

5.2.7 MCRCB SUPERSTOCK REGULATIONS

These regulations are the MCRCB Superstock Regulations. The FIM regulations differ specifically regarding electronics and gearbox. We believe that Superstock regulations, as the name implies, should only allow limited modifications to the homologated machine.

EVERYTHING THAT IS NOT AUTHORISED AND PRESCRIBED IN THESE REGULATIONS IS STRICTLY FORBIDDEN

- **The motorcycles must be homologated by the original manufacturer only. The model will be eligible for Superstock competition for a maximum period of 5 years.**
- As the name **Superstock** implies, the machines used are allowed limited modifications. Most modifications that are allowed are only allowed for safety reasons.
- Superstock motorcycles require FIM Homologation (see art 2.9)
The MCRCB may homologate machines, which comply or will comply with the principles stated by the FIM.
In addition for BSB Superstock 1000 there is a price cap of £17,000 this is the Manufacturers Recommended Retail Price including all sales taxes (not including road fund licence) and VAT on 1 January 2010. In case of dispute the decision of the MCRCB Directors will be final.
- All machines must comply with all requirements of Road Racing as specified in the MCRCB Regulations.
- The Appearance from front, rear and the profile of Superstock motorcycles must (except when otherwise stated) conform to the homologated shape (as originally produced by the manufacturer). The appearance of the exhaust system **and engine case and tank guards** is excluded from this rule.

5.2.7.1 Machine Specifications

All items not mentioned in the following articles must remain as originally produced by the manufacturer for the homologated machine.

5.2.7.2 Balancing various motorcycle concepts

In order to equalize the performance of motorcycles with different engine configurations, changes in the minimum weight can be applied according to their respective racing performances. The decision about applying a handicap system to a respective class will be taken by MCRCB/MSVR at any time. These handicaps will follow the system like described in 2.4.4.2 of the Superbike regulation, but will be adapted to the Superstock class.

5.2.7.3 Displacement capacities

The following engine configurations compose the Superstock 1000 and Superstock 600 classes.

5.2.7.3.1 **Superstock 1000**

Over 600cc up to 1000cc	4-stroke	4 cylinders maximum
Over 750cc up to 1000cc	4-stroke	3 cylinders maximum
Over 850cc up to 1200cc	4-stroke	2 cylinders maximum

5.2.7.3.2 **Superstock 600**

Over 500cc up to 600cc	4-stroke	4 cylinders maximum
Over 600cc up to 675cc	4-stroke	3 cylinders maximum
Over 650cc up to 750cc	4-stroke	2 cylinders maximum

The displacement capacities must remain at the homologated size. Increasing the bore size to reach class limits is not allowed.

5.2.7.4 **Minimum Weight**

1000cc 4 cylinders & 1200cc 2 cylinders	174kg
600cc 4 cylinders	165kg
675cc 3 cylinders	168kg

The use of ballast is allowed to stay over the minimum weight limit, but must be declared to the MCRCB Chief Technical Officer at the preliminary checks.

- In the final inspection at the end of the race, the checked machines will be weighed in the condition they were at the end of the race.
- The established weight limit must be met in the condition the machine finished the race. Nothing can be added to the machine including water, oil, fuel or tyres.
- At the time of the event, the weight of the whole machine (including the tank **and its contents**) must be not less than the minimum weight, **with a tolerance of 1 kg.**

During the practice and qualifying sessions every rider may be asked to submit his motorcycle to a weight control.

5.2.7.4.1 **Balancing various motorcycle concepts**

In order to equalise the performance of motorcycles with different engine configurations, changes in the minimum weight may be applied according to their respective racing performances.

The decision about applying a handicap system to a respective class is taken by the MCRCB at any time these handicaps will follow the system like described in 5.2.4.4.2 of the Superbike Technical regulations but will be adapted to the Superstock class.

5.2.7.5 **Number and Background Colours**

See MCRCB General Technical Regulations (G-3.29).

In case of dispute concerning legibility of numbers, the decision of MCRCB will be final.

5.2.7.6 **Fuel**

Only MCRCB Control Fuel is permitted for all practice and race. This will be ENI Premium, this must be supplied by ENI see F- Championship Conditions for details of supply.

5.2.7.7 Tyres

- **The MCRCB will impose a controlled tyre. Further conditions will be stated in F - Championship Conditions and any Bulletins issued by MSVR.**
- The use of tyre warmers is allowed.
- **Any modification (cutting, grooving) is forbidden.**

5.2.7.8 Engine

5.2.7.8.1 Carburetion Instruments / Fuel Injection System

Carburetion instruments refer to throttle bodies and variable length intake track devices.

- **Carburation instruments must remain as homologated.**
 - Bell mouths must remain as originally produced by the manufacturer for the homologated machine.
 - The injectors must remain standard units as on the homologated motorcycle.
- See also 5.2.7.8.17 Fuel Supply.

5.2.7.8.2 Cylinder Head

- **No modifications are allowed.**
- No material may be added or removed from the cylinder head.
- The cylinder head gaskets may be changed.
- The valves, valve seats, guides, springs, tappets, oil seals, shims, cotter valve, spring base and retainers must be as originally produced by the manufacturer for the homologated machine. Only normal maintenance interventions as prescribed by the Manufacturer in the model's Service Manual are authorized.
- Valve springs shims are not allowed.

5.2.7.8.3 Camshaft

- **No modifications are allowed.**
- At the technical checks: for direct cam drive systems, the cam lobe lift is measured; for non direct cam drive systems (i.e. rocker arms) the valve lift is measured.
- The timing of the camshaft is free, however no machining of the camshaft sprocket is authorised.

5.2.7.8.4 Cam Sprockets or Gears

- **No dimensional modifications are allowed.**

5.2.7.8.5 Cylinders

- **No modifications are allowed.**

5.2.7.8.6 Pistons

- **No modifications are allowed (including polishing and lightening).**

5.2.7.8.7 Piston Rings

- **No modifications are allowed.**

5.2.7.8.8 Piston Pins and Clips

- **No modifications are allowed.**

5.2.7.8.9 Connecting Rods

- **No modifications are allowed (including polishing and lightening).**

5.2.7.8.10 Crankshaft

- **No modifications are allowed (including polishing and lightening).**

5.2.7.8.11 Crankcase and all other Engine Cases (i.e. ignition case, clutch case)
- **No modification to the crankcases are allowed (including painting, polishing and lightening).**

- The original lateral (side) covers may be modified without modification to the position and dimensions of the covered parts. The modified cover must have at least the same resistance to impact.
- Engine case guards in the form of strengthened engine side covers may be installed. These covers must be constructed of the same material and be no lighter in weight than the standard material.
- 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 of composite material, type injection moulded nylon 6.6 long fibre 60%, carbon or Kevlar® approved by the MCRCB, aluminium or steel plates and/or bars are also permitted. All these devices must be designed to be resistant against sudden shocks and must be fixed properly and all devices are fitted by bolts onto the engine cover/case.

All devices must be approved by MCRCB and it is recommended that for composite material, Nylon 6.6 long carbon fibre 60% is used and all devices are fixed by bolts onto the engine covers/cases not stuck. No damaged cases will be permitted unless approved by the Chief Technical Officer.

5.2.7.8.12 Transmission/Gearbox

- The material and heat treatment of the highest 2 gear pinions may be changed, but the number of teeth has to be kept as homologated.
- Other modifications or additions to the gearbox or selector mechanism, including quick shift systems are not allowed. Quick shift systems are allowed if on the homologated model.
- Only countershaft sprocket, rear wheel sprocket, chain pitch and size can be changed.
- The sprocket cover can be modified or eliminated.

5.2.7.8.13 Clutch

- **No modifications are allowed.**
- Only Friction and drive discs may be changed but their numbers must remain as original.

- Clutch springs may be changed **but the number must remain as that on the Manufacturers homologated machine.**

5.2.7.8.14 Oil Pumps and Oil Lines

- **No pump modifications are allowed**
- Oil lines may be modified or replaced. Oil lines containing positive pressure, if replaced, must be of metal reinforced construction with swaged or threaded connectors.

5.2.7.8.15 Radiator and oil coolers

- Additional radiators and / or oil coolers are not allowed.
- The radiator tubes to and from the engine can be changed but the system must be maintained, with its original tanks.
- Protective meshes can be added in front of the oil and/or water radiator(s)
- Radiator fan and wiring may be removed

5.2.7.8.16 Air Box

- The air box must remain as originally produced by the manufacturer for the homologated machine but the air box drains must be sealed.
- The air filter element may be removed or replaced.
- All motorcycles must have a closed breather system. The oil breather line must be connected and discharge in the airbox.

5.2.7.8.17 Fuel Supply

- The fuel injection management computer chip (EPROM) may be changed.
 - The use of flash memory (flash RAM) for fuel injection mapping is allowed. An additional control unit to change the fuel mixture may be installed and must be fitted to the original connectors, the unit must not be able to perform any other function. (The original wire-loom must remain unmodified).
 - Fuel pump and fuel pressure regulator must remain as homologated.
 - Fuel lines may be replaced but the fuel petcock must remain as originally produced by the manufacturer.
 - Quick connectors or dry break quick connectors may be used.
 - **Fuel vent lines may be replaced.**
 - Fuel filters may be added.
- See also 2.7.8.1 Carburetion Instruments/Fuel Injection

5.2.7.8.18 Exhaust System

- Exhaust pipes and silencers may be modified or changed from those fitted to the homologated motorcycle.
- The number of the final exhaust silencer(s) must remain as homologated. The silencer(s) must be on the same side(s) of the homologated model.
- Catalytic converters must be removed
- For safety reasons, the exposed edges of the exhausts pipe(s) outlet must be rounded to avoid any sharp edges.
- Wrapping of exhaust systems is not allowed except in the area of the riders foot or an area in contact with the fairing for protection from heat.

- The noise limit for Superstock is 107 dB/A (with a 3 dB/A tolerance after the race). **There is also an equipment tolerance of 2dB/A, the actual maximum reading before race or practice is 109 dB/A and after race or Practice 112dB/A.**

5.2.7.9 Electrics and Electronics

5.2.7.9.1 Ignition/Engine Control System (ECU)

- **Spark plugs may be replaced.**
- **The central unit (ignition/engine control unit/CDI) must stay as homologated.**

5.2.7.9.2 Generators

- No modifications allowed.
- **The electric starter must operate normally and always be able to start the engine during the event (including at pre and post race inspections). The engine must start and run when the electric starter has stopped its procedure.**

5.2.7.9.3 Additional Equipment

- Additional electronic hardware equipment not on the original homologated motorcycle **may** be added. (i.e. data acquisition, computers, recording equipment etc.).
- **The addition of a device for infra red (IR) transmission of a signal between the racing rider and his team, used exclusively for lap timing, is allowed.**
- The addition of a GPS unit for lap timing/scoring purposes is allowed.
- **Telemetry is not allowed.**

5.2.7.9.4 Wiring Harness

The original wire-loom may be modified **only** as indicated hereafter:

- The unused wire loom elements supplying current to direction indicators, horn, ignition contact and key lock etc. may be unplugged and/or removed (no cutting allowed).
- Cutting of the wiring harness is not allowed but to disconnect connectors is allowed.
- The wiring harness may only be used for the purpose it is homologated for unless stated in these regulations.

5.2.7.9.5 Battery

Battery may be replaced, if replaced nominal capacity must be equal or higher than the homologated type.

5.2.7.10 Frame and Body

5.2.7.10.1 Frame Body and Rear Sub Frame

- **Frame must remain as originally produced by the manufacturer for the homologated machine.**

- **The sides of the frame-body may be covered by a protective part made of composite material. These protectors must fit the form of the frame.**
- **Holes may be drilled on the frame only to fix approved components (i.e. fairing brackets, steering damper mount).**
- Nothing can be added by welding or removed by machining from the frame body.
- All motorcycles must display the manufacturers' vehicle identification number on the frame body (chassis number), with the exception of spare frames.
- Engine mounting brackets or plates must remain as originally produced by the manufacturer for the homologated machine.
- Rear sub frame must remain as originally produced by the manufacturer for the homologated machine.
- Additional seat brackets may be added, **non-stressed protruding brackets may be removed if they do not affect the safety of the construction or assembly.**
- Bolt on accessories to the rear sub-frame may be removed.
- The paint scheme is not restricted but polishing the frame body or the sub frame is not allowed.

5.2.7.10.2 Front Forks

- Forks structure (spindle, stanchions, bridge, stem etc.) must remain as originally produced by the manufacturer for the homologated machine.
- Standard original internal parts of the forks may be modified.
- After market damper kits or valves may be installed.
- **No aftermarket or prototype electronic ally-controlled suspensions can be used. If original electronic suspensions are used, they must be completely standard(any mechanical or electronic part must remain as homologated). The original electronic system must work properly in the event of an electric/electronic failure otherwise it cannot be homologated for FIM/MCRCB competitions**
- The fork caps can be modified or changed to add spring preload/compression adjusters.
- Dust seal can be modified, changed or removed if the fork is totally oil-sealed.
- **Any quality and quantity of oil can be used in the front forks.**
- The height and position of the front fork in relation to the fork crowns is free.
- The upper and lower fork clamps (triple clamp, fork bridges) must remain as originally produced by the manufacturer on the homologated machine.
- Steering damper may be added or replaced with an after-market damper.
- **The steering damper cannot act as a steering lock limiting device.**

5.2.7.10.3 Rear Fork (Swing arm)

- Every part of the rear fork must remain as originally produced by the manufacturer for the homologated machine (including rear fork pivot bolt and rear axle adjuster).

- Rear wheel stand positioning (support) brackets may be added to the rear fork. Brackets must have rounded edges (with a large radius) viewed from all sides. Fastening screws must be recessed.
- For safety reasons, it is compulsory to use a chain guard fitted in such a way as to prevent trapping between the lower chain run and the final driven sprocket at the rear wheel.

5.2.7.10.4 Rear Suspension Unit

- Rear suspension unit (shock absorber) may be modified or replaced, but the original attachments to the frame and rear fork (swing arm) must be used and the rear suspension linkage must remain as originally produced by the manufacturer for the homologated machine.
- Rear suspension unit spring may be changed.
- **No aftermarket or prototype electronic ally-controlled suspensions can be used. If original electronic suspensions are used, they must be completely standard (any mechanical or electronic part must remain as homologated). The original electronic system must work properly in the event of an electric/electronic failure otherwise it cannot be homologated for FIM/MCRCB competitions.**

5.2.7.10.5 Wheels

- Wheels must remain as originally produced by the manufacturer at the time of sale into the dealer/distributor network for the homologated machine.
- The speedometer drive may be removed and replaced with a spacer.
- If the original design included a cushion drive for the rear wheel, it must remain as originally produced for the homologated machine.
- No modifications of the wheel-axles or any fixing and mounting points for front and rear brake calliper are authorised. Spacers can be modified. Modifications to keep spacers in place are permitted.
- **Wheel diameter and rim width must remain as originally homologated.**
- Any inner tube (if fitted) or inflation valves may be used.
- **Wheel balance weights may be discarded, changed or added to.**

5.2.7.10.6 Brakes

Brake discs can be replaced by aftermarket discs which comply to the following rules:

- **Brake discs and carrier must retain the same material as the homologated disc and carrier.**
- **A 'wave' type disc can be replaced with a round disc.**
- **The outside and inner diameter of the brake disc must remain the same as on the homologated disc.**
- **The thickness of the brake disc may be increased by 20% and must continue to fit into the homologated brake calliper without any modification. The number of floaters is free.**
- **The fixing of the carrier on the wheel must remain the same as on the homologated disc.**

- **Anti lock systems (ABS) can be disconnected and the ABS ECU can be dismantled.**
- **The ABS rotor wheel can be deleted, modified or replaced.**
- Front and rear brake callipers (mount, carrier, hanger) must remain as originally produced by the manufacturer for the homologated machine.
- The rear brake calliper bracket may be fixed on the swingarm, but the bracket (support) must maintain the same mounting (fixing) points for the calliper as used on the homologated machine. A modification of these parts is authorised. The Swingarm may be modified for this reason to aid the location of the rear brake calliper bracket, by welding, drilling or using a helicoil.
- The front and rear master cylinder must remain as originally produced by the manufacturers for the homologated machine.
- **Front and rear brake fluid reservoirs may be changed with an after market product.**
- Front and rear hydraulic brake lines may be changed.
- The split of the front brake lines for both front brake callipers must be made above the lower fork bridge (lower triple clamp).
- Quick (or "dry-brake") connectors in the brake lines are authorised.
- Front and rear brake pads may be changed. Brake pad locking pins may be modified for quick change types.
- **Additional air scoops or ducts are not allowed.**

5.2.7.10.7 Handlebars and Hand Controls

- Handlebars may be replaced (does not include brake master cylinder).
- **Handlebars and hand controls may be relocated.**
- **Throttle controls must be self closing when not held by the hand.**
- **Throttle assembly and associated cables may be modified or replaced but the connection to the throttle body and to the throttle controls must remain as homologated.**
- **Clutch and brake lever may be exchanged by an aftermarket copy. An adjuster to the brake lever is allowed for the 1000cc/1200cc class only.**
- Switches can be changed but electric starter switch and engine stop switch must be located on the handlebars.

5.2.7.10.8 Footrest/Foot Controls

- **Footrest/foot controls may be relocated but brackets must be mounted to the frame at the original mounting points. Their two original mounting points of fixture (on foot controls and on the shift shaft) must remain as original.**
- **Footrest may be rigidly mounted or a folding type which must incorporate a device to return them to the normal position.**
- **The end of the footrest must have an 8mm solid spherical radius.**
- **Non-folding footrests must have an end (plug) which is permanently fixed, made of plastic, Teflon® or an equivalent type material (minimum radius 8mm). The plug surface must be designed to reach**

the widest possible area. The Chief Technical Officer has the right to refuse any plug not satisfying this safety aim.

5.2.7.10.9 Fuel Tank

- Fuel tank filler cap may be altered or replaced from those fitted to the homologated motorcycle, by a "screw-on" type fuel cap (SAFETY).
- All fuel tanks must be completely filled with a fire retardant material (open celled mesh i.e. "Explososafe ®").
- Fuel tank valve petcock must remain as originally produced by the manufacturer for the homologated machine.
- The sides of the fuel tank may be covered by a protective part made of a composite material. These protectors must fit the shape of the tank
- Fuel tanks with a 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.

5.2.7.10.10 Fairing/Body Work

- a) Fairing and bodywork may be replaced with exact cosmetic duplicates of the original parts, but must appear to be as originally produced by the manufacturer for the homologated machine, with slight differences due to the racing use (different attachment points, fairing bottom etc.). The materials may be changed. The use of carbon fibre or carbon composite materials is not allowed. **The front of the fairing may be modified to accommodate a front number plate in compliance with MCRCB General Technical Regulations**
- b) Overall size and dimensions must be the same as the original part.
- c) Windscreens may be replaced with a duplicate of transparent material. The height of the windscreen is free, within a tolerance of +/- 15 mm regarding the vertical height from the upper fork bridge.
- d) Motorcycles that were not originally equipped with streamlining are not allowed to add streamlining in any form, with the exception of a lower fairing device, as described in (h). This device cannot exceed above a line drawn horizontally from axle to axle.
- e) The original combination instrument/fairing brackets may be replaced, but the use of titanium and carbon (or similar composite materials) is forbidden. All other fairing brackets may be altered or replaced.
- f) The original air ducts running between the fairing and the air box may be altered or replaced. Carbon Fibre composites and other exotic materials are forbidden, particle grills or wire meshes, originally installed in the openings of the air-ducts, may be taken away.
- g) The lower fairing has to be constructed to hold, in case of engine breakdown, at least half of the total oil and engine coolant capacity used in the engine (minimum 5 litres). The lower edge of the openings in the fairing must be positioned at least 50mm above the bottom of the fairing.
- h) Front mudguards may be replaced with a cosmetic duplicates of the original parts and may be spaced upwards for increased tyre clearance.
- i) Rear mudguards fixed on the swinging arm can be modified or changed but the original profile must be respected.

- j) All exposed edges must be rounded.
- k) Motorcycles can be equipped with inner ducts to improve the air stream towards the radiator but the appearance of the front, the rear and the profile of the motorcycle must not be changed.
- l) Screen Height - there is no FIM homologated height. An average will be determined and the results are all taken from a fixed casting point on the top fork yoke by the ignition mounting point to the top of the top of the screen.

5.2.7.10.11 **Seat**

- The appearance from both front rear and profile must conform to the homologated shape.
- Seat, seat base and associated body work may be replaced with parts of similar appearance as originally produced by the manufacturer for the homologated machine.
- The top portion of the rear bodywork around the seat may be modified to a solo seat.
- The homologated seat locking system (with plates, pins, rubber pads etc.) may be removed
- All exposed edges must be rounded. The card you have used is coming up as an invalid number, please can you let me have the correct number.

5.2.7.10.12 **Fasteners**

- Standard fasteners may be replaced with fasteners of any material and design but titanium fasteners may not be used.. The strength and design must be equal to or exceed the strength of the standard fastener it is replacing..
- Fasteners may be drilled for safety wire, but intentional weight saving modifications are not allowed.
- Fairing/body work fasteners may be changed to the quick disconnect type.
- Aluminium fasteners may only be used in non-structural locations.

5.2.7.11 **The following items may be altered or replaced from those fitted to the homologated motorcycle.**

- A special one way valve can be fitted to the crankcase oil filler opening (to avoid oil spillage)
- Any type of lubrication, brake or suspension fluid may be used.
- Gasket and gasket materials (with the exception of the cylinder base gasket).
- **Instrument, instrument bracket(s) and associated cables**
- Painted external surface finishes and decals.
- Material for brackets connecting non-original parts to the frame (or engine) cannot be made from titanium or fibre reinforced composites.
- Protective covers for engine, frame, chain, footrests etc. can be made in other material like fibre composite material if these parts do not replace original parts mounted on the homologated model.
- Tachometer – **NB this must be working so that noise limits may be measured – (MCRCB Only)**

5.2.7.12 **The Following Items May Be Removed**

Emission control items (anti-pollution) in or around the airbox and engine (O2 sensors, air injection devices)

- Instrument and instrument bracket and associated cables.
- Speedometer.
- Chain guard as long as it is not incorporated in the rear fender.
- Bolt on accessories on a rear sub frame.

5.2.7.13 **The following items MUST BE removed**

- Headlamp and rear lamp.
- Turn signal indicators (when not incorporated in the fairing). Openings must be covered with a suitable material.
- Rear view mirrors.
- Horn.
- Licence plate bracket.
- Tool kit.
- Helmet hooks and luggage carrier hooks.
- Passenger foot rests.
- Passenger grab rails.
- Safety bars, centre and side stands must be removed (fixed brackets must remain).

5.2.7.14 **The Following Items Must Be Altered**

- Motorcycles must be equipped with a functional ignition kill switch or button mounted on either side of the handlebar (within reach of the hand while on the hand grips) that is capable of stopping a running engine.
- **It is recommended that machines be equipped with a red light on the instrument panel. This light must flash in the event of oil pressure drop.**
- All drain plugs must be wired. External oil filter(s) screws and bolts that enter an oil cavity must be safety wired (i.e. on crankcases, oil lines, oil coolers, etc.)
- All motorcycles must have a closed breather system. The oil breather line must be connected and discharge in the airbox.
- Where breather or overflow pipes are fitted they must discharge via existing outlets. The original closed system must be retained, no direct atmospheric emission is permitted.