 10 metre from each other in straight line.

The karts must manoeuvre around the pylons/cones in a crisscross manner *(refer the illustration below)* from the start line, turn around after the last pylon/cone and hit the finish line in the same crisscross manner in the least amount of time.

Important Note: Each pylon/cone displaced or hit or touched will attract a time penalty of 1 second to be added to your run time.



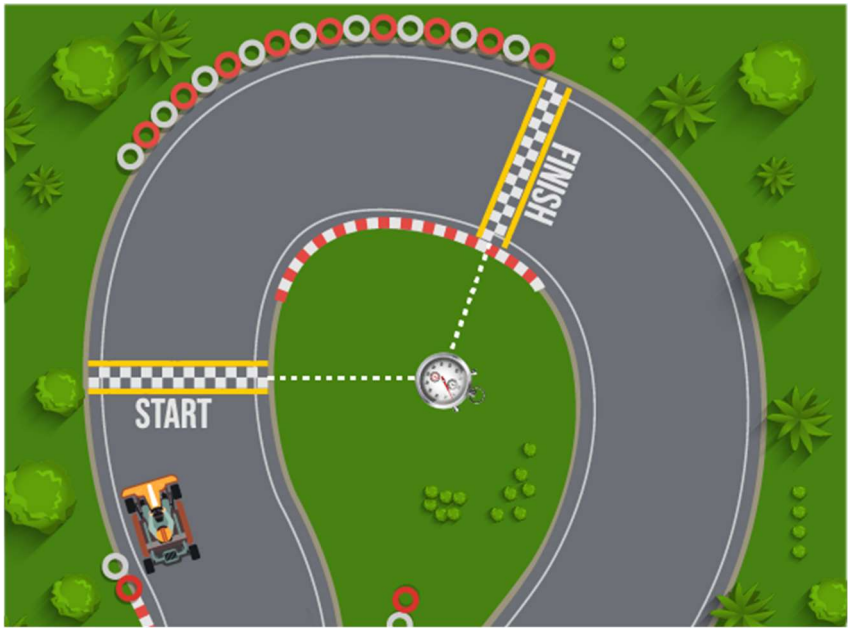
17.3 Apex Speed Challenge

The aim of this challenge is to test the driver's ability more than the kart's capability to negotiate a corner/turn without compromising a great extent of pace/speed.

A challenging turn of the track will be used for this challenge *(refer the illustration below)*

The driver will have a lead distance of 60-70 metre before hitting the start line, in other words it will be a rolling entry to the corner/turn. The time keeper will be positioned at a point as indicated in the illustration below and will note the time from the moment the front most part of the kart hits the start line till the time the same front most part of the kart hits the finish line.

The start & finish line will be clearly marked on the track.



17.4 Endurance Challenge

The aim of this challenge is to test the durability & consistency of the Kart.

The complete track will be used for this challenge.

17.4.1 Supplementary Regulations for Endurance Challenge

a) The teams will form a batch of 20 starters.
b) Starting order each batch will be decided based on the points tally leading up to the endurance challenge.
c) Each batch will be allotted a maximum time of 15 minutes for this challenge.
d) The team have to complete maximum number of laps in 15 minutes.
e) At least ONE driver change is mandatory during the 15-minute session. The unloading and loading of the driver must take place in the designated pitlane. The pitlane procedures must be strictly followed as described in the mandatory team & driver briefing.
f) The challenge is about racing against time and not against each other, hence blocking, pushing, dicing or bumping other competitors is STRICTLY PROHIBITED.
g) The teams misbehaving and not following the rules on the track may be disqualified from the challenge.
h) In case of a tie in the number of laps completed between two or more teams, the winning order will be decided based on team taking the least time to complete the number of laps in question.

18. Race of the Titans

The race of the titans does not contribute to the final result of the Kart1 Design Challenge. The aim of this race is to clearly define the Top 10 teams (in each category) that will form the grid of the Kart1 Championship 2024 (College Team Category)

The top 10 teams as per the points tally after the Endurance Challenge in each category will be given the opportunity to participate in this show race.

18.1 Right of Refusal

The top 10 finishing team(s) can refuse to take this opportunity. The same has to be notified to the organisers in written format within 30 minutes of publishing of the Endurance Challenge results.

18.2 Beneficiary

In case any of the top 10 team(s) as per the overall points tally after the Endurance Challenge decide not to take this opportunity the next team (i.e. 11^{th} place) will be given the opportunity, the progression going there on basis to the next finishing team(s).

18.3 Supplementary Regulations

a) The race of the titans will be of 10 laps
b) The starting order of the grid will be same as the finishing points tally after the Endurance Challenge
c) The detailed regulations will be handed over to the teams in the driver's briefing which will be held on Day 2 of the event and before the start of the On-track Challenge.

19. PROTEST & APPEAL

Any disputes pertaining to the results of each challenge and on the whole will be addressed by the stewards/organisers if and only if the same is submitted in written format along with a protest fee of ₹ 5,000/-

The protest fee is deemed forfeit if the stewards/organisers rule out the issue protested for, after studying all the material facts, documents, official footage, official pictures, etc.

The protest fee will be fully refunded to the protesting team in case the judgement is released in the favour of the protesting team, after studying all the material facts, documents, official footage, official pictures, etc.

The respondent team or the team in question will have the right to appeal against the judgement of the stewards/organisers after submitting their response in written format along with an appeal fee of ₹ 10,000/-

Any team with an intent to protest must express their intent within 5 minutes of completion of the specific challenge. The team will then be given a time of 15 minutes to submit their case in writing along with the protest fee. The same time limits apply to the appealing team.

It is the responsibility of the stewards/organisers to accept and look into the protest as well as the appeal once submitted within the mentioned conditions.

20. PRIZES & AWARDS

20.1 Grand Prizes

1) The top 10 finishing teams of the Kart1 Design Challenge in each category will be eligible to compete as a professional team in the College category of Kart 1 Championship 2024.

2) A team as judged by the stewards will be eligible for a contract to manufacture karts for Kart 1 Championship 2024, should they wish to accept.
(Note: This team may or may not be the team that have finished in the top spots of the event)

20.2 Cash Prizes

- 1st place finish 50,000 (each category)
- 2nd place finish 25,000 (each category)
- 3rd place finish 12,500 (each category)

20.3 Special Awards

a) Best Performing All Women Team
b) Most Organised Team
c) Best Innovation
d) Best Faculty Advisor
e) Best Team Presentation

21. AMENDMENTS

Any amendments to the technical regulations will be notified to the teams on their registered e-mail address, no later than 60 days before the Final event.

Any amendments to the Sporting regulations will be notified to the teams on their registered e-mail address, no later than 10 days before the Final event.

Any other amendments pertaining to the change in schedule or order of the challenges of the Final event will be posted on the notice board at the venue as well as a copy of the same will be sent to the teams on their registered e-mail address.

22. COMMUNICATION WITH ORGANISERS

E-mail: info@mvrmotorsports.com

Phone: +91 84849 68646

The teams are free to contact the organisers via e-mail or the helpline number as mentioned. It is advised that all the queries be listed in one single e-mail addressed to the official e-mail address. The teams may even prepare their queries and ask the same during the doubt clearing online session.