

### **TECHNICAL REGULATIONS X30 MINI PART 1**

### 1. Driver

- 1.1 Drivers from year of 10th birthday to 31st December of your 12th year with National licence
- **1.2** Minimum 110kg, (is as per International rule) including the driver. Minimum driver weight as per U17.29.6 is 29kg (B1.8.2).

#### 2. TECHNICAL CONTROLS

- **2.1** Technical controls on the engines will be carried out by the Scrutineers of the Sporting Authority, with the possible assistance of a technical promotor staff appointed by Motorsport UK.
- **2.2** The reference document for the technical controls is the engine technical form.
- **2.3** In case of persistent doubts about the absolute originality and compliance of a particular, the necessary element must be compared with the same part belonging to the sample engine, in possession of the Chief of the IAME S.p.A. delegate. (There is engine held at IAME so would be sealed and sent for inspection)
- **2.4** Scrutineers have the right to carry out technical checks on the parts to the point of making them unusable. Following a check that turns the particular inoperable, this particular will be refunded only if found original.
- 2.5 all the parts turned unusable as a result of technical inspections and detected as non-genuine, will not be refunded.
- **2.6** The Promoter, while guaranteeing the perfect efficiency and operation of the supplied material, will in no case be held liable for any malfunction occurring as a result of the replacement.
- 2.7 Controls can be carried on the engines, in race conditions, at any time of the Event.
- **2.8** In case of extremely controversial events during engines scrutineering, the Scrutineers can decree the delivery of the concerned part, duly sealed, to IAME S.p.A. for an accurate inspection at the factory at the presence of representatives of the Entrant and the Sporting Authority (ASN).

## 3. MODIFICATIONS TO THE REGULATIONS

**3.1** In order to ensure the correct execution of the IAME X30 water swift international qualifier and / or in case of force majeure, and or on the grounds of fairness IAME Uk. and or Motorsport UK reserves the right to change the articles of the technical regulations as it deems necessary, at any time, subject to authorization by Motorsport UK. these will be published by bulletin at the event.

# 4. FUEL, LUBRICANT, FUEL TANK

**4.1** Only fuels commonly sold at service stations are allowed. The choice of the service station for the supply of fuel as well as mandatory octane number will be indicated by the organizer of the event and reported in the Supplementary Regulations.



- **4.2** The fuel must not contain any additive other than the approved lubricant.
- **4.3** Oil mix ratio: 4-6% this must be noted on the declaration card at the event.
- 4.4 The only allowed lubricant is Silkolene Pro KR2 CIK/FIA Karting registered.
- 4.5 The tank must be of the removable type and have a minimum capacity of 3 liters.
- **4.6** Recovery tank for the cooling water and fuel tank vents are mandatory.

#### 5. TYRES

## 5.1 Slick tyres

Model: KOMET Racing Tyres K1D-M Size Front: 10 x 4.00-5 Size Rear: 11 x 5.00-5

Max. allowed: 2 front and 2 rear tyres starting from the Qualifying Practice bar code may be noted on the technical declaration card and check during the event .

#### 5.2 Wet tyres

Model: KOMET Racing Tyres K1D-W
Size Front: 10 x 4.00-5
Size Rear: 11 x 5.00-5

Max. allowed: 2 front and 2 rear tyres starting from the Qualifying Practice code may be noted on the technical declaration card and check during the event .

- **5.3** All Tyres Slick and Wet must be purchased from JM engineering LTD . The organizer reserves the right to apply Parc Fermè provisions. In such case he will inform of such decision through the Supplementary Regulations of the Event or via bulletin
- **5.4** Any modification of a tyre is forbidden. Heating and cooling of tyres by any method and/or remoulding or treating the tyres with any chemical substance is forbidden.
- **5.5** The measuring device MiniRAE Lite of the company «RAE Systems Inc. (USA)» is employed in Qualifying Practice, Qualifying Heats, and final phase to check that the tyres are in compliance with the regulations.
- The VOC measurement of the tyres may not exceed the maximum ppm limiting value under any circumstances. Tyre compounds may also be checked as per the 2021 Motorsport UK regulations
- 5.6 Polluting of the tyres, e.g. through chain grease, must be avoided as this can result in the limiting value being exceeded.
- **5.7** Should the check at the "Start" Servicing Park establish that one or more tyre is not in compliance with the regulations, the relevant Driver will not be allowed access to the Gird.
- **5.8** Should the test be carried at the "Finish" Servicing Park and one or more tyres result not in compliance with the regulations, then tyre sample may be taken for further analysis in line with the Motorsport UK yearbook.
- **5.9** In the event of a damaged tyre, not repairable, the competitor can request the substitution with a used tyre, same model as prescribed, prior to approval from the Technical Scrutineers. In any case, the tyre may only be replaced if the damage has prevented the competitor from completing the session before the damage has been reported.
- **5.10** In the event of defective tyre, the driver must submit the defective tyre to the Technical Control and ask for the substitution with one tyre from the organizer, at Technical Scrutineers discretion.
- 5.11 In both cases, the decision to agree to the replacement is at the discretion of the Technical Scrutineers



# 6. APPENDIXES

The following appendixes are integral part of the regulations

## **APPENDIX 1**

Technical form 364E IAME X30 WATERSWIFT 60cc

All technical regulations, technical forms and appendixes are available on: www.iamekarting.com











### **TECHNICAL REGULATIONS X30 MINI PART 2**

### 1. CHASSIS

- 1.1 Traditional chassis with a valid CIK/FIA Karting "MINI KART" homologation or approved by ASNs members of the CIK/FIA Karting and in compliance with CIK/FIA Karting prescriptions requirements.
- 1.2 Each Driver is allowed with one (1) chassis only.
- 1.3 If a damage occurs to the chassis previously scrutinized for the meeting, if in the opinion of the Scrutineers it is not practical to repair in time, one alternative chassis of the same make and model as the damaged chassis may be scrutinized and authorized, in order to continue the meeting.

#### 2. DEFINITION OF THE CHASSIS

- 2.1 Chassis must be in compliance with the following:
- 2.2 Traditional chassis with a valid CIK/FIA Karting "MINI KART" homologation or approved by ASNs members of the CIK/FIA Karting and in compliance with CIK/FIA Karting prescriptions.
- 2.3 Front fairing mounting kit as per CIK 2015/2020 prescriptions in compliance with CIK drawings 2c and 2d
- 2.4 Rear shaft max. diameter: 30mm
- 2.5 Wheelbase 950mm (+/-5mm)
- 2.6 Rear track width max. 115cm
- 2.7 Ceramic ball bearings are forbidden
- 2.8 Mechanic or hydraulic brakes
- 2.9 Front brakes forbidden
- 2.10 Steel or cast iron brake discs (Aluminum/Ceramic/Carbon are forbidden)
- 2.11 Aluminum or magnesium wheels allowed
- 2.12 Rear wheels protection must be CIK/FIA Karting homologated
- 2.13 Full chain guard is mandatory

## 3. ENGINE

- 3.1 Each Driver is allowed two (2) engines only.
- 3.2 Any modification or adjunction on the engine and its accessories, if not expressly authorized, is forbidden.
- 3.3 IAME considers as modifications any action changing the initial aspect and dimensions of an original part. Any modification and/or installation having as a consequence to alter a dimension and/or its control possibility is strictly forbidden.
- **3.4** Polishing, sandblasting, trimming or adjustments are not allowed.
- 3.5 No heat treatment or surface treatment are allowed.
- **3.6** The Entrant is liable for the conformity of its own equipment.







- **3.7** Only the IAME X30 WATERSWIFT 60cc RL TaG, original and strictly in compliance with the manufacturer's technical form (technical features, sizes, weights, diagrams with the tolerances prescribed by the manufacturer) is admitted.
- 3.8 The pictures on the original homologation forms are as well valid to identify the engine and the parts.
- **3.9** The engines must be provided with their original serial number.
- **3.10** No modification, improvement, polishing, addition or removal of material of any engine part is allowed.
- **3.11** Each engine internal or external part has to be installed in its original position and functioning according to the original design specs.
- **3.12** The tolerances reported on homologation form are necessary to comprise all the machining, assembling and settling tolerances. Nevertheless, the Entrant is absolutely not allowed to make any intervention on the engine, even if the characteristic dimensions after his intervention will still be within the prescribed tolerances.
- **3.13** The tolerances reported on homologation form are necessary to comprise all the machining, assembling and settling tolerances. Any tuning is forbidden: the maximum and minimum allowed values and the volume of the combustion chamber have to be measured according to the CIK Technical Regulations.

### 3.14 Diagrams and Volume Chart:

Refer to technical form of the engine

#### 4. CYLINDER HEAD

- 4.1 Strictly original.
- 4.2 The sparkplug body tightened on the cylinder head must not protrude from the upper part of the combustion chamber dome.
- **4.3** The squish minimum value must be as prescribed on the engine technical form.
- 4.4 The thickness of the tin wire (50% tin minimum.) used for the squish measurement must have a 1,5mm diameter.
- **4.5** The original IAME gauge n. 10215 is the reference to check the cylinder head profile conformity. The gauge shape must match with the dome profile, the squish area and the gasket plane.

# 5. CYLINDER

- 5.1 Strictly original, with security pin and markings.
- **5.2** Polishing, sandblasting, trimming or adjustments are not allowed. Only re-boring is allowed.
- 5.3 In case of doubt, the shape and the height of the transfers have to be compared to the cylinder of the sample engine.
- 5.4 No heat treatment or surface treatment are allowed.
- **5.5** Only one cylinder gasket of 0.40mm +/- 0.05 thickness is admitted.
- 5.6 No head gasket is admitted.
- **5.7** The original IAME gauge n. ATT-005 is the reference to measure the distance of the upper edge of the ports from the cylinder head plane.







### 6. CRANKCASE, CRANKSHAFT, CON-ROD, CRANKPIN

- **6.1** Only original parts are allowed, without any modification.
- **6.2** Only strictly original big end cage (IAME B-10431), original washers (IAME E-38436) and original small end cage (IAME A-60440) are allowed.

#### 7. BEARINGS

- 7.1 Strictly original.
- 7.2 Crankshaft ball bearings p.n. IAME: 10400-D (6204 C4).
- 7.3 Ball-bearing with oblique contacts are forbidden.
- 7.4 Only bearings with steel balls and rings are authorized. (Ceramic is forbidden).
- **7.5** Shims can be added behind the main roller bearings to reach the correct axial play.
- **7.6** All bearings not reporting the correct and clearly visible classification number, as described in the present regulations, are expressively forbidden.

#### 8. PISTON. RING AND PIN

8.1 Strictly original without any modification and in compliance with the engine technical form.

## 9. CARBURETTOR

- **9.1** Only the Tillotson HW-31A carburettor supplied together with the engine in its original configuration (same brand, same model, same reference) is admitted.
- 9.2 Only the accessories supplied together with the original carburettor are allowed.
- 9.3 Needle valve spring is free.
- 9.4 Carburettor positioning (i.e. with pump in upper or in lower position) is free.
- **9.5** All carburettor spacers and gaskets are mandatory and must be in compliance and in the same order as indicated on the technical form.
- 9.6 In case of doubt the carburettor must be compared to the sample carburettor.

# **10. INLET SILENCER**

- **10.1** Inlet silencer strictly original as supplied together with the engine (same brand, same model, same reference) that is IAME mod. MINI SWIFT with CSAI 01/SA/14 homologation.
- 10.2 Inlet hose max. internal diameter must be 22mm. Protective grids are optional.
- **10.3** The rubber manifold connecting the inlet silencer to the carburettor can be installed in either ways and it must be in compliance with the size indicated on the technical form of the engine.
- **10.4** If the manifold with sponge air filter is used, the sponge must be intact and the whole must be in compliance with the size indicated on the technical form of the engine.
- **10.5** Any injection and/or spraying system is forbidden.







### 11. CLUTCH

- **11.1** The engine is supplied with a dry centrifugal clutch system.
- 11.2 Any intervention intended to extend the sliding of the clutch hub beyond the prescribed limit is strictly forbidden.
- 11.3 The centrifugal clutch must engage at max. 4.500 RPM moving the kart with driver on board and in racing conditions.
- **11.4** The clutch must be completely triggered at max. 6.500 RPM in any condition, this measurement can eventually be checked with proper instruments.
- 11.5 Each Competitor is responsible for the wear status of the clutch padding material and friction parts cleaning,
- 11.6 The proper clutch operation might be checked at any moment of the event, and even after each phase.

### 12. IGNITION

- 12.1 Original ignition only, that is SELETTRA p.n. IAME A-61951 and coil p.n. IAME A-61955 without any modification.
- 12.2 The battery must be fixed to the chassis and always connected to the ignition system.

## 13. SPARK PLUG & SPARK PLUG CAP

- 13.1 Only the NGK B9EG B10EG BR9EG BR10EG are allowed, strictly original without any modification.
- 13.2 The sparkplug must be installed with its original gasket.
- **13.3** The insulator must not exceed the sparkplug body and the length of the sparkplug body itself must be max. 18,5 mm. (CIK technical regulations appendix 7).
- 13.4 Original spark plug cap, as delivered with the engine (IAME p.n. 10544 or 10543)

### 14. EXHAUST

- **14.1** Only the original muffler and header are allowed as supplied with the engine and must be kept in compliance with the homologation form.
- 14.2 No modification in structure or in dimensions is allowed.
- **14.3** The complete sealing of the exhaust gas between the cylinder and the exhaust manifold must be guaranteed at all times.
- **14.4** The control of the sealing of the exhaust gas can be performed at any time through occlusion of the outlet hole of the exhaust header, filling of the exhaust header with liquid through the exhaust port and check for leaks.
- 14.5 The proper sealing of the exhaust system is at Driver's responsibility.
- 14.6 Exhaust temperature probes are not allowed.

# 15. COOLING

- **15.1** The cooling system must be in its original configuration.
- **15.2** Only one IAME original radiator (p.n. T-8601), only one IAME original simple water pump (plastic black/blue or aluminum) are allowed and in compliance with the technical form of the engine.
- 15.3 The number of radiator support brackets is not limited.



