INTERNATIONAL IAME EVENTS PROMOTED BY RGMMC 2021 - TECHNICAL REGULATIONS

The CIK/FIA Karting Technical regulation applies for the IAME International events orgnaised byt RGMMC. The ENGLISH language is the authentic version. The Organizer of the event RGMMC GMBH, following the agreement of the ASN presenting the event, reserves the right to issue additional statements concerning the Technical Regulations. Such statements are issued to all registered competitors by way of Competitors' Bulletins at the race meetings, or posted to the address (email) detailed on the event registration form, or written on the official website of the series

ARTICLE 1. CLASSIFICATION AND DEFINITION

1.1 Classification: Article 1.1 of the CIK/Fia Karting Technical Regulations.

1.2 Definition: Article 1.2 of the CIK/Fia Karting Technical Regulations.

ARTICLE 2. GENERAL PRESCRIPTION

2.1 General: Article 2.1 of the CIK/Fia Karting Technical Regulations

ARTICLE 3. KART AND EQUIPMENT SAFETY

3.1 Kart Safety: Article 3.1 of the CIK/Fia Karting Technical Regulations

3.2 Equipment Safety: Article 3.2 of the CIK/Fia Karting Technical Regulations

ARTICLE 4. GENERAL PRESCRIPTION FOR GROUP 2 KARTS

4.1 Chassis: Article 5.1 of the CIK/Fia Karting Technical Regulations

5. SCRUTINEERING

5.1 A mandatory check is carried out before the start of the Non Qualifying Practice. It must be possible to identify the homologated equipment by the technical descriptions (drawings, dimensions, etc.) on the Homologation Form.

5..2 Each competitor shall be able to submit the Homologation Forms relevant to the equipment employed.

6. CHASSIS PRESCRIPTIONS

6.1 Chassis must have a valid CIK/FIA Karting homologation.

6.2 Front brakes are not allowed in classes X30 Junior and X30 Senior.

6.3 Chassis for the " IAME GEARBOX" class must have a CIK/FIA Karting homologation for KZ class.

6.4 Rear shafts CIK/FIA Karting manufacturer identification sticker (CIK/FIA Karting Technical Regulations - Appendix No. 10) and manufacturer's logo stamped or engraved on the outside are not mandatory.

6.5 The use of the front fairing retaining system CIK / FIA 2015-2020, as per CIK drawings N. 2c and 2d, is mandatory in X30 Junior, X30 Senior, X30 Master, X30 Pro, IAME Gearbox.

6.6 The technical committee reserves the right to refuse front fairings, front fairing retaining systems or other components that do not meet the required standards.

6.7 The front fairing must be CIK/FIA Karting homologated and must remain in the correct position at any time of a competition (qualifying heats or final races), as described in the Technical Drawing CIK / FIA No. 2c and 2d.

7. AMOUNT OF EQUIPMENT (CHASSIS)

7.1 Each driver is allowed with one (1) chassis only.

7.2 If a damage occurs to a chassis previously scrutinized for the meeting and it is in the opinion of the Scrutineers that it is not practical to repair in time, one chassis of the same make and model as the damaged chassis may be scrutinized, to continue the meeting.

8. AMOUNT OF EQUIPMENT (ENGINES)

8.1 Each driver is allowed to submit to Scrutineering and use only two (2) engines per driver and per category.

9. Fuel

9.1 Fuel will be non "Parc Ferme" status, unless stated in the Specific Regulations of the event

9.2 The requirements specified in these regulations are intended to ensure the use of fuels predominantly composed of compounds normally found in commercial fuel and to forbid the use of specific power-boosting chemical compounds.

9.3 At any time the volume of fuel in the tank must be over or equal to 1.5 litres.

9.4 The fuel must be unleaded 98-100 octane available from the fuel pump designated by the Organizer or from the supplier selected for the event.

9.5 The oil mixture ratio shall be 4%/6%.

9.6 It is forbidden to add any liquid and/or power-boosting chemicals in the fuel

9.7 The technical Scrutineers have the right to change/replace any Driver/Entrant petrol at their discretion and at any time.

In such a case, the driver is asked to enter servicing park without fuel in the fuel tank and the fuel from the organization is provided. The replace fuel will be the same fuel as stated in the supplementary regulations of the event.All replaced fuel is provided at no cost for the driver.

9.8 The evaluation of the fuel at the racetrack can be conducted using one or all of the following tests:

1) Digatron DT- 47 Fuel Meter Test or others
2) Specific Gravity Test
3) Water Solubility Test

9.9 Further tests will be at the cost of the Entrant/Driver. If a non-conformity is ascertained, the cost will be invoiced to the Driver/Entrant. The cost will be stated in the supplementary regulations of the event.

10. LUBRICANT

10.1 The oil must be CIK-FIA approved / homologated 2-stroke oil, which must be stated on the scrutineering card/passport upon completing technical check.

11. TYRES

11.1 Slick tyres X30 Junior

Model:	MG SH
Size Front:	10 x 4,60-5
Size Rear:	11 x 7,10–5
Max. allowed:	4 front and 4 rear tyres starting from the Qualifying Practice

11.2 Slick tyres X30 Senior

Model:	MG SM
Size Front:	10 x 4,60-5
Size Rear:	11 x 7,10–5
Max. allowed:	4 front and 4 rear tyres starting from the Qualifying Practice

11.2 Wet tyres all classes

Model:	MG SW
Size Front:	10 x 4,20-5
Size Rear:	11 x 6,00-5
Max. allowed:	4 front and 4 rear tyres starting from the Qualifying Practice

11.3 Any modification of a tyre is forbidden.

11.4 Heating and cooling of tyres by any method and/or remoulding or treating the tyres with any chemical substance is forbidden.

11.5 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 (4) under any circumstances.

11.6 Polluting of the tyres, e.g. through chain grease, must be avoided as this can result in the limiting value being exceeded.

11.7 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 Pre-Gird.

11.8 Should the test be carried at the "Finish" Servicing Park and one or more tyres result not in compliance with the regulations, the Driver is disqualified from the race.

11.9 Appeals against this procedure are not admitted.

12. RACE NUMBERS AND DRIVERS ID ON KARTS

12.1 Article 12 FIA Karting Specific Prescriptions

12.2 The numbers shall be black on a clear yellow background and shall be at least 15 cm high and have a 2 cm thick stroke and represented with an Arial type or similar font. The competition number shall be bordered by a yellow background of 1 cm minimum. They must be fitted before free practice and must be clearly visible during the hole race event (damaged numbers and I.D must be replaced regularly) on both front and rear and on both sides towards the rear of the bodywork. The number plates fitted at the back of the kart shall be plane and have rounded corners (diameter of rounded corners 15 to 25 mm) with 22 cm sides. The plates shall be flexible and made of opaque plastic, and they shall always be visible (fixation without a possible displacement).

12.3 Driver's name as well as the flag of his nationality (Origin of Licence) shall be in the fore part of the lateral bodywork. The minimum height of the flag and the letters of the name shall be 3 cm.

12.4 The Driver is responsible at all times to make sure that the required numbers and I.D are clearly visible to Officials, Timekeepers and Marshals.

12.5 Karts not in compliance with article 5.8. may not be allowed to join Free-Practice, Time-Qualifying, Qualifying Heats, Pre-Final or Final Race.

13. EXCHANGE OF EQUIPMENT

13.1 The exchange of registered equipment among Drivers is not allowed.

14. MINIMUM WEIGHT

14.1 X30 Junior: 145Kg

14.2 X30 Senior: 158 Kg

15. ENGINES GENERAL

15.1 Category X30 Junior: IAME - X30 125cc RL TaG - (125cc- centrifugal dry clutch drive-water cooled-TaG)

15.2 Category X30 Senior: IAME - X30 125cc RL TaG - (125cc-centrifugal dry clutch drive-water cooled-TaG)

16. INSPECTIONS

16.1 The engine technical inspection is performed by the technical stewards.

16.2 The technical stewards have the right to inspect any part to the point that it can no longer be employed. Inspected parts resulting as regular will be replaced to the driver at no cost. Any part resulting irregular will not be refunded.

16.3 In any moment, the technical officials have the right to replace any part, any accessory or even the entire engine.

16.4 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.

16.5 The technical forms are the main comparison reference for Scrutineers.

16.6 In case of doubts on the engine parts conformity, the comparison with the sample engine will be the definitive probating element.

16.7 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).

16.8 Controls can be carried on the engines, in race conditions, at any time of the Event.

17. APPENDIXES

The following appendixes are integral part of the regulations:

APPENDIX 1: Homologation form n. 254V - IAME X30 125cc RL – TaG
APPENDIX 2: Homologation form n. 348B - Carburateur Tillotson HW27A
APPENDIX 3: Exhaust silencer – X30 Junior – X30 Senior – X30 Master – X30 Pro
APPENDIX 4: Tyres regulations
APPENDIX 5: Official petrol
APPENDIX 6: Squish & timing control procedure

All technical regulations, technical forms and appendices are available at: www.iamekarting.com

18. ENGINE IAME X30 125cc – X30 JUNIOR and X30 SENIOR

18.1 Any modification on the engine and its accessories is strictly forbidden, if not expressly authorized.

18.2 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. Polishing, sandblasting, trimming or adjustments are not allowed.

18.3 No heat treatment or surface treatment are allowed. The Entrant is liable for the conformity of its own equipment.

18.4 Only the IAME X30 125cc, 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.

18.5 The pictures on the original homologation forms are as well valid to identify the engine and the parts.

18.6 The engines must be provided with their original serial number.

18.7 No modification, improvement, polishing, addition or removal of material of any engine part is allowed.

18.8 Each engine internal or external part has to be installed in its original position and functioning according to the original design specs.

18.9 The tolerances reported on homologation form are necessary to comprise all the machining, assembling and settling tolerances.

18.10 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.

18.11 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/FIA Karting Technical Regulations.

18.12 Diagrams and volume chart**:** refer to engine homologation form

18.13 All the templates described in the engine technical form of the engine and available to the Technical Stewards, are to be considered valid and certified by the Manufacturer instruments in order to determine the conformity of the part whose control they are designed for.

19. CYLINDER HEAD

19.1 The cylinder head has to be strictly original.

19.2 Only the thread repairing by means of an M14 x1,25 helicoil of the same length as the original thread is allowed. The sparkplug body tightened on the cylinder head must not protrude from the upper part of the combustion chamber dome.

19.3 The squish minimum value must be in compliance with the engine technical form prescription at all points.

19.4 The tin wire (50% tin minimum.) used for the squish measurement must have a 1,5mm diameter. Measurements must be taken with the engine in racing conditions and at ambient temperature.

19.5 The original IAME gauge n. ATT-025/1 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.

19.6 The CIK insert body tightened on the cylinder head, must not protrude from the upper part of the combustion chamber dome.

20. CYLINDER

20.1 Strictly original and provided with the security pin and original IAME markings.

20.2 Polishing, sandblasting, trimming or adjustments are not allowed.

20.3 Only re-boring is allowed. In case of doubt, the shape and the height of the transfers have to be compared to the cylinder of the sample engine.

20.4 No heat treatment or surface treatment are allowed.

20.5 The diagram adjustment is allowed only by means of the cylinder gasket replacement.

20.6 The number of cylinder gaskets is not limited. Only IAME original gaskets allowed.

20.7 No head gasket is admitted.

20.8 The original IAME gauge n. ATT-025/2 is the reference to measure the cylinder ports position.

20.9 The original IAME gauge n. ATT-035/1 is the reference to carry a visual check of the ports.

21. CRANKCASE, CRANKSHAFT, CON-ROD, CRANKPIN

21.1 Strictly original and without any modification.

21.2 The original IAME gauge ATT-035/3 is the reference to check the reed block housing plane

21.3 The original IAME gauge ATT-035/4 is the reference to check the distance between the indexing pins of the cylinder

21.4 The original IAME gauge ATT-035/5 is the reference to check the height of the cylinder base plane

21.5 Only original big end cage (X30125431), small end cage (E-10440/E-10441) and original washers (X30125436/X30125437) allowed.

21.6 Oil seals must be installed in the correct position, cave side looking inside the crankcase.

22. BEARINGS

22.1 Only crankshaft bearings 6206 C4 and and roller bearings SKF BC1-3342 B are allowed. Mixing of ball and roller bearing on the same engine is not allowed. Only the balance shaft ball bearings 6202 C3/C4/C4H and 6005 C3/C4 with steel balls and polyamide cage are allowed.

22.2 Oblique contact prohibited.

22.3 Ceramic balls prohibited.

22.4 The bearings must be mounted with balls visible from the inside of the crankcase

22.5 All bearings not reporting the correct and clearly visible classification number, as described in the present regulations, are expressively forbidden.

22.6 The use of spacer shims behind the bearings is allowed to obtain the correct axial clearance.

22.7 All internal parts of the engine must be of manufacturer origin, the same number as the assembly of the factory and mounted in the same direction.

23. PISTON, RING AND PIN

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

23.2 The IAME original gauge ATT-035/2 is the reference to check the piston head shape.

24. REED BLOCK

24.1 Strictly original without any modification.

24.2 No gasket planes machining is allowed.

24.3 Original reed valve cover without any modification is allowed.

24.4 Reed block/crankcase gasket thickness is 1mm (admitted tolerance +/- 0.3mm).

24.5 Conveyor/reed block gasket thickness is 0.8mm (admitted tolerance +/- 0.3mm).

25. REED PETALS

25.1 Fiberglass (min. thickness 0.30mm) original IAME marked reed petals are allowed.

25.2 Carbon fibre (min. thickness 0.24mm) original IAME marked reed petals are allowed.

25.3 Mixing of carbon fibre and fibreglass petals is forbidden.

26. CARBURETTOR

26.1 Only the Tillotson HW-27A carburettor supplied together with the engine in its original configuration (same brand, same model, same reference) is admitted.

26.2 Only the accessories supplied together with the original carburettor and represented on the carburettor technical form are allowed.

26.3 Needle valve spring is free.

26.4 Carburettor positioning (i.e. with pump in upper or in lower position) is free.

26.5 Carburettor gasket thickness is 1 mm (admitted tolerance +/- 0.3mm).

26.6 The original IAME gauge n. ATT-035/2 is the reference to check the carburettor inlet duct. The gauge shape must match with the inlet profile.

27. INLET SILENCER

27.1 The inlet silencer (p.n. X30125740) must be identical to the original one supplied together with the engine (same brand, same model, same reference) with max. 22mm diameter intake tubes.

27.2 Protective grids are optional.

27.3 The rubber manifold with air filter connecting the inlet silencer to the carburettor is mandatory and must be installed and in compliance with the homologation form.

27.4 Any injection and/or spraying system is forbidden.

28. CLUTCH

28.1 The centrifugal clutch must engage at max. 4.000 RPM moving the kart with driver on board and in racing conditions.

28.2 The clutch must be completely triggered at max. 6.000 RPM in any condition, this measurement can eventually be checked with proper instruments.

28.3 Each driver will be responsible for the wear status of the clutch padding material and friction parts cleaning.

28.4 The proper clutch operation might be checked at any moment of the event, and even after each phase.

28.5 The original IAME gauge ATT-047/4 is the reference to check the clutch drum. The tool must not enter into the clutch drum in perpendicular position respect to the clutch drum axis.

29. IGNITION

29.1 Only original ignitions, either Selettra Digital “K” or Selettra Digital “S” systems are allowed, without any modification.

29.2 Scrutineers have the right to ask for the replacement of the whole ignition system or part at any moment before starting the race.

29.3 The organizer will not be liable for any eventual breakdown occurred after the replacement.

29.4 Only the electronic CDI box type "C" (16000 RPM) is allowed and must be fixed on the chassis or on the engine.

29.5 The markings on the electronic box are compulsory and must be clearly visible without disassembling the electronic box. Covering with adhesive or masking tape is forbidden.

29.6 Modifications on the stator fixing, on the shape and thickness of the rotor key and on the rotor and crankshaft slots are forbidden.

29.7 The IAME original gauge ATT-035/7 is the reference to check the correct position of the phase reference marking on the rotor.

29.8 The battery must be fixed to the chassis and always connected to the ignition system.

30. SPARKPLUG

30.1 Only the NGK B9EG - B10EG - BR9EG - BR10EG – BR9EIX - BR10EIX - R6254E-105 - R6252K-105 sparkplugs are allowed, strictly original and without any modification.

30.2 The sparkplug must be installed with its original gasket.

30.3 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).

30.4 Original spark plug cap, as delivered with the engine (IAME p.n. 10544 or 10543).

31. EXHAUST

31.1 Only the original muffler and exhaust manifold as supplied with the engine are allowed and must be kept strictly original and in compliance with the homologation form. No modification in structure or in dimensions is allowed.

31.2 Drilling and welding operations on the muffler are allowed only to install a temperature probe.

31.3 The complete sealing of the exhaust gas between the cylinder and the exhaust manifold must be guaranteed at all times.

31.4 The control of the sealing of the exhaust gas can be performed at any time through occlusion of the outlet hole of the exhaust manifold, filling of the exhaust manifold with liquid through the exhaust port and check for leaks.

31.5 The proper sealing of the exhaust system is at Driver’s responsibility.

31.6 One original gasket at least between cylinder and exhaust manifold is allowed.

31.7 The use of the original exhaust spacer is allowed and not mandatory

31.8 The use of the original 22.7mm restricted exhaust manifold as described in the tech form is mandatory in the X30 Junior category. No modifications allowed.

31.9 The use of the exhaust silencer as described in the attachment n.3 is mandatory at all moments.

32. COOLING

32.1 The cooling system must be in its original configuration: only one IAME original radiator (p.n. T-8000B or T-8001), only one IAME original simple water pump (aluminium or plastic black/blue)

32.2 Only one IAME original water pump pulley (aluminium or plastic black/blue) are allowed and in compliance with the homologation form.

32.3 The number of radiator support brackets is not limited.

32.4 Only simple or by pass original IAME thermostats are allowed and their use is optional. The two-way thermostat case can be installed without the thermostat capsule inside, and work as a fitting.

32.5 Only water with no other additive is allowed for cooling.

32.6 Radiators shields, either adhesive or mechanic are allowed but should not be removable when the kart is in motion.

32.7 Original water hoses as delivered with the engine (black or blue).

32.8 Water pump driving belt type is free.

32.9 Belt must operate on the water pump pulley.

32.10 The combination of plastic or aluminium water pumps with plastic or aluminium water pump pulleys is allowed.

33. STARTING

33.1 The engine is provided with an on board electric starter.

33.2 The original on board starting system has to be installed with all its components and properly connected and functioning.

34. SPROCKETS

34.1 Only IAME original Z10/Z11/Z12/Z13 sprockets are admitted.