INTERNATIONAL FEDERATION OF MODEL AUTO RACING



# BODY APPROVAL PROCEDURE 2010



#### **IFMAR Electric Chairman**

Frank Mostrey
Tenierslaan 28
B 1910 Kampenhout
Belgium

Phone: +32 16 65 75 18 Fax: +32 16 65 75 18

Email: electric.chairman@ifmar.org

#### **Approvals Electric, 20 January 2010**

### **Body approval Procedure**

Dear Madame/Sir

The 2010 IFMAR World Championships for the Electric Track classes (1/12th & 1/10th ISTC) will be held in Germany, late June.

Your company may submit motors, batteries and/or bodies for approval previous to the IFMAR World Championships. Enclosed are details of how to obtain approval for body shells for the 2010 events and beyond. For already approved bodies, you do NOT need a new approval. If you do have suitable products not approved (or products which are significantly changed after the last approval), you may send them for approval before the dates mentioned. By that date the samples of the products and the completed homologation form must be in our hands. Products or documentation received after the closing date will result in non-approval. Non-approved products cannot be used, by any competitor, at IFMAR World Championships.

If you have any questions please contact me direct at the email address

Sincerely
Frank Mostrey
Electric Chairman, IFMAR

#### **BODY HOMOLOGATION**

The International Federation of Model Auto Racing (IFMAR) allows only approved bodies to be used in its sanctioned World Championship meetings. This approval is to ensure that all competitors have equal access to the racing items, ensuring wherever possible, fair racing to decide the World Champion. Any manufacturer, distributor, agent or retailer may submit products for approval providing the products meet the specifications and requirements of IFMAR rules in force are submitted by the closing date (28 February 2010) and meet the availability requirements of IFMAR

### NOTE THAT THERE ARE 2 (TWO) APPROVAL OPTIONS FOR 1/12 th & 1/10 th ISTC BODIES:

- 1. Bodies may be homologated by any of the 4 IFMAR Blocs; ROAR, EFRA, FEMCA OR FAMAR
- Bodies may be homologated direct by IFMAR according to Technical Rules
   To do so complete the IFMAR Body Shell Registration Form and fulfill all requirements

#### 2.1. ONLY FOR 1/10th SCALE:

Effect a pre-payment of 200 USD (at no cost for beneficiary) per presented body into the accounts of IFMAR <u>Before 28th of February 2010</u>

IFMAR International bank Account: SE48 6000 0000 0000 4310 9969
Swift: HANDSESS
Handelsbanken BOX 135
60103 Norrkoping
Sweden



## EXTRACT FROM THE IFMAR ELECTRIC TRACK RULES

(Complete set available on the IFMAR website)

#### 5. TECHNICAL RULES 1/12

The official measurements in these Technical Rules are the metric measurements.

#### 5.1 GENERAL SPECIFICATIONS

- 5.1.1 For the purpose of the IFMAR World Championships, GTP, Le Mans Prototypes (LMP675 & LMP900), World Sports Cars (WSC) and FIA GT Racing Classes 1 & 2 (GT1 and GT2) bodies only are allowed.
- 5.1.2 When starting the race, a body shell must be neatly finished and complete.
- 5.1.3 Only body shells which are registered with IFMAR may be used. Body shell manufacturers may register at any time, but not less than four months prior to that years' IFMAR World Championship to be eligible for that event.

One sample of a body shell, together with photographs of the full-size car on which the body shell is based, must be sent to the IFMAR Electric Section Chairman.

When registered by IFMAR, the body shell will be added to the register of body shells allowed for use at IFMAR World Championship events for that class.

The body shell must be a reasonable, realistic, facsimile of the full-size car on which it is based, with particular attention to realistic height, cockpit area, scoops, vents, wings and aerodynamic devices.

- 5.1.4 All open-cockpit body shells must have a realistic driver figure fitted in an appropriate position in the cockpit at all times when racing. The driver figure must consists of at least a driver's head/helmet, shoulders and arms and should be reasonable scale size.
  - The driver figure must be painted in a realistic appearance, color and garb.
- 5.1.5 All closed cockpit cars must have transparent windshields and/or side windows and/or rear windows.

Open or painted windshields and/or side windows and/or rear windows are not allowed. This will be determined by reference to the photographs submitted by the manufacturer when registering the body shell.

#### **5.1.6 WINGS**

- 5.1.6a Wings may only be fitted where they are shown on the photographs submitted by the body shell manufacturer for registration with IFMAR. Wings may be molded in to the body shell as part of the continuous material used for the body shell, or may be attached separately.
- 5.1.6b One (1) separate front wing may be attached directly, and only, to the body shell. The front wing must be supplied by the original body shell manufacturer with the body shell as registered with IFMAR and be fitted as supplied without modification.
- 5.1.6c One (1) rear wing only may be used with the body shell. The rear wing may be: EITHER

Molded in to the original body shell as part of the continuous material used for the body shell. This is defined as the part of the body shell, from the centre of the rear axle line extended rearwards, which sweeps upward from the horizontal.

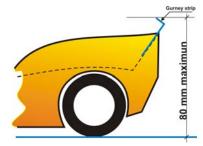
#### OR

Attached directly to the body shell or chassis by separate supports. In this case the part of body shell from the centre of the rear axle line extending rearwards must be horizontal, or swept downward from the horizontal. Separate wings must conform to the sizes shown in 5.1.14. Side dams to the sizes shown in 5.1.14 must be attached directly to the separate wing only.

No part of the wing may be closer than 6.5 mm to any part of the body other than the tail fins or side dams.

5.1.7 Side dams moulded in to the original body shell, or supplied with the original body shell, registered with IFMAR, must not exceed a maximum dam length of 102 mm and maximum height of 2 5 mm. These dimensions include moulded-in portions of body.

- 5.1.8 No additional items may be fastened to the body exterior other than the rear trim tab / Gurney strip.
- 5.1.10 Wheel arches must be cut-out if the original full-size car ran that way. This will be determined by reference to the photographs submitted by the manufacturer when registering the body shell with IFMAR.



- 5.1.11 The body shell may not be trimmed higher than the lower body trim lines. When a body shell is registered with IFMAR a lower trim line must be molded in to the body shell, or a minimum distance from the highest point on the body shell to the lower trim line must be specified by the body shell manufacturer.
- 5.1.12 No part of the chassis, wheels, tires, suspension or mechanical/electrical equipment may be visible outside the body shell when viewed in any plane.
- 5.1.13a Openings in the body shell (e.g. scoops, vents) must be appropriate to the full-size car on which the body shell is based. This will be determined by reference to the photographs submitted by the manufacturer when registering the body shell.

Additional openings in the body shell are allowed only for the original cockpit (in open cockpit cars) wing mounts, antenna, roll-over mast (if allowed) and lap recording equipment.

No other openings in the body shell are allowed.

5.1.13b Rollover antenna may be fitted. If fitted, it must have a blunt end for safety reasons. If a rollover mast and radio antenna are fitted, the antenna must be part of the mast along its length. Maximum height from ground 35 cm.

#### 5.1.14 DIMENSIONS

#### 5.1.14a Body shell dimensions in millimeters

|  | Max | Min |
|--|-----|-----|
| Overall width  | 172 | 155 |
| Overall length   | 380 | 320 |
| Clearance around openings                                  | 10  | -   |
| Clearance around wheel arches (except shaped wheel arches) | 10  | -   |
| Rear Wing (separate) Width                                 | 172 | -   |
| Chord  | 52  | -   |
| Side Dams - Length   | 55  | -   |
| - Width  | 20  | -   |

#### **SECTION SIX - TECHNICAL RULES 1/10th ISTC**

#### 6.0 PURPOSE

The essence of the 1/10th ISTC class is competition between realistic models of saloon/sedan cars raced in Touring Car Series for Class Two FIA Touring Cars.

All Cars must comply with the ISTC Technical Rules to be eligible to race in Timed Practice, Qualifying and Finals.

Bodies must be a 1:10 scale in character reproduction of touring car (sedan) 2 and 4-door vehicles that exist ore have exist, and raced in international Touring Car series

For homologation purposes, the bodies dimensions will be checked according the Global Body Specifications.

Bodies may be homologated by ROAR, EFRA, FEMCA or FAMAR up to four (4) months before the event.

This combined list will be made available by IFMAR to the organizer for inclusion in the Stage II Report. For technical inspection it is necessary that all body shells on the list can be identified by means of a manufacturer's and/or homologation number issued by a Bloc. This number must be molded in at the right upper edge of the windscreen

#### 6.1 APPEARANCE

- Cars entered for the ISTC Event shall be scale representations of full size FIA Class Two Touring Cars currently racing in International Touring Car Series' (e.g. ITC, BTCC, NATC, Japan Touring Cars, etc.) held from time to time. Notwithstanding this broad definition, all Cars must use a four (4) door body shell to be eligible for this Event.
- 6.1.2 A register of body shells will be maintained by IFMAR Electric Section. Only body shells registered four (4) months prior to that years' Event will be eligible for use on Cars.

  All details of front and rear lights, air intakes and windows must be clearly contrasted from surrounding paintwork.

#### 6.3 DIMENSIONS

The official measurements in these Technical Rules are the metric measurements.

|  | Min. (mm) | Max. (mm) |
|--|-----------|-----------|
| Width (with body shell)                          | 175       | 195       |
| Length (overall, with body shell fitted)         | 360       | 460       |
| Height (to top of roof – ready to race)          | 115       | 175       |
| Wing width (including endplates and supports)    | 125       | 190       |
| Wing chord (including any flaps or extensions    | 20        | 40        |
| Wing endplate (when separate)                    | -         | 40 x 20   |
| Flap or gurney tab extension above plane of wing | -         | 3         |

#### 6.5 WINGS

- Only one wing allowed, fitted in the same place as the wing on the original car. The wing may overhang the rear of the body of the car by 10 mm.
- The height of the wing may be adjusted, but the wing including endplates must not extend higher than the roofline.
- 6.5.3 Front splitters/spoilers must be molded in to the body shell in the same position as the original car.
- One tab or gurney flap only allowed which must be fitted securely to the rear wing, and must be contained within the wing dimensions, and the maximum height of 115mm.
- 6.5.5 Wings/splitters/spoilers/tabs/gurney flaps must be fixed rigidly to the body and/or wing, and may not be moved whilst the car is in motion.

#### 6.7 BODYSHELLS

- 6.7.1 Body shells must be a scale replica of the original car used in the relevant FIA or National class. The original car must be a four-door type. Replicas of two-door original cars are not allowed.
- 6.7.2 Body shells may not be cut above the lower door line nor above the rear bumper line. When a body shell is registered with IFMAR a lower trim line must be molded in to the body shell, or a minimum distance from the highest point on the body shell to the lower trim line must be specified by the body shell manufacturer.
- 6.7.6 Cars shall be neatly finished. Details of all front and rear lights, air intakes, front grills and windows must be clearly contrasted from the surrounding paintwork.
- 6.7.7 All windows must be clear or translucent grey/black. Windows may not be cut out. However the driver may have his name on the side window.
- 6.7.8 Only body shells which are registered with IFMAR may be used.
- 6.7.9 One (1) sample of a body shell, together with photographs of the full-size car (showing at least three (3) views: front, side and rear) on which the body shell is based, must be sent to the IFMAR Electric Section Chairman five (5) months prior to the event together with a homologation fee of \$US200. When registered by IFMAR, the body shell will be added to the register of body shells allowed for use at IFMAR ISTC World Championship events and the applicant will be notified.
- 6.7.10 The body shell must be a realistic scale facsimile of the full-size car on which it is based, with all features in proper proportion to each other. Lines indicating the shut-lines on the full-size car for bonnet (hood), boot (trunk) all doors and windows are to be molded in to the body shell. Particular attention must be paid to realistic scale height, width, length, cabin area, scoops, vents, wings and aerodynamic devices. The decision of IFMAR to register the body shell will be final.



# ELECTRIC SECTIONS BODY REGISTRATION FORM

NOTE: Closing date for approval to be used at the 2010 World Championships is: 28 February 2010

| Details of the body shell being submitted for approval       |  |  |
|--|--|--|
| Manufacturer:  |  |  |
| Type / Style of body shell                                   |  |  |
| Scale: 1/12 1/10 (4 door)                                    |  |  |
| Order/reference Number                                       |  |  |
| Trade name of specific body: (commercial shell name)         |  |  |
| Look-alike based on:   | (include pictures<br>of real car)  |  |
| Remarks:   |  |  |
| car (If applicable & t<br>product to: IFMAR E<br>M<br>T<br>1 | e of the body shell, this registration form, photographs of the full size o be attached separately) and evidence of the retail availability of the |  |
| Submitted by:  |  |  |
| Address:   |  |  |
| Country:   |  |  |
|  | on is correct to the best of my knowledge. I accept that the sample ody shells at the IFMAR World Championships.                                   |  |
| Signed, for and on behalf of:                                | by (name):   |  |
|  | Davillan   |  |

Ensure that you state on the Customs Declaration Form "Samples Only / No Commercial Value". Make sure that the package you send is free of costs for the receiver. Shipments received against payment will not be accepted.

Notify by email: electric.chairman@ifmar.org that your product(s) have been shipped

Delayed or blocked products by authorities (beyond the submission date) will not be allowed to the approval process nor considered a reason to extend the deadline for submission.

Submissions that turn out to be subject or matter to complaints regarding international safety regulations or infringing patents will be withdrawn from the list, even after approval. In such case the submitter shall not make any claim against IFMAR, including IFMAR's representatives, employees, and subcontractors but shall indemnify these against any legal liability for claims or suits, including costs and expenses incidental thereto provided that IFMAR shall notify the submitter of any claims or suits without undue delay.

Approval bodies 6/6 2010

