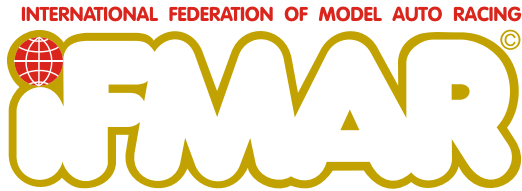


INTERNATIONAL FEDERATION OF MODEL AUTO RACING



BATTERY HOMOLOGATION PROCEDURE



Website: <http://www.ifmar.org>

IFMAR Electric Chairman
Ernest N. Provetti
47 Colonial Drive
Piscataway, New Jersey 08854
United States of America
Phone: +1 732 562 1234 Extension 301
Fax: +1 908 696 1367
Email: electric.chairman@ifmar.org

Norrköping 2008

A few words from the IFMAR President

Due to a combination of various unforeseen occurrences IFMAR was not able to complete the homologation forms in appropriate time. As a consequence of this I do not see other alternative than to disregard the specified time limit in the IFMAR rules regarding the **date for submitting batteries for approval** and **delay this date to the 19th of May** instead of March the 8th.

I have to point out that this is not the fault of the new IFMAR Electric Chairman Mr Ernest Provetti, if anyone should be blamed is it me and I do apologize if this is of any inconveniences for anyone.

To avoid supposition of **any** IFMAR Officials taking advantage of confidential information for own benefit has it been decided that any documents related to this must be sent only to the IFMAR Treasurer.

Yours sincerely
E Dallas Mathiesen
President, IFMAR.

Piscataway, New Jersey 2008

Dear Madame/Sir

The 2008 IFMAR World Championships for the Electric Track classes (1/12th & 1/10th ISTC) will be held in Bangkok, Thailand from November 08 - 16, 2008. Your company has to submit motors, batteries and/or bodies for approval previous to the IFMAR World Championships. Enclosed are details of how to obtain approval for your products for the 2008 events.

If the batteries are already approved, you have no need to seek new approval; any products previously approved do not need to be resubmitted. IFMAR approves the construction only, which is the cell type and markings. If you have no new batteries for approval for the 2008 events, please destroy these Homologation Forms as they cannot be used for future IFMAR Electric W.C. events. If you have products not approved (or products which are significantly changed after the last approval), and you wish them to be approved for official use at the 2008 Electric Track W.C. and future IFMAR W.C. events, **you must send them for approval according to the dates mentioned in the various forms attached to this.**

By this date the samples of the products and the completed homologation form must be in my hands. ANY PRODUCT OR FORMS RECEIVED AFTER THE CLOSING DATE CANNOT BE APPROVED FOR THE 2008 ELECTRIC TRACK WORLD CHAMPIONSHIPS. Products not approved cannot be used by any competitor at the 2008 Track Electric IFMAR World Championships.

Evidence of the availability of the product should be sent to the IFMAR Treasurer

The approval procedure is very easy. If you have any questions please contact me direct at the email address above and I will assist you. The IFMAR Electric Section will look forward to receiving your products for approval BEFORE the deadline noted above.

Sincerely
Ernest N. Provetti
Electric Chairman, IFMAR

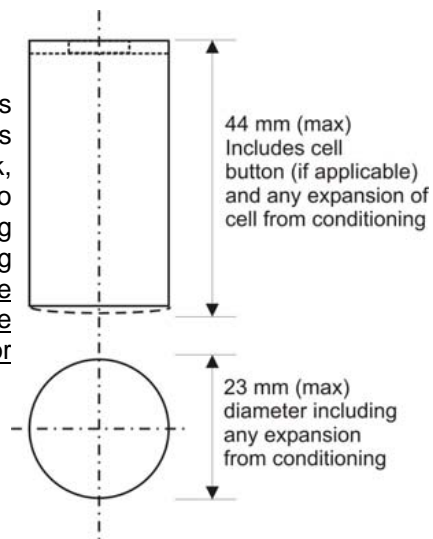
P.S. Please ensure that, if or when sending samples for homologation purposes, you state on the Customs Declaration Form "Samples Only – No Commercial Value". Please also make sure that the package you send is free of costs for the receiver. It would also be appreciated if you also notify me by email: electric.chairman@ifmar.org that your products have been posted.

Dear IFMAR World Attendees and Manufacturers:

This letter provides clarification as to the required maximum dimensions for batteries used in competition at IFMAR events. The clarification was made by the former IFMAR Electric Chairman Kenny Bergschultz after consulting the IFMAR blocs, manufacturer as well as drivers. The requirements are in accordance with Section 4.2.4 of the IFMAR Electric Track Racing and Technical Rules or as clarified below:

- 1 All batteries/cells used must be on the approved listed available at: www.ifmar.org
- 2 Cell dimensions and weight shown on the approved cell list depict typical values, not limiting values, for the approved cells.
- 3 All cells will have a maximum length of 44 mm. The maximum length will be defined as the longest dimension from the bottom of the cell (including any expansion or dimpling) to the tallest portion (includes any buttons, expansions, etc.) of the cell. This dimension will be verified by measuring perpendicular to the cell diameter. Length dimension includes shrink wrap.
- 4 All cells shall have a maximum diameter of 23 mm. This dimension will be verified by measuring perpendicular to the centerline of the cell. Diameter dimension includes shrink wrap.
- 5 Weight of any cell shall not exceed manufacturer supplied production tolerances submitted during the homologation process.

Clarification: Section 4.2.4 defines the cell dimensions as “nominal”. The definition and enforcement of “nominal” is subject to interpretation (i.e. nominal for each battery pack, nominal for all the same cells at the event, etc.). In order to manage all cell deformations including expansion or dimpling due to charging, treatments, and cycling; while creating repeatability and confidence in technical inspection, the absolute maximum dimensions for scrutinizing during the event will be 44 mm in length and 23 mm in diameter for approved cells at anytime during the race



Maximum Cell Dimensions



Battery Homologation Procedure

PLEASE READ THIS FIRST

The International Federation of Model Auto Racing (IFMAR) allows only approved motors and batteries to be used in its sanctioned World Championship meetings. This approval is to ensure that all competitors have equal access to the latest motors and batteries, thus ensuring wherever possible, fair racing to decide the World Champion. IFMAR makes no representation as to the quality or efficacy of the products approved. If parts of an approved motor are changed, the motor must be sent to IFMAR for re-approval.

Any manufacturer, distributor, agent or retailer may submit products for approval. Providing the products meet the specifications and requirements of the IFMAR rules in force at the time of approval, and are submitted by the closing date and meet the availability requirements of IFMAR rules, IFMAR will approve the product.

Complete the IFMAR Battery Homologation Form.

Prepare one (1) copy of the commercial documents showing that 50,000 cells are available and the addresses of shops which sell the batteries in accordance with the IFMAR Rules. **Send these documents to the address mention below.**

Send ten (10) samples of the cell, together with the Homologation Form to the IFMAR Electric Section Chairman

PLEASE NOTE

This page of the battery homologation form together with Copies of invoices, receiving notes, etc. for availability check should be sent separately ONLY to:

**IFMAR Treasurer
c/o Jean-Luc RETORNAZ
PO Box 25, 2019 Route de Berre
F-13122 VENTABREN
France**

If you intend to homologate more than one product please copy this page and use only one form per submitted product.

Battery Specification Checklist

Brand and Name of cell	
Availability	Evidence (Invoices, etc.)
Maximum and minimum weight of single cell	
Confirm that 50 000 cells has been sold to commercial outlets.	

EXTRACT FROM THE IFMAR ELECTRIC TRACK RULES

4.2 BATTERIES APPROVAL

- 4.2.1 The deadline date for submitting batteries (cells) to be approved for that year's World Championship is eight (8) months prior to the date of the Opening Ceremony of the World Championship. Applications for approval must be submitted to IFMAR.

The submittal for approval must contain a written technical specification from the original cell manufacturer for verification; **which must include: - dimensions and weights with associated tolerances.**

Samples submitted are required to closely represent the weight range stated.

A minimum of 50,000 individual cells must have been sold (by the original manufacturer or their agents) to commercial outlets in the retail or distribution sector of the hobby industry. Approval may be requested by the original manufacturer or their agents.

The submittal for approval must conform to the procedure current at the time for IFMAR approval - copies available on request.

- 4.2.2 A verification of availability will be made four (4) months prior to the date of the Opening Ceremony of the World Championship.

A list of telephone numbers, email-addresses and postal addresses of retail suppliers in each bloc from whom the cells can be purchased must be submitted with the application.

The manufacturer has to provide addresses of hobby shops, where any driver who wishes to obtain these batteries at the time of approval can do so.

Failure of verification will result in the non-approval of the product.

- 4.2.3 One (1) sample of each product and paperwork submitted for approval to be supplied by the IFMAR Electric Section Chairman to the appropriate IFMAR Electric Section representative in EFRA, ROAR, FEMCA and FAMAR to be checked that they comply with the rules. If a product meets all technical specifications and IFMAR availability requirements by a majority of the voting Blocs' representatives, it will be included on the Approved Product List for use at WC events.

4.2.4 BATTERIES TECHNICAL

Cells must be sub-C size, rated nominally at 1.2 volts and dimensioned nominally at 44.00 mm length and 23.00 mm diameter with heat shrink fitted. No modifications allowed to the outer or inner cell construction or modifications to the chemical composition. Soldering for connections and wire is allowed.

- 4.2.5 All cells must be submitted to Technical Inspection for checking and marking prior to being used during Controlled Practice, Qualifying and Finals. This may be completed at any time. Cells which do not bear the Organizers mark may not be used for Controlled Practice, Qualifying and Finals.

The Organizer and IFMAR Officials may check the legality of a competitor's cells at any time during the WC event.

All cells must comply with the published data contained in the current IFMAR Approved Battery List.

A weight scale will be available at all times during the event for competitors to carry out weight checks on cells.

- 4.2.6 IFMAR shall produce an Approved Product List which lists all the cells eligible for that year's IFMAR W.C. events. This Approved Product List shall be distributed to all competitors in the race acknowledgement package no later than two (2) months prior to the WC event.

- 4.2.7 Cells may not be charged or changed during the race.

- 4.2.8 Cars will be driven by a maximum of 6 cells and 7.2 volts maximum. For 1/12 the numbers of cells is limited to 4.

- 4.2.9 A receiver battery pack to power the receiver and Servo is allowed in any configuration. Under no circumstances may power from the receiver pack contribute to the power to the motor.



ELECTRIC SECTION

BATTERY HOMOLOGATION FORM

Battery Specification Checklist					
Fill in the grey shaded boxes below with the details of the battery cell being submitted for approval			For IFMAR use only		
Requirement	Nominal Size	Tolerance +/- Acc	Acc	Rej	n/a
Cell Size					
Cell Diameter					
Cell Length					
Cell Materials					
Nominal Volts					
Trade Name of Cell					
Ampere- Hr Rating					

Please fill in the details above for one battery type. Use another form for more battery types (photocopies accepted). Send this form with 10 (ten) samples (fully marked and shrunk wrapped) of the battery cell to:

IFMAR Electric Chairman
Mr. Ernest N. Proveti
47 Colonial Drive
Piscataway, New Jersey 08854
USA

NOTE: CLOSING DATE FOR APPROVAL TO BE USED AT THE 2008 ELECTRIC TRACK WORLD CHAMPIONSHIPS IS MAY 19, 2008

Company Name:

Address:

.....

.....

Country:

I agree that the above information is correct to the best of my knowledge. I accept that the samples submitted will be used to check batteries at the IFMAR World Championships.

Signed:..... Name: Position: