

FREETECH

50cc HIGHTECH RACING

Regulations 2022

Version 3

Last Amendment Date: 23-9-2021

Algemeen Regulations:

1. Clothing

The rider must wear a one-piece leather overall with a material thickness of at least 1.2 mm, with reinforcements on shoulders, elbows, hips and knees.

Wearing a hard back protector with EC- quality mark is mandatory.

The rider must wear gloves and boots of leather or other material with the same relevant characteristics. Gloves and boots should completely overlap the overalls. Wearing eye protection in the form of an undamaged visor is mandatory.

2. Helmet

The helmet must be labelled with an official ECE 22-05 or an approval label approved by the FIM, which is fixed in the helmet and clearly indicates the relevant approval number.

The helmet must be undamaged.

3. Age

The minimum age to participate is 14 years.

In special cases, the board may allow a younger participant to participate in case of demonstrated experience and/or abilities.

4. Liability

4.1 Participation is at your own risk. The participant, partly responsible to third parties, will exempt the organisers, the Freetech50 Foundation and their representatives from all costs and declarations incurred in connection with a third party claim, and of any obligations to third parties, except in the event of gross negligence.

4.2 The participant is always responsible for the behaviour of the team members, helpers or guests who belong to him or her. A penalty can also be handed out to the participant for misconduct by these team members, helpers or guests. For these misconduct, several participants from the same team can also be punished.

4.3 The participant must be healthy in body and mind and be able to control his machine responsibly.

4.4 Both the participant and his team members, helpers or guests must at all times follow the instructions of the officials.

5. Final decision

In all cases that occur during the event, in which this regulation does not provide the board decides. In special cases, the board is competent to deviate from the regulatory system, at all times in consultation with the majority of the board, the decision can never be taken by a single board member.

6. Environmental protection

6.1 Fuel, lubricants, degreaser/ cleaning agent, etc, should not enter the soil. The use of a garage mat is recommended. When a circuit and/or manager of the paddock impose additional requirements, this must be met.

6.2 All waste (residual waste, tyres, etc) must be deposited on the method indicated/prescribed by the circuit and/or manager of the paddock. If such facilities are not present, it must be disposed responsibly by the participant.

6.3 If the above rules are not complied, the organisation will recover the costs of dispose the waste and/or cleaning the soil plus a fine (amount to be determined) on the participant.

7. Protest filing

7.1 Filing a protest can only be done by a participant.

7.2 A protest against the driving / track behavior of a fellow participant can be done from 1 hour after the race, if it's done earlier than 1 hour after the race, then the board can immediately reject the protest. The petitioner of the protest himself must come up with the evidence, this can be done by means of camera videos, officials who can testify or several participants who can/want to testify.

7.3 A protest against the technical condition of a participant's machine can be submitted at any time, but the board may take the decision to pick it up after a practice / race.

Technical regulations:

1 General

Each machine must be in a safe and proper condition and must not have sharp parts, for the assessment by the technical committee.

If in doubt, consult the head of the technical committee.

In cases where these regulations do not provide for or where the rules call for discussion, the Technical Committee decides.

2 Cylinder capacity

The maximum permitted cylinder capacity is 50 cc for naturally-aspirated engines and 40 cc for engines with mechanical pressure filling.

The cylinder capacity is calculated using the formula:

content = bore x bore x stroke x 0.0007854 Boring and stroke must be filled in millimetres.

3 Pressure filling

The pump operation of the sump is not considered as mechanical pressure filling, provided that the total variation of the sump volume during a crankshaft rotation does not exceed the permissible cylinder capacity.

Direct injection of fuel is not considered pressure filling.

4 Rotating parts

rotating parts of the ignition, clutch and transmission must be properly shielded. For the rear sprocket, a shield plate with a minimum thickness of 2 mm and with sufficient strength must be mounted in such a way that it is not possible to get between the lower chain loop and the rear sprocket with any part of the body.

5 Wheels

Wheel size at least 16 inches. No material may be removed from rims and spokes.

6 Brake

brake discs must be at least 3 mm thick.

7 Tire

Valves must be sealed with metal valve caps.

8 Steering

Clip on tubes must be sealed with rounded, smooth plastic or light metal caps. The steering rash, measured from the straight end of the steering wheel, must be at least 15 degrees on both sides. A permanent touch should ensure that, with each steering result, a space of at least 30 mm remains free between the steering wheel and all other parts (tank, frame, streamline etc.).

9 Kill Switch

The machine must be equipped with a switch with which the ignition can be switched off. The preference is for a switch with a red button that is clearly visible on the steering wheel, such that the rider can operate it without taking the hands off the steering wheel.

10 Handles and footrests

The ends of brake and clutch handles must be spherical. The gas handle must be self-closing. Footrests must be at least 70 mm long. The ends must consist of plastic or light metal and must be rounded.

11 Cables and pipes

Hydraulic pipes and control cables of brakes, coupling and gas shall not show any damage and shall be fitted in such a way that wear or clamping is not possible. Pipes must not leak.

12 Cooling

In liquid cooling, only water may be used as a coolant, whether or not mixed with ethanol. Other antifreezes are not allowed. A maximum of 2 % anti-corrosion agent may be added to the refrigerant. External oil pipes must be attached by means of screw or pinch couplings. The use of hose clamps in oil pipelines is prohibited.

13 Safety wiring

Safety wiring Means the prevention of loosening by the use of metal wire with a thickness of at least 0,6 mm. The use of self-securing nuts and products such as Loctite is not considered to be guarantors because their proper functioning cannot be determined without disassembly at the technical inspection.

All filling caps, plugs, bolts and nuts that can cause oil leakage when you run loose must be secured. Bolts and nuts with which calipers and brake anchorages are attached must be secured. Nuts with which wheels are attached must be secured.

14 Fuel

All engines must use petrol, diesel or bio fuel.

Additives based on manganese, iron and nickel are NOT allowed.

In addition, the fuel must NOT contain any substance capable of an exothermic reaction without an outside oxygen supply. Only outside air may be mixed with the fuel as an oxidant.

15 Exhaust

No part of the exhaust system may protrude behind the rear tyre.

The exhaust (not just the silencer) must be attached with at least one bolt.

Securing springs is recommended.

16 Number plates

There must be three number plate surfaces: one centre front and one on each side.

If the surface is not sufficiently flat, the starting number should be applied to both oblique fronts, both left and right.

The smallest diameter of the license plate must be at least 125 mm.

The digits must be at least 90 mm high.

17 Weight

The total weight of the ready-to-drive machine must be at least 55 kg.

The total weight of machine plus rider must be at least 120 kg.

18 Camera

A Camera must be properly mounted and secured by more than one sureness.

In case of dispute, the board can request the images and the driver must cooperate.

19 Safety tail light

The Freetech50 will comply with the regulations of the organizer of the event where we are guests. It will therefore be preferable that the Safety-taillight is prepared and that it can be mounted (working) if the race director indicates that driving should be done with a Safety-taillight.