TECHNICAL RULES FOR
FIM EUROPEAN Stock 250cc 4 Stroke CHAMPIONSHIP 2015

Where is written “he” or “his”, it means also “she” or “her”.

RR 09.0 General

The price of the complete motorcycle should not exceed 10,000 EUR and must be declared by the manufacturer.
The producer of the motorcycle must confirm that this motorcycle complies with the technical rules of this series

RR 09.1 Engine / Engine Specification

RR 09.1.1 4-stroke reciprocating piston engines only.

RR 09.1.2 Engine capacity: maximum 250cc.

RR 09.1.3 Single cylinder only.

RR 09.1.4 Maximum bore size: 81mm. Oval pistons are not permitted.

RR 09.1.5 Engines must be normally aspirated. No turbo-charging, no super-charging.

RR 09.1.6 Crankshaft speed limited to maximum: 13,200 rpm.** Max. 38CV

RR 09.1.7 Maximum of 1 ignition driver.

RR 09.1.8 Pneumatic and/or hydraulic valve systems are not permitted.

RR 09.1.9 Valve timing system drive must be by one chain. An intermediate drive gear which rotates on only one axle or rotation centre is allowed in the system (refer to ANNEX 1 for some examples of permitted systems).

RR09.1.10 Variable valve timing and/or variable valve lift systems are not permitted.

RR 09.1.11 The engine manufacturer must specify the weight of the crankshaft

** All bikes must use **STARLANE FURIA SST** Europe, special for control every Bike with the same sistem of RPM.

RR 09.2. Inlet & Fuel System

RR 09.2.1 Variable-length inlet tract systems are not permitted.

RR 09.2.2 Only one throttle control valve is permitted to control the power demand by the rider, which must be controlled exclusively by mechanical, means (eg. cable) operated by the rider only. No other powered moving devices (except injectors and the idle control air bypass) are permitted in the inlet tract before the engine intake valve. No interruption of the mechanical connection between the rider's input and the throttle are allowed.

RR 09.2.3 Idle speed (including engine braking) adjustment by means of an air bypass system, controlled by the ECU is allowed (see also 9.5.2).

RR 09.2.4 Fuel injectors must be located upstream of the engine intake valves.

RR 09.2.5 Maximum of 1 fuel injectors and 1 independent fuel injector drivers.

RR 09.2.6 Other than engine sump breather gases, only air or air/fuel mixture is permitted in the inlet tract and combustion chamber.

RR 09.2.7 Only normal unleaded fuel from the normal free pomp, special fuel are not permitted content of 0,005 g/l and a maximum MON of 90 is allowed (see FIM 2.10.1)

RR 09.2.8 Any quality of oil may be used.

RR 09.3. Exhaust system

RR 09.3.1 Variable length exhaust systems are not permitted , material Titanium not permitted

RR 09.3.2 No moving parts (e.g. valves, baffles) are allowed in the exhaust system.

RR 09.3.3 Noise tests will be according to Article 2.14 of the FIM Grand Prix Regulations. Test rpm: 5,500. Maximum permitted noise level: 105 dB/A **,**

RR 09.4. Transmission

RR 09.4.1 A maximum of 6 gearbox speeds is permitted.

RR 09.4.2 Gearbox systems must be of the conventional type. So-called “seamless shift” transmissions (also known as Automated Manual Transmission, Instantaneous Gearchange System**,** Removable gear change) are not permitted.

RR 09.4.3 Electro-mechanical or electro-hydraulic clutch actuating systems are not permitted.

RR 09.4.4 Gear box must be declared before the first race, not permitted change during the season

RR 09.5. Ignition, Electronics & Data-Logging

RR 09.5.1 The traction control system are not allowed

RR 09.5.2 The use of a Data-Logging system is free, not possible data technical recording and sensors.

RR 09.5.3 A battery is compulsory; proper engine management function is ensured only when the battery voltage is in the 8÷18V range.

RR 09.6. Chassis

RR 09.6.1 Chassis must be of a design and construction which is free within the constraints of the FIM Grand Prix Technical Regulations.

RR 09.6.2 Minimum total weight of Motorcycle + Rider 148kg

The weight of the motorcycle + rider will be that measured in the form that the motorcycle + rider participated, with fuel tank on and including normal levels of oil and water, and all additional equipment attached to the motorcycle, for example timekeeping senders, camera equipment, electronic telemetry equipment, etc.

Random weight controls may be carried out during practice and the end of the race in a designated weighing

RR 09.6.3 Brake discs must be made from ferrous materials, iron-based alloy.

RR 09.6.4 Suspension systems must be of a conventional passive, mechanical type. Active and semi-active suspension systems and/or electronic control of any aspect of the suspension and ride height is not permitted. Springing must be by means of coil springs made of Iron-base alloy).

RR 09.6.5 Suspension front not permitted, hydraulic pressure, rear suspension possible pressure, total cost front and rear 1000 euro from commercial cost

RR 09.6.6 The lower fairing has be constructed to hold, in case of an engine breakdown, minimum capacity to retain spilled engine fluids is 2.5 litres.

RR 09.6.7 The lower fairing must incorporate an opening of Ø 25 mm diameter in the front lower area. This hole must remain closed in dry conditions and must be only opened in wet race conditi

RR09.6.8 Material permitted for fairing is only fibreglass, carbon its not permitted

RR09.6.9 For the Fuel tank fibreglass is permitted, carbon is not allowed
Fuel tanks with tank breather pipes must be fitted with non-return valves that discharge into a catch tank with a minimum volume of 250cc made of a suitable material.
All fuel tanks must be completely filled with fire-retardant material (open-celled mesh, i.e. "Explosafe®").

RR09.6.10 Forced air vents in the aspiration is not allowed

RR 09.7. Wheels & Tyres

RR 09.7.1 The materials permitted for wheel construction are Aluminium.

RR 09.7.2 The only permitted wheel rim sizes are:
Front, 2.50" x 17"
Rear, 3.50" x 17"

RR 09.8. Materials & Construction

RR 09.8.1 Construction materials must comply with Article 2.7.10 of the FIM Grand Prix Regulations.

RR 09.8.2 Camshafts, crankshafts, piston pins must be made from ferrous materials. Inserts of a different material are allowed in the crankshaft for the sole purpose of balancing.

RR 09.8.3 Engine crankcases, cylinder blocks and cylinder heads must be made from cast aluminium alloys.

RR 09.8.4 Pistons must be made from an aluminium alloy.

09.8.5 Connecting rods, valve Springs must Be made from either ferrous, titanium based alloy only for original series made valve.

RR 09.8.6 Definitions: "X-based alloy" or "X materials" means the element X (e.g. Fe, for ferrous or iron based alloy) must be the most abundant element in the alloy, on a % w/w basis.

RR 09.9 Number of Motorcycles
During the event, each rider cannot more than one complete motorcycle presented by the technical Control

RR 09.10. Number & Backgrounds
The allocated number (& plate) for the rider must be affixed on the machine as follows:
- One at the front, either in the centre of the fairing or slightly off to one side;
- One on each side of the motorcycle. The location for the numbers is on the lower rear portion of the main fairing near the bottom. Also the number may be placed on the top of the seat. These numbers must have the same size as the front numbers.

The sizes for all the front numbers are:	Minimum height Minimum width Minimum stroke Minimum space between numbers	140 mm 80 mm 25 mm 10 mm
The sizes for all the side numbers are:	Minimum height Minimum width Minimum stroke Minimum space between numbers	120 mm 80 mm 25 mm 10 mm

The numbers and backgrounds will be as follows:

Background	*Number*
White	Black

In case of a dispute concerning the legibility of numbers, the decision of the Chief Technical Steward will be final.

RR 09.11. Optional Assembly.

RR 09.11.1 Motorcycles must be equipped with brake lever protection, intended to protect the handlebar brake lever from being accidentally activated in case of collision with another motorcycle.

RR 09.11.2 Rear Safety Light

All motorcycles must have a functioning red light mounted at the rear of the seat, to be used during Wet Races or in low visibility conditions.
The rear safety light must comply with the following:

a. The output must be continuous - no flashing safety light whilst on track, flashing is allowed in the pit lane when pit limiter is active.
b. Safety light power supply may be separated from the motorcycle.
c. The Chief Technical Steward has the right to refuse any light system not satisfying this safety purpose.
d. The light must be able to be switched on and off.

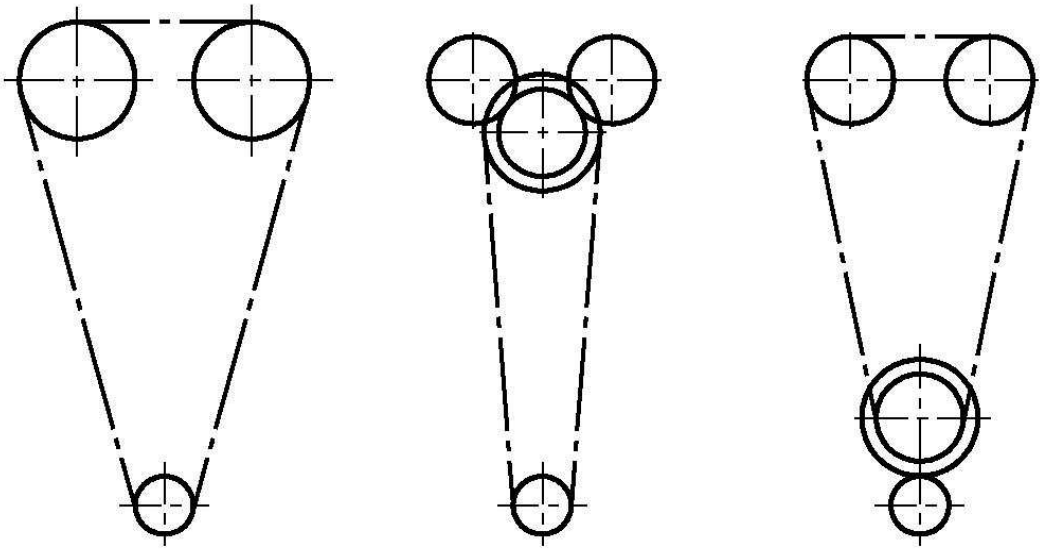
RR 09.11.3 A chain guard must be fitted in such a way to reduce the possibility that any part of the rider's body may become trapped between the lower chain run and the final drive sprocket at the rear wheel.

RR 09.11.4 Motorcycles must be equipped with a functional ignition kill switch or button mounted on the handlebar (within reach of the hand while on the hand grips) that is capable of stopping a running engine. The button or switch must be RED.

RR 09.11.5 All lateral covers/engine cases containing oil and which could be in contact with the ground during a crash, must be protected by a second cover made from metal, such as aluminium alloy, stainless steel, steel or titanium, composite covers are not permitted.
And for safety the second cover must Be protected during a crash, but in composit material covers or maximum Kevlar.

ANNEX 1

A) Simple chain drive B) Chain drive + upper gear C) Chain drive + lower gear



A) Simple chain drive B) Chain drive + upper gear C) Chain drive + lower gear

ANNEX 2

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