The European Federation of Farriers Associations CIC

Syllabus of the Master Eurofarrier examination

The qualification Master Eurofarrier is awarded by the European Federation of Farrier Associations CIC (EFFA) to farriers who have successfully completed a period of further training and professional work experience, and who have successfully passed the Certified EuroFarrier (CEF) examination accredited by EFFA. The qualification recognises progression from the basic standards required to practise as a self-employed farrier in the farrier's own country.

Master Eurofarriers should be able to:

- Train an apprentice up to the level of Certified Eurofarrier
- Manage employees
- Perform remedial farriery using a variety of techniques and materials
- Communicate with owners and handlers regarding procedures, prognosis and costs
- Confer with veterinarians on orthopaedic and hoof related cases, including assessment of radiographs

Candidates are required to satisfy certain pre-entry experience criteria, to submit a shoe board before taking the examination, and then to complete successfully written, oral and practical tests of their knowledge and level of skill.

The Master EuroFarrier (MEF) examination will be carried out over two modules, one being Knowledge and the other Practical, each containing component parts that are detailed in this syllabus. Candidates are expected to take both modules in one examination but may re-take a module if required at a further examination.

The Knowledge module consist of three component parts, a Theory test, an Oral test and a case Study which must all be passed at one sitting. If it is required to re-take the Knowledge module having passed the Case Study component, it can be presented again for examination.

The Practical module has three component parts. Live shoeing, a Shoe Board and a Modern Materials test. All three need to be passed but any of the components may be re-taken if required at the next examination.

1. Pre-entry criteria

To be eligible to enter the programme leading to the qualification of Master Eurofarrier, candidates must:

- Have completed the training and examination leading to recognition as a Certified Eurofarrier (CEF) or an equivalent recognised by EFFA.

- Ensure that if they are planning to undertake training or to sit the examination outside their own country, they are entitled to practise farriery in the other country. Rules for EU citizens are given in Directive 2005/36/EC Chapter II, Article 16. The general requirement is that the farrier must have practised farriery as either a student or a self-employed farrier for at least 6 years in the last ten years

2. Pre-examination Evidence

Before candidates sit an examination to qualify as a Master Eurofarrier, they must produce:

- Four mandatory and four self-chosen specimen shoes made by themselves from the list given at Annex B
- A fully documented case study of remedial treatment carried out on a horse under their care. Suitable procedures for consideration but not restricted to are given at Annex C

Candidates taking the examination are expected to:

- Have undertaken further theoretical and practical training
- Have developed their forging skills
- Have carried out wide ranging remedial farriery under the guidance of other remedial farriers and veterinarians
- Have attended Continuing Professional Development regularly

3. The Knowledge Module

3.1. The Theory test

The candidate will complete a written theory paper containing five questions with diagrams where asked and a multiple choice paper (amount set at the discretion of the examiners).
The time given for the theory paper is two hours (120minutes) and the multiple choice paper will be set depending on the number of questions.

The papers will assess the candidates knowledge of:

3.1.1. Anatomy and physiology

The limb up to and including the carpus/tarsus in detail, and a broad understanding of higher structures. Candidates should understand the structure, function and composition of:

Bone	Nerves	Skin
Muscle	Lymphatics	Synovial membranes and fluid
Joints	Cartilage	Blood
Tendons	Ligaments	Bursae

The hoof and all its associate structures, particularly the hoof wall and laminae.

3.1.2. Biomechanics

- Correct balance, both in the moving and stationary horse
- Common imbalances and their effects
- Shoeing for different activities such as racing, jumping and dressage
- Effects of specialist shoes such as natural balance, extensions and wedges

3.1.3. Conformation and Movement

- Effects of conformation and limb structure on movement
- Shoeing for improved conformation in young stock
- Ability of shoeing style to compensate for poor conformation

3.1.4. Equine Health

Diseases

- Common diseases in horses, their method of transmission and any likely effects on the lower limb and the hoof
- Which diseases are notifiable and should be reported depending on the country the candidate is from.
- Precautions to be taken when handling and shoeing diseased horses

Distorted Hooves

- Reasons for hoof distortions, whether genetic, injury, condition, use or disease related
- Shoeing of distorted hooves
- Prognosis for improvement

Disorders of the Hoof

Injuries, diseases, degenerative conditions and abnormal growths affecting the hoof wall, the laminae, the soft tissue, the bones, and tendons and ligaments in the hoof capsule.

Disorders of the Locomotive Apparatus

- Tendon and ligament injuries, short and long term treatment, and prognosis for recovery
- Muscle and bone injuries, and their treatment
- Angular/flexural limb deformities in youngstock

Diet and Exercise Management

- Weight and fitness management for hard work, light work and resting.
- Effects of hard feed, additives and grass on hoof condition.

3.1.5. Technical Processes

Hoof Preparation and Repair

- Assessment of the worn shoe and the hoof before trimming
- Trimming of normal, distorted and diseased feet for level and balance
- Removal of diseased or infected material as appropriate
- Techniques for stopping cracks and filling holes
- How to prepare a hoof for reconstruction, using the right products for cleaning and then reconstruction

Glues and Fillers

- The different kinds of glue and the chemical characteristics of each
- Surface preparation

- Temperature effects on glues
- Safe handling and disposal of materials used

Hoof Treatments

- Dietary additives
- External dressings
- Antiseptic and anti-infectious dressings

Pads and Cushions

- Uses for work
- Uses for alleviation of injury, and as part of treatment

3.1.6 Civics

Throughout this section, it is the law in the candidate's own nation that is relevant. Where the candidate is being trained and examined in a different country to their own, this may require the candidate to show how they are aware of their own national requirements.

The law affecting the work carried out by farriers

Responsibilities to the horse

- Emergency first aid - definition
- Horse welfare - handling, humane methods of restraint and animal legislation
- Appropriate and timely referral to a veterinarian
- Regulations on the administration of drugs
- Legally acceptable invasive cutting or surgical operations unless under veterinary supervision
- Recognition of required areas of competence

Responsibilities to Clients

- Record keeping - work carried out, charges, prices, insurance cover, marketing, social media
- Work within the area of competence, when to seek a second opinion or veterinary advice
- Clear lines of communication between client and farrier
- Advice to the owner but not diagnosis
- Remaining up to date - annual CPD

Responsibilities to colleagues/ fellow professionals

- Professional conduct, advertising, social media and social licensing
- Client confidentiality
- Appropriate insurance cover for all the above sections.

3.1.7. Employment Law

- Methods of employment - structure of the business - self-employed, employed, partnership

- Contracts of Employment - working hours, rates of pay, overtime
- Liability insurance
- Employee relations, selection, induction, training
- Pension schemes
- Holidays
- Maternity/paternity leave
- Sickness /injury benefits

Health and Safety

- Risk Assessments - clear understanding of a farrier's working environment, and its effect on colleagues, employees, horses, clients, general public
- Correct use of personal protective equipment
- Safe use of acrylics etc for the user and other people.
- Recording methods and systems of work
- Maintenance of tools and equipment
- Vehicle safety and legal requirements
- Fire safety and method of control
- Thorough inductions to all employees on carrying, lifting, noise, heat etc as required by individual countries
- Emergency procedures - first aid equipment and training

Tax

- Government requirements on taxation for goods and services applicable to farriery businesses
- Tax levels/ thresholds
- Accounts
- Methods of payment
- Implications of tax avoidance
- These will be country specific.

3.2 The Oral examination

The candidate will be expected to demonstrate a thorough knowledge of the following:

3.2.1 Live Horse Assessment

- Static and dynamic conformation assessment of one or more horses
- Thorough knowledge of topographical anatomy on a live horse, and commonly encountered pathologies related to the practice of corrective farriery

3.2.2 Analysis of Radiography, MRI and Ultrasound Evidence

- Ability to assess radiographs of the lower limb, below and including the knee and hock
- Discuss with a veterinarian and the owner diagnoses based on X-ray, MRI and ultrasound scans. The candidate is not expected to make an initial diagnosis.

3.3.3.Question and Answer Session on Case Study

- Present the report of a case study carried out by the candidate

- Answer questions from a veterinarian and farrier(s) on the background to the case study, the reasons for the actions taken and the prognosis for the future

3.3.4 Production of Shoeing Plan

- Production of a supplied shoeing plan for the given horse(s) relevant to the evidence available and the work intended, or the remedial treatment planned
- Knowledge of the relative advantages and disadvantages of hot and cold shoeing

3.3.5 Relations with Owners, Trainers and Veterinarians

- Demonstrate an ability to provide simple explanations and advice to owners and trainers
- Demonstrate an ability to discuss in detail with a veterinarian diagnoses and treatment

The Oral examination will be marked through five components (20 marks per component)

- Live Horse Assessment. Candidates will demonstrate a thorough knowledge of the static and dynamic conformation of a given horse. They will have to discuss the shoeing plan for this horse using their observations during the assessment
- The candidate will demonstrate a thorough knowledge of surface anatomy using a live horse or morbid specimens and be able to discuss observed pathologies
- The candidate will demonstrate a clear knowledge of diagnostic images of the lower limb, below and including the knee and hock and have a working understanding of MRI and Ultrasound and their uses.
- The candidates Shoe Board will be discussed and marked. The candidate will be asked for an explanation for the practical applications of their chosen shoes.
- The candidates Case Study will be discussed and marked. The candidate will be asked to explain their chosen study and the outcome from the application of any farrier related intervention.

4.2. The Practical Modules

4.2.1 Live shoeing

The candidate will make and fit two shoes within a given time and nail them on to their given horse. One shoe will be a steel front Bar shoe and a steel hind shoe. Both shoes will be selected in discussion between the examiners and candidate from any of the variations shown at Annex A. The shoes will be made from one piece of straight bar steel.
Synthetic materials are not permitted in this part of the examination.
The time given for this test is two hours (120 minutes).
Candidates will be expected to adhere to the signed Risk Assessment at all times during the practical elements. Failure to comply with this may lead to the candidate being asked to leave the examination and consequently the failing of the practical module.

4.2.2 The Shoe Board (marked as part of the Practical Module)

The candidates are required to bring to the examination a Shoe Board consisting of eight shoes made from the list of shoes given at Annex B. Four of which are mandatory shoes marked with an asterix (*) and a further four of their own choice. At least one of the shoes on the board must be made in aluminium and all the eight shoes must be made by the candidate prior to the examination.

The shoes are to be made from one piece of steel or aluminium, fire welded where necessary but jump welded bar shoes are not to be used. The shoes must show examples of fullering or plain stamping.
Used handmade shoes can be added to the board if they are relevant to the candidates work and are still in a good enough condition to be representative of an original shoe from the list.
Candidates must be prepared to repeat any of the shoes submitted if required by the examiners.

The shoe board will be marked as a practical component and used in the theoretical knowledge component as part of the oral examination.

A successfully marked shoe board will not be required to be made if the candidate needs to retake the practical element, but it will need to be brought to any subsequent examinations.

4.4.3. Modern Materials.

The candidate is required have sufficient theoretical knowledge to support his practical work. He must be able to discuss and may be requested to perform hoof-curettage, normally on a morbid specimen, or to demonstrate hoof repair, or any other practical farriery treatment, During the examination candidates may be required to complete any of the procedures listed in Annex C.
A sound knowledge of farriery and its relationship to young stock is essential.

Candidates must demonstrate that they can work with a range of different materials and methods of attachment to the hoof. Candidates to bring their preferred type of fillers, glues and plastic or aluminium shoes to use at the examination. The sizes to be for an average sized foot of 120-140mm (51/4 - 51/2 inch) wide unless advised differently before attending the examination.

Full health and Safety procedures must be shown to be adhered to and will be used as part of the marking during this element.

5.0 The use of strikers

1. Candidates must provide their own strikers if required. Each candidate must notify the name of the striker on the MEF Application Form. A striker need not be a farrier as he/she is not required to perform any acts of farriery.
2. A striker in the MEF examination may not be a qualified MEF nor may the striker have passed the Practical Module of the MEF examination. Strikers may not hold a higher farrier examination from other countries. If in doubt, then please ask.
3. A Strikers may only work for one candidate for the practical module in the same examination session. Strikers may not act on the same horse or either of the adjacent horses in consecutive rounds.
4. Strikers are to remain outside the working anvil area.
5. Strikers may:
    - Cut steel as marked but the responsibility for the sizing remains with the candidate
    - Use a sledgehammer
    - Hold steel on the anvil
    - Hold the horse's head if and when required or hold the horses leg for the candidate to work on.
    - Pass shoes to examiners for marking
6. Strikers may not:
    - Offer advice or get into any conversation with the candidate
    - Mark steel in any way
    - Tend the fires (either gas or coke)
    - Brush shoes (de-scaling)
    - Hand tools or nails to candidates
7. Candidates may use their striker to pass shoes to the examiners, but it is the candidates responsibility to confirm that the shoe or foot has been marked before proceeding to the next section. If a section is not marked by an examiner, then zero marks will be awarded from that examiner.
8. Strikers must wear suitable health and safety attire when working and sign the risk assessment.

6.0 EFFA Health and Safety

Each country within the EU comes under the control of the Occupational Safety and Health (OSH).

Article 153 of the Treaty on the Functioning of the European Union gives the EU the authority to adopt legislation (directives) in the field of safety and health at work, in order to support and complement the activities of Member States.
Directive 89/391/EEC, the so-called **occupational safety and health** (**OSH) "Framework Directive"**, lays down the main principles to encourage improvements in the safety and health of workers at work. It guarantees minimum safety and health requirements throughout the European Union while Member States are allowed to maintain or establish more stringent measures.
The Framework Directive is accompanied by further directives focusing on specific aspects of safety and health at work. Together they form the fundamentals of European safety and health legislation.

Those countries outside of the EU should have a national Health and safety policy and these will be adhered to but those without a basic policy will fall under the EFFA umbrella of H&S and risk assessments. If the EFFA policy is stronger than countries own, then the EFFA standard will apply.

Risk Assessment.

A Risk Assessment will be made prior to the examination which may vary slightly depending on the country where the examination is being held. The candidate and striker will be asked to sign the risk assessment before starting the examination process. Failing to do so may compromise your acceptance into the examination process.

APPENDIX A

LIST OF HORSESHOES FOR EXAMINATION

A candidate may be required to make to the required standard any of the shoes specified on the list of Horseshoes shown below for the examination:

1. Elevated Heel Shoe
For altered hoof-pastern axis and foot-limb anterior/posterior relationship.
Graduated shoes and Bar shoes, all variants.
Wedged Heel hind shoe- Spavin shoe.
Unilateral raised shoe for Medio lateral imbalance.
2. Uni/Bi lateral Sidebone Shoe
Traditional shoe design to follow wear pattern and allow expansion to hoof capsule.
3. Interference Shoes – Variations
For forging, speedy cutting, scalping and brushing.
4. Rocker Shoe
Shoe for ringbone, raised at quarters, thinned towards heels and toe, usually with rolled toe. With or without bar.
5. Wide-Webbed Shoe
Shoe for pedal-osteitis, sole cover, bruised foot.
6. Shoe for Corn
Shoe expanded at heel to cover seat of corn and bar.
7. Bar Shoe (Straight, Egg, Heart)
All types, steel and aluminium. Traditional shoe for corns, hoof wall lesions, stabilising hoof capsule.
8. Fracture Shoe (Immobilising Shoe)
All types, steel and aluminium
9. Medial or Lateral Extension Shoe
All types. Steel for mature horses; aluminium for foals in treatment of angular limb deformity.
10. Half or Three quarter Bar Shoe
A unilateral support shoe for localising support to an individual area.
11. Calk and Feather
Hind conformation defect.
12. Lateral Extension and Feather
Hind conformation defect.

APPENDIX B

LIST OF HORSESHOES SUITABLE FOR SHOE BOARD

1. **French Bar shoe.** Weak collapsed heels-bar width 2/3 length of frog. Solid bar (heavy) or set away from the ground.
2. **French Onion Shoe.** For heel support /limb support or protection of damaged area.
3.* **Heartbar.** Frog support shoe/column support shoe. All types, steel/aluminium. For laminitis or in conjunction with Dorsal Wall resection.
   Open Toe heart bar. For hoof wall lesions to laminal bond or infected areas.
4. **Bar Shoe variations.** Eggbar/Straightbar combining caudal support.
   Z-Bar Heart bar to relieve damaged area or floating heel.
   Three Quarter bar shoe for floating heel with column support.
   Unilateral raised bar shoe for Medio lateral imbalance.
5. **Patten Shoe (Rest shoe, Raised bar shoe).** Traditional shoe offering elevation and caudal support, Deep digital Flexor tendon Lesion.
6.* **Hind Spavin Shoe.** Wedged Heel hind shoe (traditional)
7. **Uni/Bi Lateral Sidebone shoe.**
8.* **Fishtail (Caudal extension shoe).** Shoe with bar extending horizontally under fetlock. For flexor lesion, post fracture cast causing toe elevation
9.* **Hospital Shoe (Treatment Plate shoe) All types, steel/aluminium shoe. Steel/aluminium plate.** Bar shoe with removable plate attached for puncture wounds, post surgery etc. sometimes with a Heart bar in cases of prolapsed distal Phalanx.
10. **Hospital shoe variation.** Walking plate shoe as above, but with plate at toe lodged in or under that shoe to allow exercise.
11. **Fracture Shoe.** Continuous Rim Shoe-Rim running from heel to heel**.**

*Designates the four compulsory shoes to be made. Front or hind. Aluminium or steel.

Made to a suitable size.

APPENDIX C
LIST OF PROCEDURES

Listed below are the procedures which a candidate is expected to be able to perform competently at the examination.

The candidate is required have sufficient theoretical knowledge to support his practical work. He must be able to discuss and may be requested to perform hoof-curettage, normally on a morbid specimen, or to demonstrate hoof repair, or any other practical farriery treatment, including the procedures listed below. A sound knowledge of farriery and its relationship to young stock is essential.

Listed below are the procedures, together with descriptions, materials and equipment which may be requested at the examination.

1. **Abscess Search**
   Locate, ventilate and treat - farrier's tools.

5. **Hoof Wall Resection**
   Remove a section of the hoof wall - farrier's tools and/or dremel.

6. **Hoof Wall Repair/Extensions/ Seedy Toe/White Line Disease**
   Debride loose and necrotic horn, rebuild with composite repair material - repair kit
   Section or curettage of defective horn - farrier's tools and/or dremel

7. **Cracks**
   Repair using own choice of method and materials (screw & wire, screw & fibreglass, compound patch, lace patch) - farrier's tools and/or dremel, drill, appropriate materials.

8. **Glue on Shoe**
   Steel/Aluminium/Composite

Procedures carried out on sensitive tissue must be performed under appropriate anaesthesia induced and supervised by a veterinarian.