

Fédération Internationale d'Esgrime



**Technical Handbook for
Homologation / Approval
of Fencing Equipment**

Version 1.0 - August 2009

Introduction

This technical handbook for homologation / approval of fencing equipment is a collection of the existing procedures which need to be followed in order to obtain homologation / approval of fencing equipment, namely scoring apparatus, 800 Newton fencing clothing (jackets, breeches, protective plastrons), 1600 Newton masks, FIE blades, épée and foil points and fencing pistes, for their use in first-class FIE competitions.

The first text included in this handbook describes the procedures in the FIE Material Rules, Annexe A, pages 43 to 67 (English version), Manufacturers' Safety Standards for Fencers' Weapons, Equipment and Clothing.

This handbook then contains the lists obtained through applying the procedures over the years:

- List of FIE approved épées and foils, version 30-03-2009
- List of FIE approved traditional masks, version 30-06-2009
- List of FIE approved transparent visor masks, version 30-06-2007
- List of FIE approved M2009 foil masks with conductive bibs, version 18-12-2008
- List of FIE approved fencing pistes, version 18-12-2008

<p style="text-align: center;">MATERIAL RULES ANNEXE A</p>
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Manufacturers' Safety Standards for Fencers' Weapons, Equipment and Clothing

Fencing material used at an official FIE competition and featuring the FIE emblem must, without exception, have obtained a certificate of homologation delivered by the FIE SEMI commission to the manufacturer concerned, certifying that his fencing material complies with FIE Rules.

The following is the material that manufacturers must submit to the SEMI Commission, subsequent to a request in writing for homologation and the authority to mark with the FIE emblem: apparatuses for the signalling of hits, blades, foil and épée points, masks, jackets and breeches, protective plastrons.

To obtain the FIE homologation of a piste, the manufacturer concerned must contact the SEMI and submit a file requesting homologation, including all technical characteristics, and a sample of the piste.

For the homologation file of their fencing material to be completed, manufacturers must answer any SEMI requests for information regarding the homologation.

When the SEMI commission has received the file requesting homologation, including the manufacturer's samples and the reports of the different tests (EC tests conducted in accordance with EN13567, level 2 by the institutes CRITT, Denkendorf and IFTH for clothing, under-plastrons and masks; and CRITT, Sofranel and Visti for blades), if the analysis is positive they will issue a homologation certificate authorizing the manufacturer to mark his future production (from the date of the delivery of the certificate) with the FIE emblem.

The SEMI must be informed of any modification whatsoever that has the effect of causing a non-conformity to the samples provided for the original homologation. Obviously the manufacturer must wait for written confirmation of the SEMI Commission's agreement to the proposed modification before launching the new production.

The FIE emblem is a registered trademark. The fact that a piece of equipment carries the FIE emblem attests that the latter has been manufactured in accordance with the prescriptions of the Safety Norms and the Rules of the FIE.

FIE EPEE AND FOIL BLADES - Version 30.03.2009

The summary table of the certified blades includes the dates of homologation and periodic tests for each manufacturer. The approved blades are marked with the dates included during a one-year period after the date of homologation. Since 1990, the blades must entirely comply with the “Specification for the Manufacture of Fencing Blades” contained in Annexe A to the Material Rules, available through the FIE website www.fie.ch. The FIE Congress of July 1994 decided that the blades needed to be approved by the SEMI Commission in order for the manufacturers to be authorized to apply the FIE label to their blades and that the different productions of blades would undergo periodic testing. According to the decision of the FIE Congress in December 2001, there is no time limit on the validity of the blades carrying the FIE label. After obtaining a homologation, the manufacturers can ask for a new homologation, as long as their production has been subjected to periodic testing at least twice during the five-year period that follows the initial homologation date.

List of épée blades approved by the F.I.E. S.E.M.I.: EPEE (month.year)

N°	Manufacturer	Abbr.	Dates of homologation and periodic tests (month.year)
1	Léon Paul		(95) (97) (3.00) (2.01) (3.02) (3.04) (4.04) (2.06) (1.07) (04.08)
2	France Lames	FL	(2.97) (4.98) (1.99) (1.00) (2.01)
3	Blaise Frères	BF	(95) (3.96) (1.98) (11.99) (1.00) (2.01) (1.02) (4.03) (5.04) (2.05) (2.06) (2.07) (2.08) (11.08)
4	Lammet	LM	(95) (1.96) (9.98) (11.99) (11.00) (12.01) (12.02) (1.04) (5.06) (8.08)
5	Ao Vniti		(2.97) (12.98) (12.99) (11.00) (12.01) (12.02) (12.03) (5.06)
6	Allstar/Uhlmann	FS	(97) (12.99) (2.01) (2.01 N) (3.02)
7	Weyersberg Kirschbaum	KW	(98) (3.01)
8	Sportservice (STM)		(2.99) (4.00) (4.00 N) (11.01) (7.03) (1.05) (1.05 N) (6.07)
9	Prieur Sport	PS	(3.99) (9.01) (5.02) (2.04) (2.05) (1.06) (1.06 N) (1.07) (1.08) (1.08N) (1.09) (1.09N)
10	Metal West		(3.03N) (3.05N) (3.06N)
11	Chevalier d’Auvergne	CA	(4.03) (2.05) (1.06) (1.06N) (1.07) (1.08) (1.08N) (1.09) (1.09N)
12	Gloria-Pro	LT	(6.07)
13	Dynamo		(9.04N)

Note: N = non-maraging steel

List of foil blades approved by the F.I.E S.E.M.I.: FOIL

N°	Manufacturer	Abbr.	Dates of homologation and periodic tests (month.year)
1	Ao Vniti		(6.96) (9.98) (12.99) (11.00) (12.01) (12.02) (12.03) (5.06) (1.07)
2	Blaise Frères	BF	(95) (3.96) (1.98) (11.99) (2.01) (1.02) (4.03) (7.04) (9.04) (2.05) (2.06) (2.07) (2.08) (11.08)
3	Lammet	LM	(95) (6.96) (9.98) (11.99) (12.00) (12.01) (12.02) (3.06) (8.08)
4	Megastar	*	(9.95) (11.96)
5	France Lames	FL	(5.96) (2.97) (3.98) (2.99) (1.00) (2.01)
6	Allstar/Uhlmann	FS	(97) (12.99) (2.02) (4.05)
7	Weyersberg Kirschbaum	KW	(98) (3.01)
8	Prieur Sport	PS	(3.99) (3.02) (2.04) (2.05) (1.06) (1.07) (1.08) (1.09)
9	Léon Paul		(97) (98) (99) (3.00) (2.01) (4.02) (3.04) (4.04) (2.06) (1.07) (04.08)
10	Sportservice (STM)		(4.00) (11.01) (7.03) (1.05) (6.07)
11	Chevalier d'Auvergne	CA	(4.03) (2.04) (2.05) (1.06) (1.07) (1.08) (1.09)
12	Blue Gauntlet	MC	(8.04)
13	Absolute Fencing		(1.06)

TRADITIONAL FIE MASKS - Version 30.06.2007

List of traditional masks approved by the F.I.E S.E.M.I.:

N°	Manufacturer	Year of homologation
1	Léon Paul	1985
2	Uhlmann	1985
3	Allstar	1986
4	Negrini	1986
5	Santelli	1986
6	Schermasport	1986
7	Soudet	1986
8	Carminari	1986
9	Novascherma	1986
10	Diamant	1988
11	Frank Fechtservice	1991
12	Parbaj	1992
13	Artos	1994
14	Mangold Fechtsport	1995
15	Negrini	1996
16	Prieur Sport	1996
17	Blue Gauntlet Fencing Gear	1996
18	France Lames	1997
19	Doma Techn / Le Mask	1997
20	Eurofencing Italia	1997
21	Carminari	1997
22	Gajardoni	1997
23	FWF	2005
34	Wu Xi	2006
25	Absolute Fencing	2007

FIE TRANSPARENT VISOR MASKS - Version 30.06.2007

List of transparent visor masks approved by the F.I.E. S.E.M.I.:

N°	Manufacturer	Year of homologation
1	Allstar	2004
2	Gajardoni	2004
3	Léon Paul	2004
4	PBT	2004
5	Negrini	2005
6	Blue Gauntlet	2007

Following the FIE Information Letter n° 9- 04 of 15 March 2004 and in 2005.

In line with the Material Rules available on the FIE website www.fie.ch:

- All masks featuring the FIE emblem must be marked with “1600 Newton”.
- In addition to the above marks, all transparent visor masks must bear the CE/EC mark and “EN 13567”, and they must have passed the EC and SEMI tests.
- The month and year the visor was manufactured must always be visible on it, and the visor is valid for 2 years from that date.
- Mask manufacturers who have received a CE and FIE homologation / approval since 2004 must mark their masks with:
 - the FIE and CE emblems
 - the manufacturer’s logo
 - 1600 Newton
 - year of manufacturing (2004, 2005, 2006, 2007...)

List of M2009 foil masks with a conductive bib approved by the F.I.E. S.E.M.I.:

N°	Manufacturer
1	Absolute Fencing
2	Allstar
3	Blue Gauntlet
4	FWF
5	Jianli
6	Negrini
7	Léon Paul
8	PBT
9	Prieur Sport
10	Uhlmann
11	Wuxi

List of the M2009 transparent visor masks with conductive bib approved by the F.I.E. S.E.M.I.:

N°	Manufacturer
1	Allstar
2	Blue Gauntlet
3	Léon Paul
4	PBT
5	Negrini
6	Uhlmann

Only masks with a tag showing the FIE label of quality, the name of the manufacturer and the letters 1600N and M2009 on the spring/tongue of the mask have been approved for the competitions. The same information is put on a tag sewn to the inside of the bib. These masks follow the prescriptions of the Material Rules of the FIE and the Safety Standard EN13567 level 2.

The electrical contact between the conductive bib and the conductive jacket is ensured by means of a mask wire and 2 crocodile clips. The maximum length of this wire is 40 cm to 45 cm. In the case of a coiled cable, the maximum length is 25 cm, when the cable is at rest. The cables must be white or transparent with silver connectors for a camouflage effect. No other colours are allowed.

The list will be updated each time there is a new homologation compliant with FIE regulations and the technical manufacturing guidelines.

Approval / Homologation of the conductive retrofit bib, taken from the minutes of the meeting of the SEMI Commission, Lausanne 2009:

The manufacturers have been working on a retrofit lame bib to be applied to standard masks in order to transform them into masks with conductive bibs. The solutions proposed use double-sided tape. It has been decided that for foil the retrofit conductive bib from a specific manufacturer is accepted at FIE competitions, only when it is being applied to masks of the same brand; this means that a PBT retrofit bib must only be attached to PBT masks, an Allstar retrofit bib to Allstar masks, an Uhlmann retrofit bib to Uhlmann masks and so on.

The fencers have full responsibility in making sure that the retrofit bib is well attached, that it is in good condition and properly fits the mask in compliance with article m. 27.2 of the Rules (“*The part of the bib that is beneath a horizontal line 1.5 – 2 cm below the chin, must be entirely covered with a material that has the same conductive characteristics as the conductive jacket.*”).

The retrofit bib solution has been accepted from May 2009 until July 2012. With the feedback of information provided from its use further decisions will be taken by then.

It is noted that this solution is not acceptable at the Olympic Games. The manufacturers should address, to the SEMI commission, a request of approval / homologation of their retrofit bibs together with a sample. The FIE approved retrofit conductive bibs will be added to the list of FIE approved conductive masks for foil M2009. Only retrofit bibs from the manufacturers mentioned in the list will be accepted at weapon control during official FIE competitions.

The bibs must be supplied with instructions of installation.

It is mandatory for the approved FIE retrofit conductive bib to contain a label that states “Upgrade to M2009 by” the manufacturer’s name and date.

N°	Manufacturer	How the retrofitted conductive bibs are attached
1	Allstar	- applied with double-sided tape - risk of heat causing it to unstick, but the decision is that it is the fencer’s responsibility to make sure that the bib is put on properly.
2	PBT	- the front side uses a double-sided tape whereas the inner side is to be sewn onto the original bib (the manufacturer proposes a presentation via email with instructions and photos).
3	Léon Paul	- the bib glides into the frame which attaches the old bib (future improvements to come).
4	Prieur Sport	- developed a retrofit bib that is to be sewn both to the front and the back of the original bib.
5	Negrini	- studying a solution with Velcro.
-	-	- another manufacturer is developing a solution where the fabric that covers the bib replaces one of the layers of Velcro.

FIE PISTES

Since March 2008, the approval of pistes complies with a COMEX decision approved by the 2007 FIE Congress in Madrid.

Approvals are made in accordance with the text contained in Information Letter n° 3-08 of 3 March 2008: “New homologation procedure for fencing pistes”:

To obtain the homologation of their pistes by the FIE, manufacturers must contact the SEMI Commission, send their contact details, the technical specifications of the pistes, the documents and manufacturing procedures, a description of the materials and the contact details of their suppliers and manufacturing plants. They must also answer any questions SEMI might have.

In the case of a metallic, aluminium or carpet piste, a sample (30 cm wide x 40 cm long) must be provided so that the connection can be examined. If the analysis is positive, the SEMI will issue a homologation certificate authorising the manufacturer to mark the piste (from the date of the delivery of the certificate) with the FIE emblem.

A homologation by the FIE implies that the manufacturer produces at least 15 units of the piste for which it requested a homologation. Each homologation will cost the manufacturer 1,500 euros (+100 euros for each additional piste).

Payment will be made to the FIE upon receipt of an invoice. The homologation certificate will then be sent by SEMI to the manufacturer, who must keep a copy of the certificate and send the original to the organisers who bought the pistes, in view of controls by the organizer or the FIE representative.

Each unit will have a certificate number and a serial number which will be kept permanently. This serial number will include ‘FIE’ + the manufacturer’s abbreviation + the year of homologation (2007-001, 2007-002, etc).

Homologations obtained through the previous procedure remain valid.

According to this procedure, the pistes certified by the FIE, with an FIE serial number, can be used during the World Championships, Olympic Games and Grand Prix competitions; the manufacturers in the table below have pistes approved for these competitions.

The SEMI thus issued a total of 372 certificates for pistes in 2008 and 2009.

N°	Manufacturer	Number of certificates
1	Artos	15
2	Prieur	15
3	Jianli	15
4	Wuxi	15
5	FWF	15
6	Blue Gauntlet	15
7	Absolute Fencing	15
8	Greenapple	157
9	Allstar	95
10	Uhlmann	15