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**ALUMINIUM COMPETITION SHOES**  
**ALUMINIUM KINETHERAPEUTIC SHOES**

Give the best to your horse...

## MICHEL VAILLANT, AN INNOVATIVE MANUFACTURER

Michel VAILLANT has been designing and manufacturing specialist equine hoof products for over 100 years. Our knowledge and significant industrial culture represent a strong advantage when combined with **investments** that are resolutely **hi-tech, quality** as our guiding mantra and a strategy of constant **innovation**.

As specialists in sports horse locomotion, it was a logical step to expand into the design of aluminium horse shoes to satisfy 3 main objectives:

- **To offer kinetherapeutic shoes** for most locomotive pathologies, through a collaboration with veterinary researchers.
- **To increase sports performances** whilst maximizing the horse's wellbeing.
- **To improve the quality of aluminium horseshoes** to increase the efficiency/durability ratio.

## WHY ALUMINIUM?

Aluminium shoes dominate the sports field mainly because of their lightness compared to steel. This reduces the weight on the lower end of the limbs thereby reducing mechanical stresses on the various structures. Whilst we used to think that heavy shoes were better shock absorbing, we now know that they increase vibrations. Making the lower limb lighter allow the specific sport movement to be performed more efficiently in terms of speed or height, depending on the discipline.

**The technicality of modern alloys** combined with our industrial expertise means that we can now offer you **very durable aluminium shoes**.

Our shoes are as resistant to wear as steel shoes based on horses shod every 5 - 6 weeks. Our endurance models are regularly used for 55 to 100 miles endurance races without horses having to be re-shod during the race.

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## A CLOSE PARTNERSHIP WITH PROFESSOR JEAN-MARIE DENOIX

**Jean-Marie Denoix, veterinarian and professor at the École Nationale Vétérinaire at Maisons-Alfort (France)**, is recognised by his peers as **one of the world's leading specialists in equine locomotion**.

He has created the CIRALE in Normandy which is the only structure of its type dedicated to research and diagnosis in the field of equine locomotive problems.

Professor Denoix founded the International Society of Equine Locomotor Pathology (ISLEP) and has been its president since 2006. He obtained a degree from the American College of Veterinary Sport Medicine and Rehabilitation (ACVSMR) in 2013.

Professor Denoix and his team have collaborated regularly with Michel VAILLANT since the 80's for congresses, post-graduate teaching or via the KINESIC, the 1st continuous professional development course covering anatomy, biomechanics and therapeutic farriery for farriers and vets.

Many products were designed and tested from this partnership. For instance, the educational film, «The Functional Anatomy of the Horse's Tendon», the «Parabolic» steel shoe, the «JMD» orthopedic aluminium shoes. Those JMD shoes have been specifically constructed to answer specific equine veterinary needs.

To dispose of an industrial line of therapeutic horse shoes which has been scientifically validated in order to facilitate the prescription by the veterinarian and the implementation by the farrier for an **accurate and efficient treatment of the locomotive pathologies**.

The concept of **kinetherapeutic shoeing** is the result of numerous biomechanical trials conducted over the last three decades by Professor Denoix.

They have proven that the anatomical formations in joints and tendons can be relieved individually by changing the foot's longitudinal and transversal's balance, specifically by working on the penetration of the shoe in soft and reactive grounds.

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# ALUMINIUM COMPETITION SHOES

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Jumping - Eventing - Dressage - Endurance

## GUARANTEED PERFORMANCE, LIGHTNESS AND DURABILITY

Give your horse the best with Michel VAILLANT  
aluminium shoes.  
Comfort, lightness, performance, trauma prevention.



## ALUMINIUM COMPETITION SHOES

### ALUMIX BASIC SHOE RANGE

Every rider practising equine sports expects the best from their horse in their quest for better performance. Good locomotion is one of the principal means of achieving their ambitious objectives.



HUNTER  
FRONT



HUNTER ROLLIX  
FRONT



HUNTER  
HIND

#### SOLUTIONS

Aluminium shoes represent the first step towards this excellence and this approach is possible whatever the budget. Thanks to its industrialisation ability, Michel VAILLANT is able to offer you your first hi-tech shoe at a price that beats all competitors for this level of technicality and quality.

Enter the competition range with the ALUMIX products and discover its first members:

The Hunter and Hunter Rollix horseshoes.

**GENUINE MICHEL VAILLANT ALUMINIUM COMPETITION SHOES  
AT HIGHLY COMPETITIVE PRICES**



# ALUMINIUM PERFORMANCE COMPETITION SHOES

The technical level of equine sport has increased considerably.

Riders win thanks to the grace of their mounts who are considered and treated like high performance athletes. Keen amateurs naturally want to achieve the same heights. Modern farriery has to anticipate these changing needs and offer technical and innovative solutions to them.

## SOLUTIONS

Through its continuous innovation programme, Michel VAILLANT offers a broad range of solutions with its performance aluminium competition shoes which are both preventive and able to provide greater comfort and mobility.

Do you want to make progress in your discipline to reach the highest competitive level?

Let yourself be tempted by the Michel VAILLANT range of aluminium competition shoes, combining lightness with technicality to increase performance and comfort for those seeking excellence.





PARABOLIX®  
FRONT



PARABOLIX®  
HIND



HYPERBOLIX®  
FRONT



HYPERBOLIX®  
HIND



PHR



PHR SPORT MOTION



COVER ROLLER



JMD - SPORT TRAINIX



PAD GRANDPAS



# ALUMINIUM ENDURANCE COMPETITION SHOES

Shoeing endurance horses is a real technical challenge.

The ground bearing surface, the distance and the duration of the event make great demands on the locomotive system.

Protection, shock absorption, durability and lightness are the keywords...

## SOLUTIONS

As a result of different developments and with the assistance of leading competitors, Michel VAILLANT proposes different choices of aluminium shoes adapted to the specific challenges provided by each event.

The ground bearing surface, the distance, the horse's conformation, the strategy with the option of minimal farrier interventions...

Each component allows you to select a very thin shoe, a large surface area, or a thick shoe that can withstand lots of wear...

Why not try the TITANESC alloy for very long distances: super hi-tech, extra hard, extra durable!

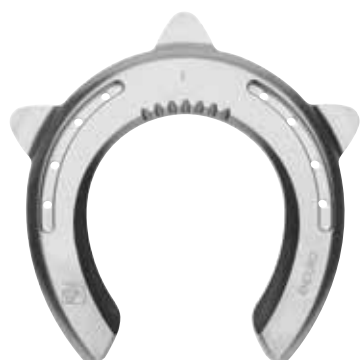
Only one shoe is available in this alloy family: INDURIX, supplied in 2 different shapes:

INDURIX - Front, standard shape

INDURIX PSA - Front, pure bred Arab shape







MV ENDURO



COVER ROLLER



3D MOTION®



INDURIX  
FRONT



INDURIX PSA  
FRONT ARABIAN HORSE

# ALUMINIUM KINETHERAPEUTIC SHOES

---

3

Locomotion pathologies...

## REHABILITATION THROUGH MOVEMENT

Aluminium kinetherapeutic shoes provide an easy management solution for major locomotive pathologies.



# ALUMINIUM KINETHERAPEUTIC SHOES

Your horse can benefit from **rehabilitation through movement** by interacting with the ground thanks to Michel VAILLANT aluminium kinetherapeutic shoes.

The aim of kinetherapeutic farriery is to make movement easier by reducing the tensions and pressures on sensitive or injured anatomical structures. It acts by modifying the foot's longitudinal or transverse balance. It works by redistributing the interaction with the ground beneath the foot, whilst working on the differential penetration of the various parts of the shoe in the supple and reactive surfaces found in modern outdoor arena. Consequently, Michel VAILLANT aluminium kinetherapeutic shoes manipulate the forces acting on the osteo-articular and tendinous structures.

The horses digit (foot + pastern + fetlock) is subject to very high mechanical stresses during sport activity, depending on the type of ground bearing surface and the speed. Foot problems are a major cause of lameness and lead to poorer performances in sport horses.

During the early part of this century and during the previous one, when one spoke of therapeutic shoes it meant orthopaedic shoes. The term orthopaedic (from the Greek orthos = right and paidos = child) means correcting children and is both medically and etymologically inappropriate!

Nowadays, nothing is more logical than to speak of kinetherapeutic farriery (kinesi = movement + therapy). These shoes allow horses carrying injuries to be kept active by the reduction in biomechanical stress provided by the shape of the shoes.

## CONCEPT ORIGIN

The concept of kinetherapeutic shoeing is the result of numerous biomechanical trials conducted over the last 30 years by **Professor Jean-Marie Denoix**.

He has imagined and designed the Michel VAILLANT JMD shoes.

**The first objective of kinetherapeutic shoes is to stabilise a horse that is carrying injuries and to prevent them from getting worse.**

The relief that is provided contributes to continuing their sports career in competitions.

## WHY ALUMINIUM?

Using aluminium avoids adding weight to the distal end of the limbs and reduces the stresses caused by vibrations on the lower and upper parts of the limb, especially during support and impact phases.

The high technicality of the alloys used allows Michel VAILLANT to produce very reliable aluminium shoes whilst maintaining a shoeing interval of 5 - 6 weeks.

# PODOTROCHLEAR SYNDROME

## (Or navicular disease)

This foot problem, which is often progressive and chronic, affects the distal sesamoid bone (known as the navicular bone), the deep digital flexor tendon and their associated structures, usually in the front limbs.

The horse presents with a progressive loss of movement and a decline in performance. It reduces its speed, starts to be lame (especially when cold and on hard surfaces). When resting, the horse often points the affected limb forwards.

When working, cold or riding in circles, the horse is uncomfortable.

Diagnosis is confirmed by a clinical examination. Foot anaesthetic is positive (lameness disappears).

Radiography can show bone lesions in the navicular bone. Ultrasound is used to examine the deep digital flexor tendon and the navicular ligaments.

Magnetic Resonance Imaging (MRI) can be used to diagnose bone, tendon and ligament lesions.

There is no cure for navicular disease but a number of measures can produce excellent results (anti-inflammatory drugs, foot trimming and special shoes, longer and more progressive warm-ups, softer surfaces, avoid riding in circles...

**Farriery is the first and most effective of these treatments.**

## SOLUTIONS

A wide choice of shoes is available with increasing effectiveness:

From grade 1 (Onionix®), to grade 3.5 (Rocking Support wedged), or even grade 4, if the toe is removed from the Rocking Support wedged (making it equivalent to a Bonapartix L® wedged).

These shoes provide the horse with effective relief.

During the convalescence phase or for preventive use, Parabolix® shoes can optimise your horse's comfort and performance.



Dorso-palmar radiograph showing a large demineralised zone (osteolysis) in the centre of the navicular bone (arrow head).  
Photo: Jean-Marie Denoix.



Transverse ultrasound scan of the rear of the foot. The lateral lobe of the deep digital flexor tendon is thickened and has an altered ultrasound appearance (tendinopathy) (arrowhead)  
Photo: Jean-Marie Denoix.



Evolving range of shoes depending on lameness or lesion severity



ONIONIX®



ROCKING SUPPORT



BONAPARTIX® L



BONAPARTIX® S - PP



BONAPARTIX® S



ROCKING SUPPORT  
WEDGED

Aluminium competition shoes for convalescence or as preventive measures



PARABOLIX®  
FRONT



PARABOLIX®  
HIND

## ARTHROPATHY

Arthrosis is accompanied by a degeneration of the articular cartilage and painful inflammatory reactions in horses.

They can be due to age, limb defects, working conditions...  
 Joint pain is responsible for stiffness or varying levels lameness when cold, prior to exercise.  
 Synovitis provokes swelling of synovial joint recesses (galls and spavins).  
 Joint crepitus can develop as the conditions reaches maturity.

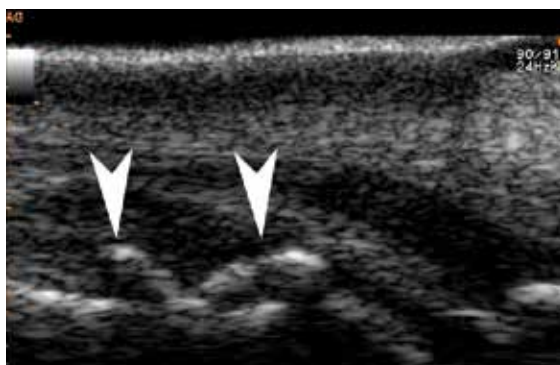
This pathology is very disabling for sports, racing or leisure horses.  
 If it is detected and managed very early, it may be possible to delay the development of cartilage lesions and provide the horse with relief.

### SOLUTIONS

Excellent results can be obtained during the acute phase by using the Arthrophix® aluminium kinetherapeutic shoe.  
 Compromix or PHR Sport Motion shoes are preferable for fetlock arthrosis.  
 Suspensorix® can also be used but with the bevel being accentuated on the side walls.  
 For limb defects (varus = inward deviation or valgus = outward deviation) or asymmetric overload, Asymétrix® shoes should be used to support the foot on the opposite side to the fetlock joint compression zone.



Lateral radiograph showing peri-articular osteophytes (arrowheads) in a horse with distal interphalangeal arthropathy.  
 Photo: Jean-Marie Denoix



Sagittal ultrasound scan of the coronet of the same horse. The osteophytes are very visible on the dorsals surface (anterior) of the middle phalange (arrowhead).  
 Photo: Jean-Marie Denoix.



Dorso-palmar radiograph of a fetlock with a medial overload and articular pinching (arrow) with a zone of osteolysis on the metacarpal condyle (arrowhead) in a horse with a distal interphalangeal arthropathy.  
 Photo: Jean-Marie Denoix.



ARTRHOPATHIX®

**FOOT AND PASTER ARTRHOPATHIES.**  
Limit the lever arm and stresses on the foot,  
especially in circles.



PHR SPORT MOTION

**FETLOCK ARTRHOPATHIES.**  
Promotes foot rolling (toe + on the sides)  
and heal penetration.



SUSPENSORIX®

**FETLOCK ARTRHOPATHIES.**  
Reduces the stresses on the fetlock suspensory  
apparatus (fetlock suspensory ligament, straight and  
oblique sesamoid ligaments) and the superficial digital  
flexor tendon (increase the bevel on the side walls).



COMPROMIX

**FETLOCK ARTRHOPATHIES.**  
Promotes foot rolling (toe and quarters) without  
supporting heels which prevents fetlock extension.

## SUSPENSORY LIGAMENT

Race and sports horses are frequently subject to tendon problems because of fetlock joint hyperextension during the stance phase. The aim of treatment is to reduce the biomechanical stresses on the injured tendon and to avoid the horse having a long rest period. The use of specific shoes combined with medical treatments and activity advice, such as the choice of exercise ground bearing surfaces, are essential parts of appropriate management of injured horses.

### SOLUTIONS

Suspensorix® and Suspensor Ramix® (damage to a suspensory ligament branch) aluminium kinetherapeutic shoes have been specifically designed to contribute to the treatment and tolerance of proximal lesions to the body or branches of the suspensory ligament.

Suspensor Onionix® specific treatment for suspensory ligament problems in horses with hyperextended fetlocks with lack of suspension.

Compromix, PHR Sport Motion or Hyperbolix® shoes are intended for rehabilitation, convalescence or prevention.



SUSPENSORIX®  
FRONT



SUSPENSORIX®  
HIND

#### SUSPENSORIX®

Stresses reduction on the fetlock suspensory apparatus and on the superficial digital flexor tendon in horses with normal limb conformation or that are straight legged.



SUSPENSOR RAMIX®  
FRONT



SUSPENSOR RAMIX®  
HIND

#### SUSPENSOR RAMIX®

Reduction of tension on a suspensory ligament branch or on a oblique sesamoidean ligament.



SUSPENSOR ONIONIX®

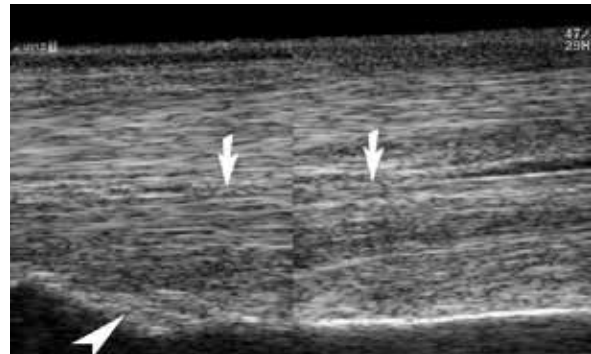
#### SUSPENSOR ONIONIX®

Designed for horses with hyperextended fetlocks with fetlock suspensory ligament or superficial digital flexor tendon problems.





Lateromedial radiograph of hock showing considerable osseous sclerosis at the suspensory ligament's insertion (arrowhead) in a horse with hock hyperextension.  
Photo: Jean-Marie Denoix.



Sagittal ultrasound scan of the suspensory ligament origin in the same horse. The bone surface of the canon bone is very irregular (arrowhead) and the suspensory ligament is thickened and has an ultrasound irregularity (arrows).  
Photo: Jean-Marie Denoix.

Aluminium competition shoes for convalescence or as preventive measure.



PHR SPORT MOTION



HYPERBOLIX®



COMPROMIX

## SUSPENSORY LIGAMENT AND DEEP FLEXOR TENDON PROBLEMS (OR PODOTROCHLEOS SYNDROME)



COMPROMIX

### COMPROMIX

Designed for horses with problems involving both the suspensory ligament and the deep digital flexor tendon or the distal check ligament (accessory ligament of the deep digital flexor tendon).

## ASYMMETRY PROBLEMS

These are related to the normal physiology of locomotion where the strongest pressures are often imposed on the medial sides of the joints (fetlock, carpus, hock, stifle...)

All limb deviation defects such as valgus (outward deviation) or varus (inward deviation) will aggravate the condition.

These asymmetries lead to a concentration of joint or tendon biomechanical stresses on one side of affected limbs. If they are not corrected, they can cause cartilage, bone or ligament lesions that result in lameness. The aim is to rebalance the loads in order to relieve the lesions using an appropriate kinetherapeutic shoe.

### SOLUTIONS

The Asymetrix® aluminium kinetherapeutic shoe has been developed specifically for asymmetric problems.

The narrow branch should be placed on the same side as the overloaded cartilage or bone lesions.

The wide branch should be placed on the same side as the tension lesion involving collateral ligaments or branches of the suspensory ligament or superficial digital flexor tendon.

The main indications are as follows:

- Rebalancing joints when limb deviations are present.
- Outward or inward deviations (toed-in/toed-out) :  
wide branch medial if outward deviation (valgus)  
or lateral if inward deviation (varus).
- Desmopathy of collateral ligaments (wide branch on the same side as the lesion to reduce tension).
- Subchondral compression bone lesions (narrow branch on the same side as lesion to provide decompression).
- Distal hock arthrosis or bone spavin (narrow branch on the same side as lesion to provide decompression).



Front view of mare with varus (inward deviation) especially in the left foreleg. The pressure on the medial surface of the fetlock is increased (white arrowhead) as is the tension in the lateral branch of the suspensory ligament (grey arrowhead). Photo: Jean-Marie Denoix.



Front view of a horse with valgus (outward deviation) of both forelimbs. The tension is increased in the medial branch of the suspensory ligament (white arrowhead) and the collateral medial fetlock ligament (grey arrowhead). Photo: Jean-Marie Denoix.



ASMETRIX®  
FRONT



ASMETRIX®  
HIND



ASMETRIX®  
FOR RACE HORSES (THOROUGHBRED)



ASMETRIX®  
FOR RACE HORSES (TROTTER)

# LAMINITIS

Laminitis is a serious and very painful condition in horses. It involves lesions developing in the keratogenic membrane (chorion), particularly the laminae, and has an initial rapid evolution before becoming chronic. The short and long term consequences for the horse are often very serious and can require the owner to make some difficult choices. The causes are diverse and variable: individual predisposition, hormonal imbalance, over-rich food, foaling, overloading to compensate for pain in another limb... Early treatment is essential. A specific biomechanical solution can be used as part of the treatment for acute laminitis to provide relief to the horse by redistributing the contact between the wall, sole and frog thereby limiting the aggravation of the chorionic lesions.



Lateral view of the feet of a horse with sub-acute laminitis of both front feet. Note the depression of the coronary band indicating the descent of the pedal bone (arrowhead). Photo: Jean-Marie Denoix.



Lateromedial radiograph of the left front foot of the same horse. Pedal bone rotation and descent are clearly visible and accompanied by descent of the coronary band (arrowhead); a separation has developed between the hoof wall and the laminae (orange arrow). Photo: Jean-Marie Denoix

## THE DIFFERENT PHASES OF LAMINITIS

Table showing chronology and degree of gravity, proposed by Dr. Lorenzo D'Arpe.

LAMINITIS PHASES				
NORMAL FOOT VASCULARISATION	STRONG SOLE	NORMAL SOLE	WEAK SOLE	
CHORIONITIS - RISK OF LAMINITIS DEVELOPING (first symptoms, first incidence, first 72 hours) INFLAMMATORY	LOW RISK	MEDIUM RISK	HIGH RISK	
ACUTE CHORIONITIS (72 hours after first symptoms) INFLAMMATORY	MODERATE LESIONS	MEDIUM LESIONS	MAJOR LESIONS	OFF SCALE
DEVELOPING CHORIONOSIS PHASE (Or sub-acute laminitis or load laminitis from 4th to 60th day) VASCULAR DEVELOPMENT	LOW RISK	MEDIUM RISK	HIGH RISK	
AFTER 60 DAYS				
RETURN TO NORMAL OR RESTITUTO AD INTEGRUM	RETURN TO NORMAL STATE AFTER 60 DAYS			
CHRONIC ASYMPTOMATIC LAMINITIS (pain absent) UNCOMPENSATED - RISK OF SYMPTOMS DEVELOPING	LOW RISK	MEDIUM RISK	HIGH RISK	
SYMPTOMATIC CHRONIC LAMINITIS (pain present) COMPENSATED BY SOLE THICKNESS	MODERATE LESIONS	MEDIUM LESIONS	MAJOR LESIONS	OFF SCALE



Phlebogram of chronic laminitis



Dondolino on solar chorionitis



5 Hearts boot on acute laminitis

## SOLUTIONS

Technical advisor: Dr. Lorenzo D'Arpe.

**NORMAL FOOT WITH WEAK SOLE - CHORIONITIS**  
Risk of developing laminitis: low to high (the first 72 hours).

Horse in box and Dondolino each evening.

If glycemia is over 100 g/l:

Use '5 Hearts boots' + prolonged continuous cryotherapy

**ACUTE CHORIONITIS**  
(72 hours after the first symptoms)

Use '5 Hearts boots' + prolonged continuous cryotherapy, depending on the symptoms, until glycemia below 100 g/l.

**CHORIONOSIS OR SUB-ACUTE LAMINITIS**  
(from the 4th to 60th day)

Use '5 Hearts boots' + cryotherapy if glycemia >100 g/l, otherwise fit Dondolino to reduce vein compression when static.

**AFTER 60 DAYS, if return to normal.**

If shoes are needed to restart working: Parabolix®, to reduce lever arm, or Apex.

If the sole grows very slowly, combine Dondolino with shoeing (at night in the box).

**CHRONIC ASYMPTOMATIC LAMINITIS**

If shoes are needed to restart working:

Apex shoe. In high risk cases, combine Dondolino with shoeing (at night in the box).

**CHRONIC SYMPTOMATIC LAMINITIS**

Use Laminitix® shoes for moderate to medium lesions. Combine Dondolino with Laminitix® shoes (at night in the box) for medium to serious lesions.

Note: the horse should be confined to its box from the 1st to the 60th day, or longer, with litter depth of at least 20 cm to hopefully ensure the best possible repair to the laminae. .





APEX

## LAMINITIS - CHRONIC PHASE

When the horse has regained a normal stance and a satisfactory gait when walking/returned to working. Transfers weight-bearing to the rear of the foot. Supports the pedal bone. Reduces the pressure on the toe.



LAMINITIX®

## LAMINITIS - SUB-ACUTE PHASE

Used to treat chronic sole abscesses. Good ground bearing surface on rear of foot. Ground bearing surface on frog. Distributes ground bearing surface to the rear part of quarters. Supports heels and the frog. Promotes forward rolling of the foot by moving its starting point backward.



DONDOLINO

Device developed with Dr. Lorenzo D'Arpe. Horses at risk of laminitis. Solar chorionitis (fine soles, navicular syndrome) stasis oedema, negative palmar and plantar angle (atrophy of the digital pad), contracted feet...



5 HEARTS BOOT

Moulded rubber boot with instability dome screwed under the sole prepared to receive cryotherapy - designed by Dr. Lorenzo D'Arpe. Chorionitis, acute chorionitis, chorionosis (sub-acute laminitis)



Dispositif Dondolino installé sur une ferrure aluminium



5 hearts boot with 5°wedge + instability dome

# ALUMINIUM SHOE DATA SHEETS

Lightness is the best shock absorber

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## SIZE CONVERSION TABLE

Size / Brand - Riding shoes

	Werkman Warrior		Mustad Libero		Kerckhaert	
	FRONT Width X Length	HIND Width X Length	FRONT Width X Length	HIND Width X Length	FRONT Width X Length	HIND Width X Length
<b>4x0</b>	-	-	115x113	109x112	115x108	110x112
<b>3x0</b>	119x115	114x117	122x120	116x119	120x116	113x118
<b>2x0</b>	125x123	122x125	128x126	121x125	127x122	122x125
<b>0</b>	131x131	128x131	134x132	127x131	135x128	128x130
<b>1</b>	138x139	135x138	140x138	131x137	140x135	135x137
<b>2</b>	145x146	142x145	146x144	139x143	146x142	140x143
<b>3</b>	152x152	148x152	152x150	145x149	155x146	147x150
<b>4</b>	160x159	155x159	159x157	152x156	162x155	155x157
<b>5</b>	165x173	166x162	166x164	158x163	170x162	163x167

All our shoes are  
manufactured and  
available from stock **from  
size 3x0 to size 4.**

We can produce any  
other possible sizes  
**to order.**



## 3D MOTION®

### front

Developed in collaboration with Dr Christophe Pelissier, veterinarian of the French endurance team.

Tested and proven by Romain Laporte, rider in the French endurance team.

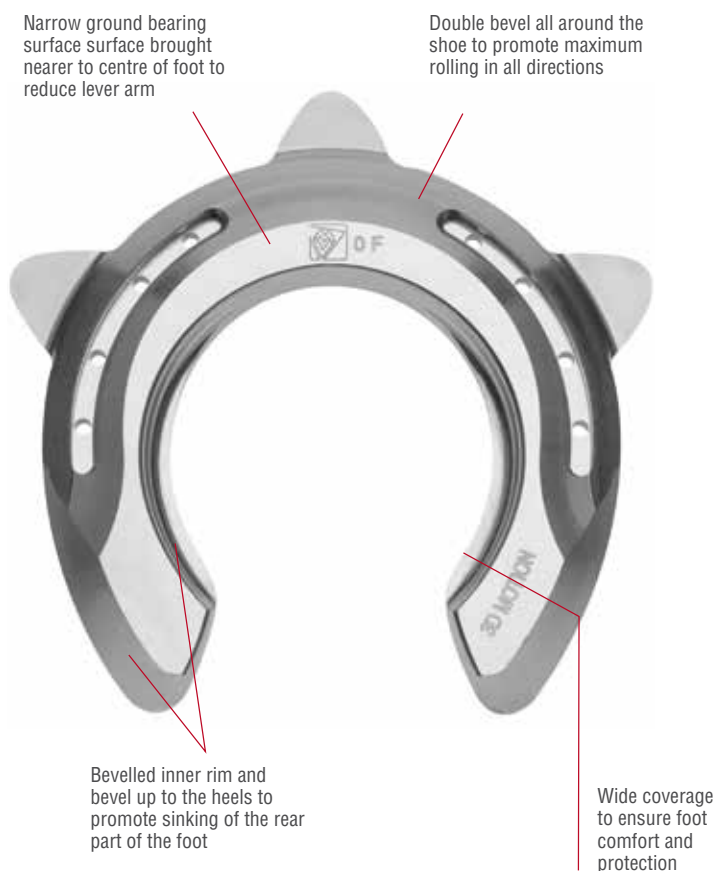
Shoe for endurance events with a wide coverage, double bevel and a bevel on the inner rim.

Thick to ensure maximum durability.

Front shape. Made from hi-tech aluminium alloy.

Non-tempered alloy: can be used for risk-free hot shoeing up to 450°C. 3 clips to allow use with option of 1 or 2 clips.

Thickness 14 mm.



Taille	Reference	Size mm Pince/ toe	Branch/ branch	Talon/ heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
3x0	FMV3DMOTIONA3X0	28	27	28	121	121	200
2x0	FMV3DMOTIONA2X0	29,7	28,3	29,7	128	128	225
0	FMV3DMOTIONA0	31,6	30,5	31,6	136	136	250
1	FMV3DMOTIONA1	33	31,8	33	142	142	275
2	FMV3DMOTIONA2	34,3	33	34,3	148	148	305
3	FMV3DMOTIONA3	36,2	34,9	36,2	156	156	335
4	FMV3DMOTIONA4	38,1	36,7	38,1	164	164	355

### PRINCIPLE AND INTERACTION WITH THE GROUND

Wide cover in contact with the foot to distribute loads and protect the foot.

Narrow ground bearing surface brought nearer to centre of foot to reduce frontal, medial and lateral lever arm.

Designed with double bevel all around the shoe to promote maximum rolling in all directions.

Bevel on inner edge and bevel extends to heel on the outer rim.

Promotes penetration of the rear of the foot on compacted and penetrable surfaces.

### BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS

Reduces joint stresses especially on distal and proximal interphalangeal joints.

Reduces collateromotion, rotation and the stresses on the collateral ligaments. Reduces stresses on the suspensory ligament and the superficial digital flexor tendon.

Generally, reduces the stresses on the suspensory apparatus.

### INDICATIONS

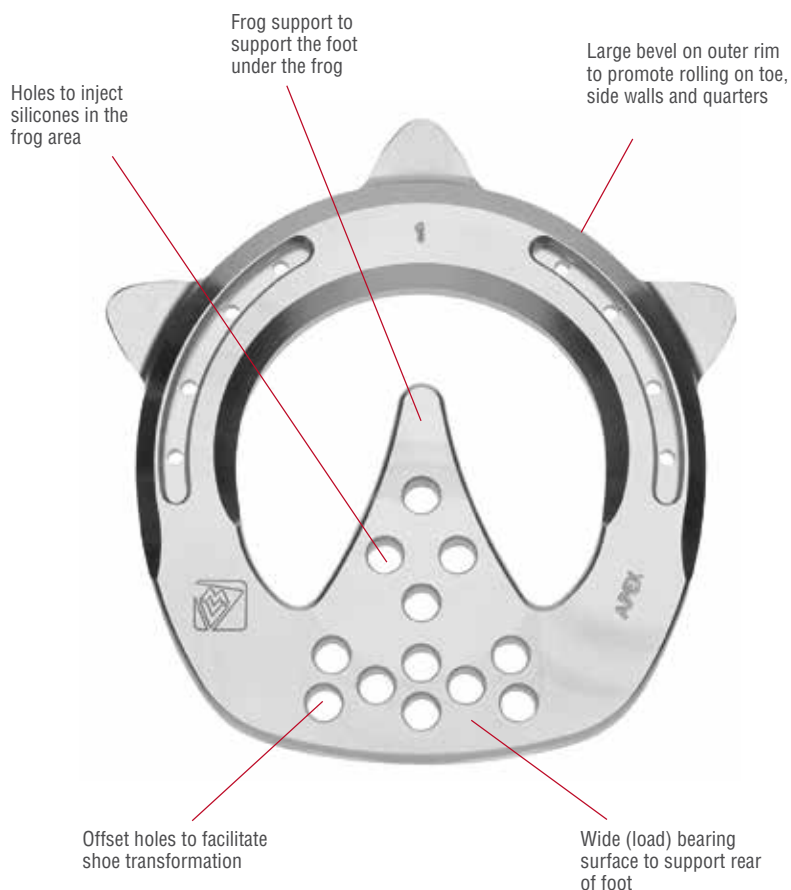
Sports shoe intended to optimise comfort and performance whilst reducing stresses particularly on joints and the suspensory apparatus.

They are especially useful for endurance horses with high heels that have a tendency to develop fetlock problems.

# APEX

## front

Heart bar shaped shoe.  
Wide rear cover that runs under the heels and provides ground bearing surface on the frog. Front shape.  
Made from hi-tech aluminium alloy.  
Can be used for risk-free hot shoeing up to 450°C.  
3 clips to allow use with option of 1 toe clip or 2 lateral clips. Thickness 10 cm



Taille	Reference	Size mm Pince/ toe	Branche/ branch	Talon/ heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
3x0	FMVAPEXA3X0	23,8	21,3	/	121	126	202
2x0	FMVAPEXA2X0	25,2	22,5	/	128	133,4	227
0	FMVAPEXA0	26,8	23,9	/	136	141,7	255
1	FMVAPEXA1	28	25	/	142	148	275
2	FMVAPEXA2	29,1	26	/	148	154,2	305
3	FMVAPEXA3	30,7	27,4	/	156	162,5	345
4	FMVAPEXA4	32,3	28,8	/	164	170,9	367

## PRINCIPLE AND INTERACTION WITH THE GROUND

Wide cover to support the rear of the foot  
Pierced plate with offset holes to facilitate shoe transformation when a narrower or wider shape is required.  
Frog ground bearing surface to support the foot under the frog.  
Frog ground bearing surface pierced with holes to allow silicon to be injected under the frog.  
Injecting hard silicon (MV2-50A) under the rear of the foot provides better transmission of loads.  
Large bevel on the outer rim to promote rolling on toe, side walls and quarters.

## BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS

Transfers ground bearing surface to the rear of the foot.  
Supports the distal phalanx. Reduces pressure on the toe.

## INDICATIONS

Chronic stage of laminitis (recovery of physical activity). Prevention of an unilateral laminitis in case of increased weight bearing due to an injury in the contralateral limb.  
Can be also used to move the bearing surface onto healthy parts of the foot in case of hoof wall injuries (i.e. quarter cracks, seedy toe...).



# ARTHROPATHIX®

front

Model designed by Professor Jean-Marie Denoix.

Shoe with wide cover, onion heels and double bevel.

Front shape. Made from hi-tech aluminium alloy.

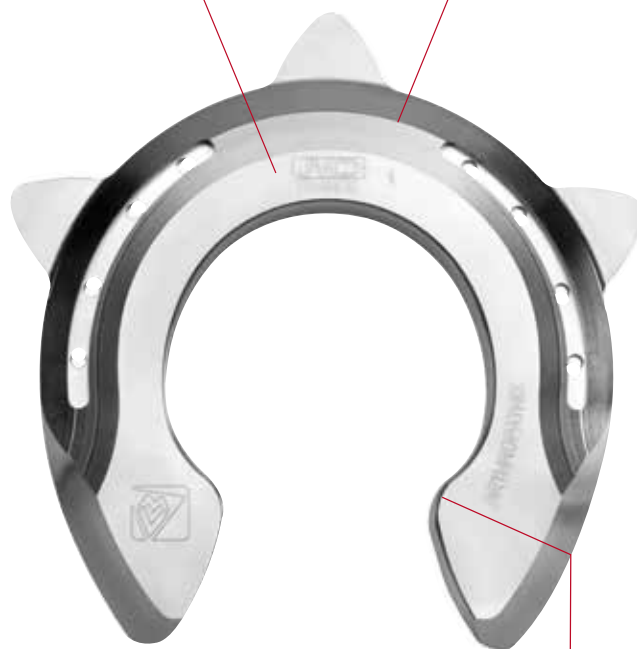
Non-tempered alloy: can be used for risk-free hot shoeing up to 450°C

3 clips to allow use with option of 1 or 2 clips.

Thickness 12 mm.

Narrow ground bearing surface which is closer to the center of the foot in order to reduce lever arm

Double bevel all around the shoe for maximum promotion of rolling in all directions



Wide coverage in contact with the foot. Onion heels to distribute loads

Taille	Reference	Size mm Pince/ toe	Branche/ branch	Talon/ heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
3x0	FJMDARTHROPATHIXA3X0	28	27,1	32	121	121	181
2x0	FJMDARTHROPATHIXA2X0	29,7	28,6	33,8	128	128	202
0	FJMDARTHROPATHIXA0	31,6	30,4	35,9	136	136	228
1	FJMDARTHROPATHIXA1	33	31,8	37,6	142	142	246
2	FJMDARTHROPATHIXA2	34,3	33,1	38,7	148	148	273
3	FJMDARTHROPATHIXA3	36,2	34,9	41,3	156	156	305
4	FJMDARTHROPATHIXA4	38,1	36,7	43,4	164	164	345

## PRINCIPLE AND INTERACTION WITH THE GROUND

Wide cover in contact with foot and onion heels to distribute loads. Reduced ground (load) bearing surface and moved nearer foot's centre to reduce frontal, medial and lateral lever arm.

Designed with double bevel all over shoe for maximum promotion of rolling in all directions.

Thickness: 12 mm - reduces lever arm compared to shoes usually proposed with thickness: 15 mm.

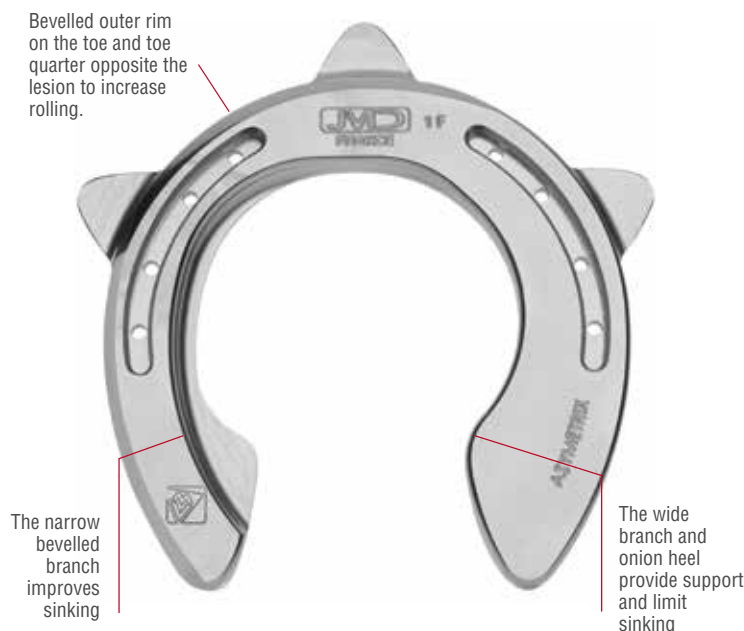
## BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS

Reduces joint stresses especially on distal and proximal interphalangeal joints.

Reduces collateromotion rotation movements and stresses on collateral ligaments.

## INDICATIONS

Arthropathy on distal and proximal interphalangeal joints.



Taille	Reference	Size mm Pince/ toe	Branch/ branch	Talon étroit / heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
3x0	FJMDASYMETRIXA3X0	22,1	21,3 - 25,5	21,3 - 33,1	121	121	147
2x0	FJMDASYMETRIXA2X0	23,4	22,5 - 27	22,5 - 34,3	128	128	167
0	FJMDASYMETRIXA0	24,9	23,9 - 28,7	23,9 - 37,2	136	136	187
1	FJMDASYMETRIXA1	26	25 - 30	25 - 39,5	142	142	203
2	FJMDASYMETRIXA2	27,1	26 - 31,2	26 - 40,8	148	148	220
3	FJMDASYMETRIXA3	28,5	27,4 - 32,9	27,4 - 43,3	156	156	244
4	FJMDASYMETRIXA4	30	28,8 - 34,6	28,8 - 45	164	164	265



Taille	Reference	Size mm Pince/ toe	Branch/ branch	Talon étroit / heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
3x0	FJMDASYMETRIXP3X0	24	22 - 25,8	21,5 - 33,2	117	118,7	142
2x0	FJMDASYMETRIXP2X0	25,3	23,1 - 27,1	22,6 - 34,6	123	124,8	161
0	FJMDASYMETRIXP0	26,8	24,4 - 28,7	23,9 - 35,7	130,2	132,7	177
1	FJMDASYMETRIXP1	28	25,5 - 30	25 - 37,6	136	138	193
2	FJMDASYMETRIXP2	29,1	26,6 - 31,2	26 - 39,1	141,7	143,8	210
3	FJMDASYMETRIXP3	30,2	27,6 - 32,4	27 - 41,3	147	149,1	224
4	FJMDASYMETRIXP4	31,5	28,7 - 33,7	28,1 - 35,2	153	155,2	248

## ASYMETRIX®

### front

Model designed by Professor Jean-Marie Denoix.

Shoe with branches of different widths: one wide branch with onion heel, one narrow bevelled branch.

Made from hi-tech aluminium alloy. Non-tempered alloy : can be used for risk-free hot shoeing up to 450°C.

3 clips to allow use with option of 1 or 2 clips.

Thickness 10 mm.

## ASYMETRIX®

### hind

Model designed by Professor Jean-Marie Denoix.

Shoe with branches of different widths: one wide branch with onion heel, one narrow bevel-rim branch.

Made from hi-tech aluminium alloy. Non-tempered alloy : can be used for risk-free hot shoeing up to 450°C. 2 clips

Thickness 10 mm.

### PRINCIPLE AND INTERACTION WITH THE GROUND

The wide branch with onion provides support by limiting sinking on compacted and penetrable grounds.

The narrow bevelled branch increases sinking on penetrable ground (enlarged surface under the heel on the foot side for more comfort ).

Bevelled outer rim at toe and toe quarter opposite to the lesion to increase rolling.

### BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS

Depending on the application of the shoe (medial or lateral wide branch):

re-balances the foot in case of lateral or medial overload. Re-balances the joints in case of deviation of the distal limb. Reduces tension on collateral ligaments.

### INDICATIONS

Distal Limb deviation: valgus or varus (medial wide branch if valgus or lateral wide branch if varus). Subchondral compression bone lesions (narrow branch on the side of the lesion to reduce pressure). Desmopathy of collateral ligaments (wide branch on the side of the lesion to reduce tension).

## ALUMINIUM SHOES DATA SHEETS

1

2

3

4



Taille	Reference	Thickness Epaisseur	Size mm Pince/ toe	Branche/ branch	Talon étroit / heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
2	FJMDASYMETRIX-PSA2	8	19,4	15,8 - 22	15,8 - 28,3	113	105,5	82
3	FJMDASYMETRIX-PSA3	8	20,1	16,4 - 22,8	16,4 - 29,5	117	109,2	90
4	FJMDASYMETRIX-PSA4	8	21,3	17,4 - 24,2	17,4 - 31,6	124	115,7	99
5	FJMDASYMETRIX-PSA5	8	22	18 - 25	18 - 32,7	128	119,5	109
6	FJMDASYMETRIX-PSA6	8	22,8	18,7 - 25,9	18,7 - 33,9	133	124,1	118
7	FJMDASYMETRIX-PSA7	8	23,7	19,4 - 26,9	19,4 - 34,7	138	128,8	126
4	FJMDASYMETRIX-PSA4-10	10	21,3	17,4 - 24,2	17,4 - 31,6	124	115,7	130
5	FJMDASYMETRIX-PSA5-10	10	22	18 - 25	18 - 32,7	128	119,5	150
6	FJMDASYMETRIX-PSA6-10	10	22,8	18,7 - 25,9	18,7 - 33,9	133	124,1	160
7	FJMDASYMETRIX-PSA7-10	10	23,7	19,4 - 26,9	19,4 - 34,7	138	128,8	165

Taille	Reference	Size mm Pince/ toe	Branche/ branch	Talon étroit / heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
2x0	FJMDASYMETRIX-TR2X0	23	16,3 - 23,1	16,3 - 29,3	120	124,8	107
0	FJMDASYMETRIX-TR0	24	17 - 24	17 - 31	125	130	116
1	FJMDASYMETRIX-TR1	24,9	17,6 - 25	17,6 - 31,8	129,8	135	127
2	FJMDASYMETRIX-TR2	26,8	19 - 26,9	19 - 34,3	139,8	145,8	141
3	FJMDASYMETRIX-TR3	27,8	19,6 - 27,8	19,6 - 35,7	144,78	150,5	158

## ASYMETRIX® PS

front for race horses (thoroughbred)

Model designed by Professor Jean-Marie Denoix.

Model for thoroughbreds with branches of different widths: one wide branch with onion at heel, one narrow bevel-rim branch. Made from hi-tech aluminium alloy. Non-tempered alloy: can be used for risk-free hot shoeing up to 450°C.

3 clips to allow use with option of 1 or 2 clips. Thickness 8 or 10 mm for wear resistance.

### PRINCIPLE AND INTERACTION WITH THE GROUND

The wide branch and the onion heel provide support and limit sinking into penetrable and compacted ground. The narrow and bevelled branch improves sinking into penetrable ground (enlarged surface under the heel on the foot side for more comfort).

### BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS

Depending on the application of the shoe (medial or lateral wide branch): re-balances the foot in case of lateral or medial overload. Re-balances the joints in case of deviation of the distal limb. Reduces tension on collateral ligaments.

## ASYMETRIX® TR

mixed shape for race horses (trotter)

Model designed by Professor Jean-Marie Denoix.

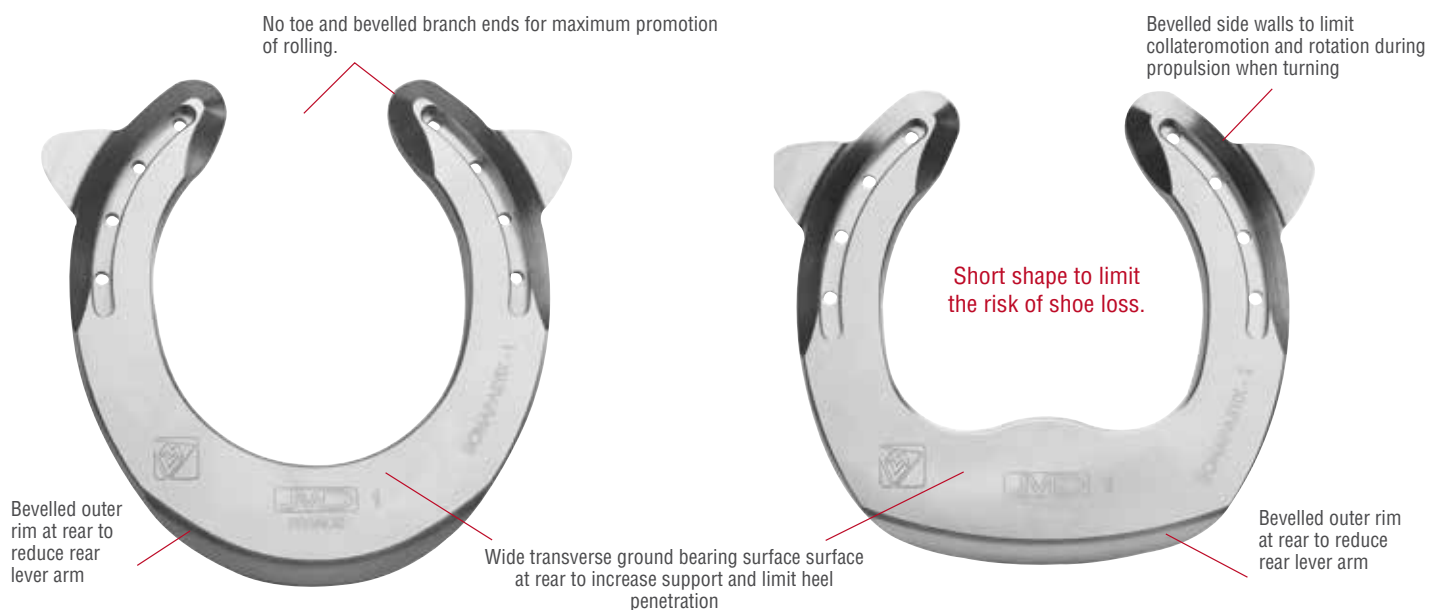
Shoe for trotters with branches of different widths: one wide branch with onion at heel, one narrow bevel-rim branch. Mixed shape can be used for front or rear feet.

Made from hi-tech aluminium alloy. Non-tempered alloy: can be used for risk-free hot shoeing up to 450°C.

3 clips to allow use with option of 1 or 2 clips. Thickness 8 mm.

### INDICATIONS

Deviations of the distal limb : valgus or varus (medial wide branch if valgus or lateral wide branch if varus). Subchondral compression bone lesions (narrow branch on the side of the lesion to reduce pressure). Desmopathy of collateral ligaments (wide branch on the side of the lesion to reduce tension).



Taille	Reference	Size mm Pince/ toe	Branch/ branch	Talon/ heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
3x0	FJMDBONAPARTIXLA3X0	/	21,3	29,8	121	130	157
2x0	FJMDBONAPARTIXLA2X0	/	22,5	31,5	128	137,5	186
0	FJMDBONAPARTIXLA0	/	24	33,6	136	145,9	205
1	FJMDBONAPARTIXLA1	/	25	35	142	152,6	220
2	FJMDBONAPARTIXLA2	/	26	36,4	148	159	238
3	FJMDBONAPARTIXLA3	/	27,4	38,4	156	167,9	265
4	FJMDBONAPARTIXLA4	/	28,8	40,4	164	176,2	285

Taille	Reference	Size mm Pince/ toe	Branch/ branch	Talon/ heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
3x0	FJMDBONAPARTIXSA3X0	/	21,3	35,7	121	117	162
2x0	FJMDBONAPARTIXSA2X0	/	22,5	37,8	128	124	184
0	FJMDBONAPARTIXSA0	/	24	40,2	136	131,8	202
1	FJMDBONAPARTIXSA1	/	25	42	142	137,6	217
2	FJMDBONAPARTIXSA2	/	26	43,7	148	143,4	240
3	FJMDBONAPARTIXSA3	/	27,4	46,1	156	151,2	265
4	FJMDBONAPARTIXSA4	/	28,8	48,5	164	158,9	295

## BONAPARTIX®L

### front

Model designed by Professor Jean-Marie Denoix.

Reverse shoe also called "Napoléon shoe" in France.

Rear ground bearing surface surface behind the heels and frog. Open toe. Front shape. Made from hi-tech aluminium alloy.

Non-tempered alloy : can be used for risk-free hot shoeing up to 450°C. 2 lateral clips.

Thickness: 10 mm.

### PRINCIPLE AND INTERACTION WITH THE GROUND

Wide rear ground bearing surface to increase support and limit heel penetration on compacted and penetrable surfaces. Bevelled outer rim at rear to reduce rear lever arm and limit the 'snowshoe' effect at landing.

No toe and bevelled branch ends for maximum promotion of rolling. Bevelled side walls to limit limit collateromotion and rotation during propulsion in turns.

### BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS

Reduces stresses on the distal sesamoid bone and on the deep digital flexor tendon. Reduces general stress on the podotrochlear apparatus and interphalangeal joint mechanics.

### INDICATIONS

Podotrochlear syndrome grade 3. Pathology of the deep digital flexor tendon and accessory ligament (distal check ligament).

## BONAPARTIX®S

### front

Model designed by Professor Jean-Marie Denoix.

Reverse shoe also called "Napoléon shoe" in France.

Rear ground bearing surface surface behind the heels and frog. Open toe Shorter version of the Bonapartix®L. Front shape.

Made from hi-tech aluminium alloy. Non-tempered alloy:

Non-tempered alloy: can be used for risk-free hot shoeing up to 450°C. 2 lateral clips. Thickness 10 mm.

### PRINCIPLE AND INTERACTION WITH THE GROUND

Wide rear surface to increase support and to limit sinking of the heels into penetrable and compacted ground. Bevelled outer rim at the rear part of the shoe to reduce rear lever arm. Open toe and bevelled ends of branches to promote maximum rolling. Bevel on toe quarters to limit collateromotion and rotation during propulsion in turns.

### BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS

Reduces stresses on the distal sesamoid bone and on the deep digital flexor tendon. Reduces general stress on the podotrochlear apparatus and interphalangeal joint mechanics.

### INDICATIONS

Shorter shape than the L model for horses that overreach.

Podotrochlear syndrome grade 3. Pathology of the deep digital flexor tendon and accessory ligament (distal check ligament).



## ALUMINIUM SHOES DATA SHEETS

1

2

3

4

Thinned and bevelled toe to promote maximum front rolling whilst protecting the front part of the foot.



Bevel on quarters to limit collateromotion and rotation during propulsion in turns



Taille	Reference	Size mm Pince/ toe	Branch/ branch	Talon/ heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
3x0	FJIMBONAPARTIXS-PP-A3X0	21,3	21,3	35,7	121	126	170
2x0	FJIMBONAPARTIXS-PP-A2X0	22,5	22,5	37,8	128	133,4	195
0	FJIMBONAPARTIXS-PP-A0	24	24	40,2	136	141,7	221
1	FJIMBONAPARTIXS-PP-A1	25	25	42	142	148	241
2	FJIMBONAPARTIXS-PP-A2	26	26	43,7	148	154	245
3	FJIMBONAPARTIXS-PP-A3	27,4	27,4	46,1	156	162,5	295
4	FJIMBONAPARTIXS-PP-A4	28,8	28,8	48,5	164	170,9	315

Taille	Reference	Size mm Pince/ toe	Branch/ branch	Talon étroit / heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
2x0	FJIMBONAPARTIXS-TR2x0	/	16,6	26,7	120	118,5	91
0	FJIMBONAPARTIXS-TR0	/	17,3	27,8	125	123	101
1	FJIMBONAPARTIXS-TR1	/	18	29	129,8	128	111
2	FJIMBONAPARTIXS-TR2	/	19,3	31,2	139,8	137,8	132
3	FJIMBONAPARTIXS-TR3	/	20	32,3	144,78	142,7	138

## BONAPARTIX®S-PP

### front

Model designed by Professor Jean-Marie Denoix.

Same model as the Bonapartix® S but includes a « Protective Part » (PP) for the toe. Rear support under the base of the frog. Front shape. Made from hi-tech aluminium alloy.

Non-tempered alloy: can be used for risk-free hot shoeing up to 450°C. 2 lateral clips. Thickness: 10 mm.

### PRINCIPLE AND INTERACTION WITH THE GROUND

Wide rear ground bearing surface surface to increase support and limit heel penetration on compacted and penetrable grounds. Pierced plate with offset holes to facilitate shoe forging when a narrower or wider shape is required. Bevelled outer rim at rear to reduce rear lever arm and limit the 'snowshoe' effect during the foot landing phase. Bevelled full toe for maximum promotion of forward rolling whilst protecting the front of the foot. Bevel on toe quarters to limit collateromotion and rotation during propulsion in turns.

### BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS

Reduces the stresses on the navicular bone and the deep digital flexor tendon. Generally, reduces the stresses on the podotrochlear apparatus and the interphalangeal joints.

### INDICATIONS

Recommended for horses that overuse the toe when fitted with the Bonapartix® S. open shoe. Grade 3 navicular syndrome. Pathology of the deep digital flexor tendon and accessory ligament (distal check ligament).

## BONAPARTIX®S TR

### for trotter

Model designed by Professor Jean-Marie Denoix.

Model for trotter.

Reversed shoe also known as a Napoleon shoe. Rear ground bearing surface surface behind the frog. No toe. Made from hi-tech aluminium alloy.

Non-tempered grade: can be used for risk-free hot shoeing up to 450°C. 2 lateral clips. Thickness: 8 mm.

### PRINCIPLE AND INTERACTION WITH THE GROUND

Wide rear ground bearing surface surface to increase support and limit heel penetration on compacted and penetrable grounds. Bevelled outer edge at rear to reduce rear lever arm and limit the 'snowshoe' during the foot landing phase. No clips and bevelled branch ends for maximum promotion of rolling. Bevel on toe quarters to limit collateromotion and rotation during propulsion in turns.

### BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS

Reduces the stresses on the navicular bone and the deep digital flexor tendon. Generally, reduces the stresses on the podotrochlear apparatus and the interphalangeal joints.

### INDICATIONS

For trotters

Grade 3 navicular syndrome. Pathology of the deep digital flexor tendon and accessory ligament (distal check ligament).

# COMPROMIX

## front

Model designed by Professor Jean-Marie Denoix.

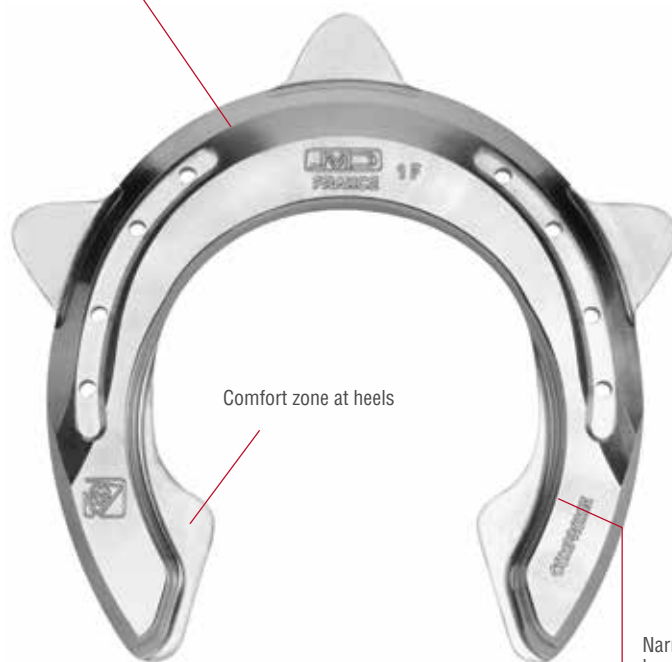
Shoe with bevelled toe and narrow double bevelled branches. Front shape.

Made from hi-tech aluminium alloy with high mechanical strength. Non-tempered alloy : can be used for hot or cold shoeing (up to 450°C).

3 clips for use either with 1 toe clip or 2 lateral clips.

Thickness 10 mm.

Double bevel at toe, side walls and quarters for maximum rolling



Comfort zone at heels

Narrow bevelled branches to increase penetration of rear part of foot

Taille	Reference	Size mm Pince/ toe	Branche/ branch	Talon/ heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
3x0	FJMDCOMPROMIXA3X0	27,2	21,3	21,3	121	121	120
2x0	FJMDCOMPROMIXA2X0	28,8	22,5	22,5	128	128	134
0	FJMDCOMPROMIXA0	30,6	23,9	23,9	136	136	151
1	FJMDCOMPROMIXA1	32	25	25	142	142	167
2	FJMDCOMPROMIXA2	33,3	26	26	148	148	178
3	FJMDCOMPROMIXA3	35,1	27,4	27,4	156	156	195
4	FJMDCOMPROMIXA4	36,9	28,8	28,8	164	164	220

## PRINCIPLE AND INTERACTION WITH THE GROUND

The narrow of the heels branches increase penetration on compacted and penetrable grounds. The enlarged surface in contact with the heel provides optimal comfort.

Double bevel at toe, side walls and quarters for maximum rolling.

## BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS

During the first part of the stride, when the foot is placed on the ground, the narrow branches and heels ensure penetration into the ground thereby reducing tension in the suspensory ligament and the superficial digital flexor tendon.

During the second part of the stride, the double bevel at the toe reduces tension in the deep digital flexor tendon

## INDICATIONS

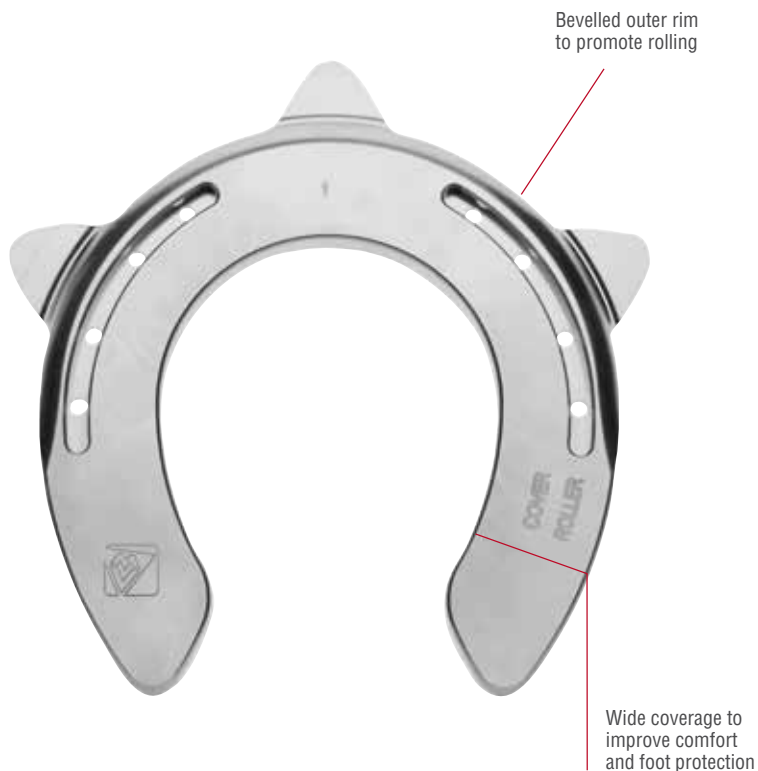
Designed for horses with problems involving both the suspensory ligament and the deep digital flexor tendon and accessory ligament (distal check ligament).

It is also recommended for wind-puff (tenosynovitis) problems where there are lesions in both deep and superficial digital flexor tendons.

# COVER ROLLER

## front

Shoe with wide coverage and bevelled outer rim. Front shape. Made from hi-tech aluminium alloy. Non-tempered alloy: can be used for risk-free hot shoeing up to 450°C. 3 clips for use either with 1 toe clip or 2 lateral clips. Thickness 10 mm.



Taille	Reference	Size mm Pince/ toe	Branche/ branch	Talon/ heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
3x0	FMVCOVERROLLERA3X0	25,5	25,5	26,4	121	121	168
2x0	FMVCOVERROLLERA2X0	28	28	29	128	128	196
0	FMVCOVERROLLERA0	29	29	30	136	136	215
1	FMVCOVERROLLERA1	30	30	31	142	142	231
2	FMVCOVERROLLERA2	31	31	32	148	148	248
3	FMVCOVERROLLERA3	32	32	33	156	156	265
4	FMVCOVERROLLERA4	33	33	34	164	164	286

## PRINCIPLE AND INTERACTION WITH THE GROUND

Wide coverage to distribute pressure and protect the sole.  
Bevelled outer rim at toe and quarters to increase rolling.

## BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS

Redistributes loads and improves comfort.  
Reduces stresses during propulsion.

## INDICATIONS

Sport shoe intended to optimise comfort and performance whilst protecting the sole and providing good rolling.

- Saddle horses, large sizes.
- Horses with sensitive feet.
- Horses working on uncomfortable grounds : hard or stony.
- Endurance races.

# DONDOLINO

Developed in collaboration with Dr. Lorenzo D'Arpe.  
Sole with kinetherapeutic action at rest (horse in box).  
Sole with 5° slope with a dome that can be adjusted longitudinally to create a slight continuous instability.  
The sole is screwed temporarily onto the shoe, using 2 or 3 screws located in the milled areas.  
The outer shape of the sole is adjusted to the shape of the shoe by grinding.

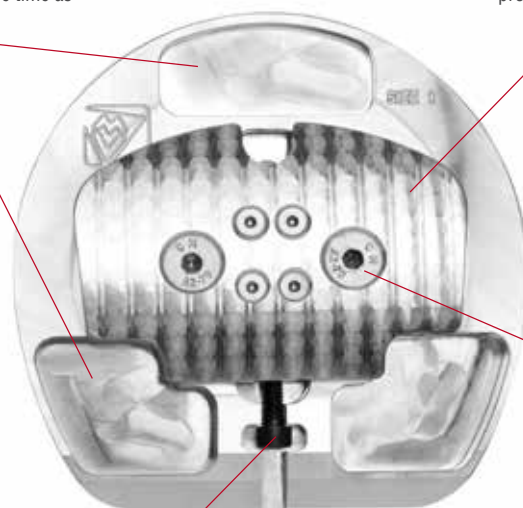


Dondolino fitted to a foot with an aluminium shoe.

Taille	Reference	Largeur/ Width	Longueur/ Length	1 shoe Weight g
2x0	FLDADONDOLINO2X0	126	125	500
0	FLDADONDOLINO0	137	132	565
1	FLDADONDOLINO1	142	138	595
2	FLDADONDOLINO2	147	145	645
3	FLDADONDOLINO3	157	155	720

3 milled zones for placing fixing screws (holes to be positioned and drilled at the same time as the shoe)

Longitudinally adjustable dome to provide oscillation



Dome locking screw

Micrometric adjustment screw used to adjust the dome in order to easily find the centre of static pressure

Compensated sole with 5° slope screwed onto the shoe with screws located in milled areas. Holes are pierced on site by superposing Dondolino on the shoe



## PRINCIPLE AND INTERACTION WITH THE GROUND

The centre of static pressure has to be found which is easy to do using the longitudinal adjustment of the dome to move it backwards and forwards until the balance point is found with the foot placed on the ground: the foot should neither tilt forwards nor backwards when balanced. Once correctly adjusted, the dome is fixed in position using 2 locking screws.

## BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS

The micro-movements produced by the system's inherent instability pump blood due to contractions by the lower limb flexor and extensor muscles..

## INDICATIONS

Horses with fine soles with laminitis risk. Solar chorionitis (fine soles, navicular syndrome) stasis oedema, negative palmar and plantar angle (atrophy of the digital pad, contracted feet...). Do not allow the horse to leave its stalls with the Dondolino fitted. It is advisable to monitor muscle fatigue during the first 2 - 3 days. Start by using them for 4 hours during the day to get the horse used to them.



# ENDURO

## front

Shoe for endurance horses and general sports use. Front shape.

Made from hi-tech aluminium alloy.

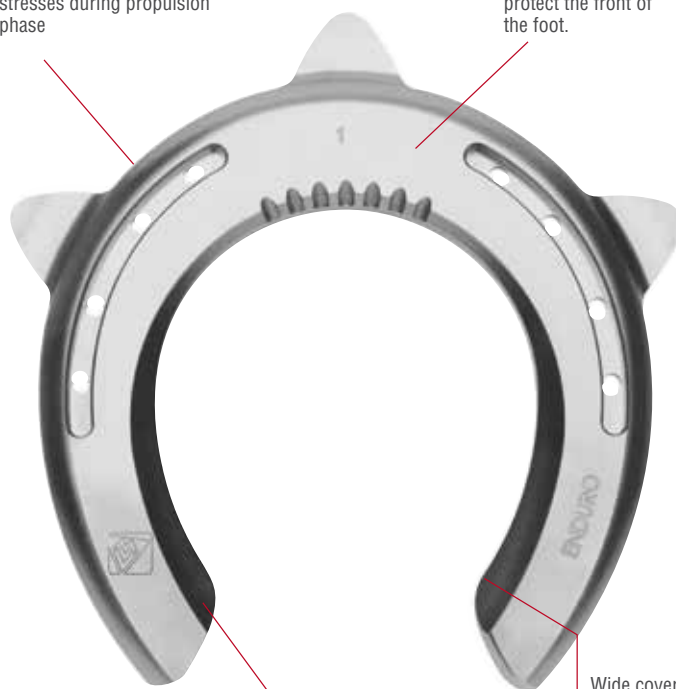
Non-tempered alloy: can be used for risk-free hot shoeing up to 450°C.. 3 clips to allow use with option of 1 toe clip or 2 lateral clips.

Thickness 10 mm.

Taille	Reference	Size mm Pince/ toe	Branche/ branch	Talon/ heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
3x0	FMVENDUROA3X0	24,9	21,35	21,35	121	121	147
2x0	FMVENDUROA2X0	28	24	24	128	128	168
0	FMVENDUROA0	28	24	24	136	136	187
1	FMVENDUROA1	30	27	27	142	142	207
2	FMVENDUROA2	31,2	28,1	28,1	148	148	225
3	FMVENDUROA3	31,2	28,1	28,1	156	156	254
4	FMVENDUROA4	34,6	31,1	31,1	164	164	267

Bevelled outer rim to increase rolling and reduce stresses during propulsion phase

Wide coverage on the toe to support and protect the front of the foot.



Bevel on the inner rim to promote the sinking of heels into penetrable ground

Wide coverage on the heel, on the foot side, to distribute loads and increase comfort and protection. Also reduces the risk of bruises on the heels

## PRINCIPLE AND INTERACTION WITH THE GROUND

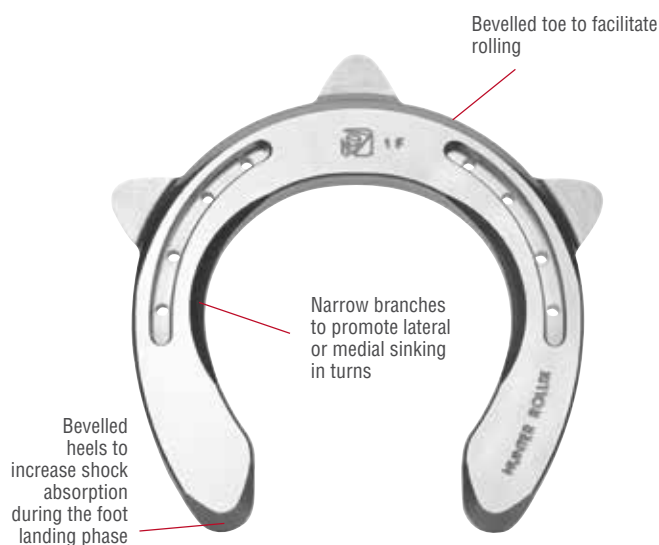
- Foot side: wide coverage to distribute loads and to increase comfort and protection.
- Ground side: narrow coverage with a bevel on the inner rim to reduce the weight of the shoe and promote the sinking of heels into penetrable and compacted ground.
- Bevelled outer rim to promote rolling.

## BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS

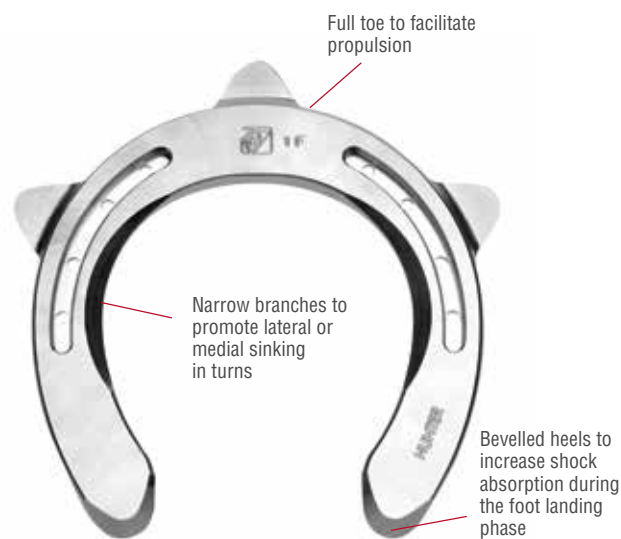
Reduction of stresses on the suspensory ligament and on the superficial digital flexor tendon. Generally, reduces the stress on the suspensory apparatus.

## INDICATIONS

Preventive sport shoe intended to improve comfort and performance whilst reducing stresses, especially on the suspensory apparatus. Specifically indicated for endurance events (60 - 90 km) for Arabs where high heels are often predisposing factor for fetlock injuries.



Taille	Reference	Size mm Pince/ toe	Branche/ branch	Talon étroit / heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
3x0	FMVHUNTERROLLIXA3X0	24,8	19	23,8	121	121	147
2x0	FMVHUNTERROLLIXA2X0	25,8	20	24,8	128	128	162
0	FMVHUNTERROLLIXA0	26,9	21,1	25,9	136	136	179
1	FMVHUNTERROLLIXA1	28	22	27	142	142	197
2	FMVHUNTERROLLIXA2	29,2	22,9	28	148	148	209
3	FMVHUNTERROLLIXA3	30,7	24,1	29,6	156	156	232
4	FMVHUNTERROLLIXA4	32,3	25,4	31	164	164	265



Taille	Reference	Size mm Pince/ toe	Branche/ branch	Talon / heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
3x0	FMVHUNTERA3x0	23	19	22	121	121	142
2x0	FMVHUNTERA2x0	24	20	23	128	128	157
0	FMVHUNTERA0	25	21,1	24	136	136	173
1	FMVHUNTERA1	26	22	25	142	142	190
2	FMVHUNTERA2	27,1	22,9	26	148	148	202
3	FMVHUNTERA3	28,5	24,1	27,4	156	156	224
4	FMVHUNTERA4	30	25,4	28,7	164	164	256

## HUNTER ROLLIX

A low cost shoe - Alumix

front

### HUNTER AND HUNTER ROLLIX ARE THE FIRST ALUMINIUM SHOES IN THE ALUMIX FAMILY:

A low cost shoe where the processes and production have been optimised in order to offer genuine Michel VAILLANT aluminium competition shoes at unbeatable prices.

#### TECHNOLOGY

- Alloy that can be hot or cold forged.
- Excellence wear characteristics without the need to add a steel staples at the toe.
- Front shape provided with 3 clips for use either with 1 toe clip or 2 lateral clips.
- Bevelled heels to increase shock absorption during the foot landing phase- Parabolic branches facilitate cornering.
- Full toe for better propulsion on Hunter.
- Bevelled toe for better rolling on Hunter Rollix.
- Thickness 10 mm.

#### AVANTAGES

- UNIQUE and UNBEATABLE value for money.
- An affordable, ultra-light competition shoe with Michel VAILLANT quality.
- Available in sizes from 3x0 to 4.
- (Any other size can be made to order).
- Front or rear shapes.

## HUNTER

A low cost shoe - Alumix

front



Taille	Reference	Size mm Pince/ toe	Branche/ branch	Talon étroit / heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
3x0	FMVHUNTERP3x0	22,3	22,3	22,3	117	118,7	136
2x0	FMVHUNTERP2x0	23,5	23,5	23,5	123	124,8	151
0	FMVHUNTERP0	24,6	24,6	24,6	129	130,9	167
1	FMVHUNTERP1	26	26	26	136	138	180
2	FMVHUNTERP2	27,1	27,1	27,1	142	144	198
3	FMVHUNTERP3	28,1	28,1	28,1	147	149,1	212
4	FMVHUNTERP4	29,2	29,2	29,2	153	155,2	232

## HUNTER

A low cost shoe - Alumix

hind

## ALUMINIUM SHOES DATA SHEETS

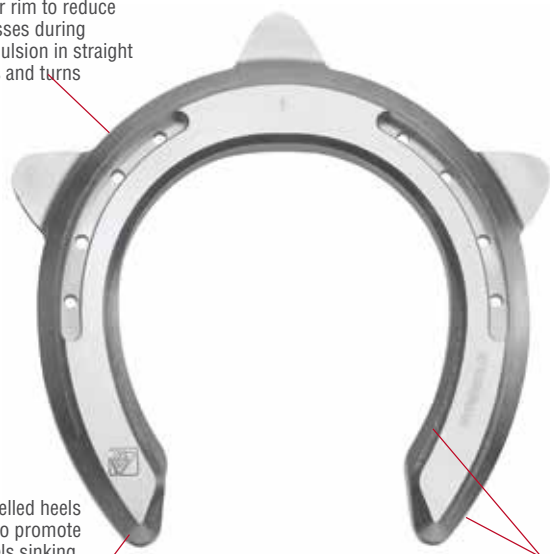
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Bevel along the whole outer rim to reduce stresses during propulsion in straight lines and turns



Bevelled heels to promote heels sinking. Also limits risks of shoe loss through overreaching.

Bevelled inner rim and bevel up to the heels on the outer rim to promote sinking of the rear part of the foot. Also balances wear between the toe and the heels

Square toe allowing shoe to be set back from toe and reducing front lever arm



Toe profile designed to optimise propulsion. Large surface to provide more ground bearing surface on reactive grounds.

Taille	Reference	Size mm Pince/ toe	Branche/ branch	Talon/ heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
3x0	FMVHYPERBOLIXA3X0	21,3	19,6	20,4	121	121	122
2x0	FMVHYPERBOLIXA2X0	22,5	20,7	21,6	128	128	144
0	FMVHYPERBOLIXA0	23,9	22	22,9	136	136	153
1	FMVHYPERBOLIXA1	25	23	24	142	142	171
2	FMVHYPERBOLIXA2	26	23,9	25	148	148	185
3	FMVHYPERBOLIXA3	27,4	25,2	26,3	156	156	196
4	FMVHYPERBOLIXA4	28,8	26,5	27,7	164	164	225

Taille	Reference	Size mm Pince/ toe	Branche/ branch	Talon étroit / heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
3x0	FMVHYPERBOLIXP3X0	24	21,5	21,5	117	118,7	134
2x0	FMVHYPERBOLIXP2X0	25,3	22,6	22,6	123	124,8	150
0	FMVHYPERBOLIXP0	26,5	23,7	23,7	129	130,9	166
1	FMVHYPERBOLIXP1	28	25	25	136	138	182
2	FMVHYPERBOLIXP2	29,2	26,1	26,1	142	144	201
3	FMVHYPERBOLIXP3	30,2	27	27	147	149,1	213
4	FMVHYPERBOLIXP4	31,5	28,1	28,1	153	155,2	230

## HYPERBOLIX®

### front

3 clips for use either with 1 toe clip or 2 lateral clips. Made from hi-tech aluminium alloy. Non-tempered alloy: can be used for risk-free hot shoeing up to 450°C. Thickness: 10 mm.

## HYPERBOLIX®

### hind

2 clips. Shoe with square toe, slightly widened to optimise propulsion. Bevelled inner and outer rim of branches. Made from hi-tech aluminium alloy. Non-tempered grade: can be used for risk-free hot shoeing up to 450°C. Thickness: 10 mm.

### PRINCIPLE AND INTERACTION WITH THE GROUND

Slightly widened very light shoe with hyper rolling: large bevel on all the outer rim and bevelled heels. Maximises rolling in straights and turns. Increases the penetration of the rear of the foot on compacted and penetrable grounds.

### BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS

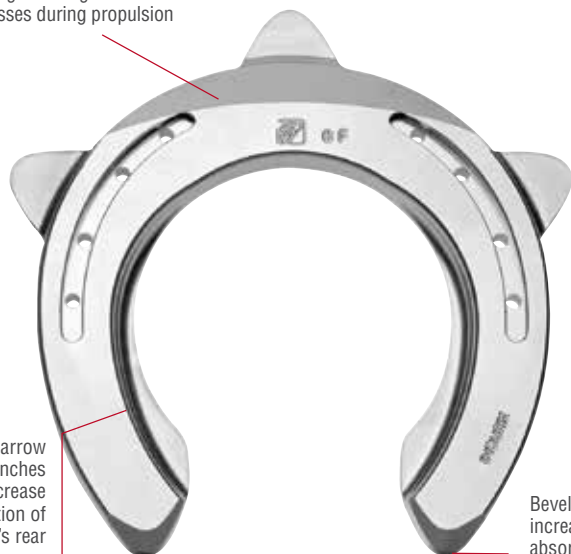
Reduces stresses during propulsion in straight lines or turns. Reduce stresses on the suspensory ligament and the superficial digital flexor tendon. Generally, reduce stress on the suspensory apparatus of the fetlock.

### INDICATIONS

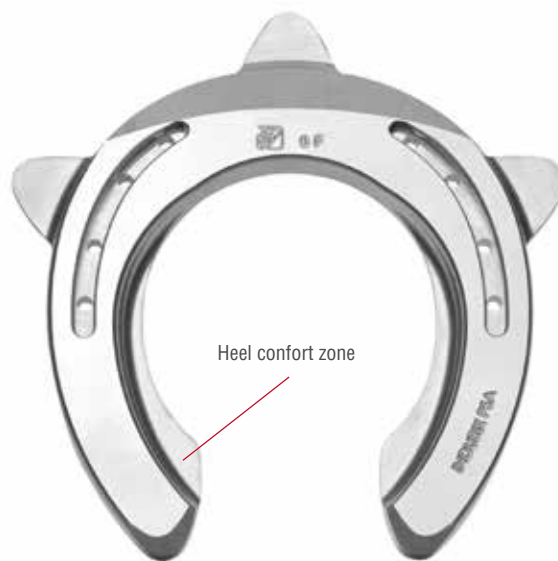
Preventive sport shoe intended to improve comfort and performance whilst reducing stresses. Horses with high heels. Horses with very stressed fetlock joints.

Large bevel at toe increases foot rolling on straight lines and reduce stresses during propulsion

Narrow branches to increase penetration of the foot's rear



Bevelled heels to increase shock absorption during foot landing phase



Heel confort zone

Taille	Reference	Size mm Pince/ toe	Branche/ branch	Talon/ heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
3x0	FMVINDURIXA3X0	25,5	23	23	121	121	185
2x0	FMVINDURIXA2X0	27	24,3	24,3	128	128	206
0	FMVINDURIXA0	28,7	25,8	25,8	136	136	233
1	FMVINDURIXA1	30	27	27	142	142	243
2	FMVINDURIXA2	31,2	28,1	28,1	148	148	265
3	FMVINDURIXA3	32,9	29,6	29,6	156	156	301
4	FMVINDURIXA4	34,6	31,1	31,1	164	164	370

Taille	Reference	Size mm Pince/ toe	Branche/ branch	Talon/ heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
3x0	FMVINDURIXPSA-A3X0	25,5	23	23	116,6	122,7	180
2x0	FMVINDURIXPSA-A2X0	27	24,3	24,3	123,3	129,8	200
0	FMVINDURIXPSA-A0	28,7	25,8	25,8	131,0	138,0	225
1	FMVINDURIXPSA-A1	30	27	27	136,8	144,1	236
2	FMVINDURIXPSA-A2	31,2	28,1	28,1	142,6	150,2	256
3	FMVINDURIXPSA-A3	32,9	29,6	29,6	150,3	158,3	292
4	FMVINDURIXPSA-A4	34,6	31,1	31,1	158,0	166,4	359

## INDURIX

front

Shoe developed specifically for long-distance endurance races. Super hi-tech TITANESC alloy with very high mechanical characteristics. Alloy tempered by heat treatment, suitable for risk-free hot shoeing up to 450°C.

Durability is not affected provided heating is of short duration. In order to limit the need for adjustments, INDURIX is available in standard front shape and also PSA (Arabian horse) front shape.

Supplied with 3 clips for use either with 1 toe clip or 2 lateral clips. Thickness: 12 mm.

### PRINCIPLE AND INTERACTION WITH THE GROUND

The bevelled heels and the reduced surface at the heels on the ground face of the shoe increases heel penetration on deep and reactive grounds. Enlarged zones under the heels on the shoe's upper face where it makes contact with the foot ensure optimal comfort and protection for the foot.

The large bevel at the toe allows better rolling when lifting the foot.

### BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS

The toe bevel allows better rolling which reduces tension in the deep digital flexor tendon. The heel penetration when the foot lands reduces the stresses on the suspensory apparatus and on the superficial digital flexor tendon. The limited thickness of 12 mm considerably reduces lever arm compared to other much thicker shoes (15 - 20 mm). Generally, reduces stress on the suspensory apparatus of the fetlock.

### INDICATIONS

Endurance shoe made from high resistance alloy that allows longer distances to be covered with minimum farriery work during the competition even though the thickness has been deliberately limited to 12 mm.



## ALUMINIUM SHOES DATA SHEETS

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Ground bearing surface  
on frog to support the foot  
under the frog

No clips and bevelled branchends  
for maximum promotion of rolling

Holes to allow silicon  
to be injected under  
the frog



Cross piece with  
wide ground bearing  
surface surface to  
support the foot's rear



Taille	Reference	Size mm Pince/ toe	Branche/ branch	Talon/ heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
3x0	FJMDLAMINITIXA3X0	/	21,3	/	121	117	200
2x0	FJMDLAMINITIXA2X0	/	22,5	/	128	124	240
0	FJMDLAMINITIXA0	/	23,9	/	136	131,8	255
1	FJMDLAMINITIXA1	/	25	/	142	137,6	295
2	FJMDLAMINITIXA2	/	26	/	148	143,4	315
3	FJMDLAMINITIXA3	/	27,4	/	156	151,2	351
4	FJMDLAMINITIXA4	/	28,8	/	164	158,9	375

Taille	Reference	Size mm Pince/ toe	Branche/ branch	Talon/ heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
2x0	FJMDLAMINITIXP2X0	/	22,5	/	130	120	240
0	FJMDLAMINITIXP0	/	23,9	/	135	130	255
1	FJMDLAMINITIXP1	/	25	/	145	140	295
2	FJMDLAMINITIXP2	/	26	/	150	145	315
3	FJMDLAMINITIXP3	/	27,4	/	155	150	351
4	FJMDLAMINITIXP4	/	28,8	/	165	160	375

## LAMINITIX®

### front

Model designed by Professor Jean-Marie Denoix.  
Heart bar shoe with open toe. Wide rear surface that runs under the heels and provides ground bearing surface on the frog. Front shape.  
Made from hi-tech aluminium alloy.  
Non-tempered alloy: can be used for risk-free hot shoeing up to 450°C. 2 lateral clips.  
Thickness 12 mm.

### PRINCIPLE AND INTERACTION WITH THE GROUND

Bar-shoe with transversal piece providing wide ground bearing surface surface to support the rear part of the foot.  
Frog ground bearing surface to support the foot under the frog.  
No ground bearing surface in the toex. The toe opening provides an access to treat sole necrosis.  
Injecting hard silicon (MV2-50A) in the foot's rear provides better load distribution on the cross piece.

### BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS

Transfers weight-bearing to the rear of the foot.  
Supports the distal phalanx.  
Eliminates painful ground bearing surface of the toe and minimises dorsal compression of the coronary chorion.

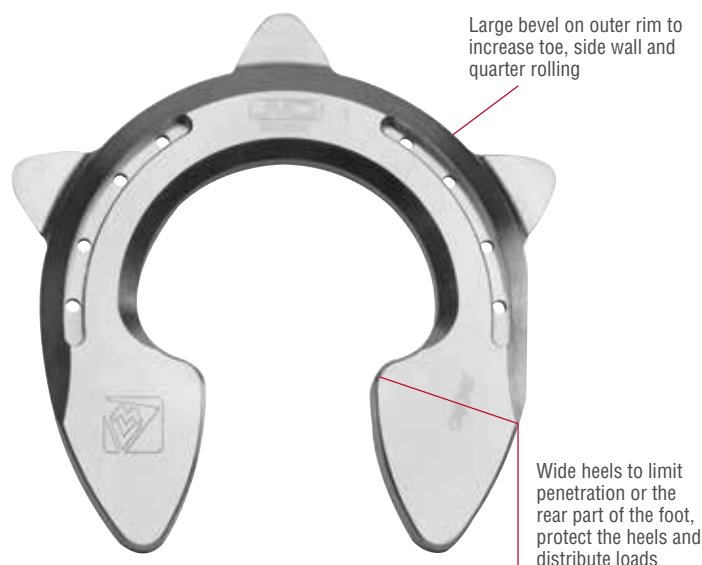
### INDICATIONS

Symptomatic chronic laminitis, provided the horse can be shod.  
For moderate to medium lesions: shoeing only.  
For medium to severe lesions: use in combination with Dondolino (the evening in the box).

## LAMINITIX®

### hind

Model designed by Professor Jean-Marie Denoix.  
Heart bar shoe with open toe. Wide rear surface that runs under the heels and provides ground bearing surface on the frog. Hind shape.  
Made from hi-tech aluminium alloy.  
Non-tempered alloy: can be used for risk-free hot shoeing up to 450°C. 2 lateral clips.  
Thickness 12 mm.



Taille	Reference	Size mm Pince/ toe	Branche/ branch	Talon/ heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
3x0	FJMDONIONIXA3X0	23,8	23,6	39,9	121	121	165
2x0	FJMDONIONIXA2X0	25,2	25	42,2	128	128	187
0	FJMDONIONIXA0	26,8	26,5	44,2	136	136	207
1	FJMDONIONIXA1	28	27,7	46,4	142	142	228
2	FJMDONIONIXA2	29,1	28,9	48,2	148	148	247
3	FJMDONIONIXA3	30,7	30,4	52,6	156	156	265
4	FJMDONIONIXA4	32,3	32	56,3	164	164	305

Taille	Reference	Thickness Epaisseur	Size mm Pince/ toe	Branche/ branch	Talon étroit / heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
2	FJMDONIONIX-PSA2	8	17,6	18,9	32,5	113	105,5	81
3	FJMDONIONIX-PSA3	8	18,2	19,6	33,8	117	109,2	88
4	FJMDONIONIX-PSA4	8	19,3	20,8	36,5	124	115,7	108
5	FJMDONIONIX-PSA5	8	20	21,5	37,9	128	119,5	113
6	FJMDONIONIX-PSA6	8	20,7	22,3	39,1	133	124,1	122
7	FJMDONIONIX-PSA7	8	21,5	23,1	40,8	138	128,8	139
4	FJMDONIONIX-PSA4-10	10	19,3	20,8	36,5	124	115,7	145
5	FJMDONIONIX-PSA5-10	10	20	21,5	37,9	128	119,5	155
6	FJMDONIONIX-PSA6-10	10	20,7	22,3	39,1	133	124,1	175
7	FJMDONIONIX-PSA7-10	10	21,5	23,1	40,8	138	128,8	180

## ONIONIX®

### front

Model designed by Professor Jean-Marie Denoix.

Shoe with large heels providing increased ground bearing surface at heels. Front shape.

Made from hi-tech aluminium alloy. Non-tempered alloy: can be used for risk-free hot shoeing up to 450°C. 3 clips to allow use with option of 1 or 2 clips. Thickness 10 mm.

## ONIONIX®PS

### front for race horses (thoroughbred)

Model designed by Professor Jean-Marie Denoix.

Model for thoroughbreds.

Shoe with onion providing increased load-bearing surface at heels. Front shape. Made from hi-tech aluminium alloy.

Non-tempered grade: can be used for risk-free hot shoeing up to 450°C. 3 clips to allow use with option of 1 or 2 clips. Thickness 8 or 10 mm for wear resistance.

### PRINCIPLE AND INTERACTION WITH THE GROUND

Wide surface in contact with foot and large heels to distribute loads. Limited heel penetration on compacted and penetrable grounds. Protects bars and heels. Distributes loads. Large bevel on outer rim to increase rolling.

### BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS

Reduces the stresses on the navicular bone and the deep digital flexor tendon. Generally, reduces the stress on the suspensory apparatus. Reduces pressure and increases heel comfort.

### INDICATIONS

Grade 1 navicular syndrome. Deep digital flexor tendon or carpal canal pathologies. Sensitive heels, heel abscesses, bruising.

## ALUMINIUM SHOES DATA SHEETS

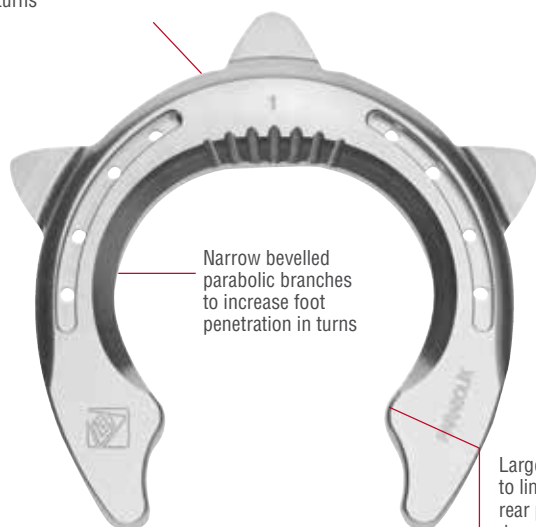
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Bevel at toe, side walls and quarters to reduce stresses during propulsion in straight lines and turns



Narrow bevelled parabolic branches to increase foot penetration in turns

Large surface at heel to limit penetration of foot's rear part. Ergonomic design to accommodate frog morphology

Square toe allowing the shoe to be set back from the toe and to reduce front lever arm. Also reduces risks of front shoe loss through overreaching



Toe profile designed to optimise propulsion. Large surface to provide more ground bearing surface on soft surfaces. Wide groove to provide grip

Taille	Reference	Size mm Pince/ toe	Branch/ branch	Talon/ heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
3x0	FMVPARABOLIXA3X0	26,4	20,4	26,4	121	121	145
2x0	FMVPARABOLIXA2X0	27,9	21,6	27,9	128	128	161
0	FMVPARABOLIXA0	30	23,6	30	136	136	186
1	FMVPARABOLIXA1	31	23,9	31	142	142	195
2	FMVPARABOLIXA2	32	26	32	148	148	215
3	FMVPARABOLIXA3	33	26	33	156	156	236
4	FMVPARABOLIXA4	35,8	27,6	35,8	164	164	264

Taille	Reference	Size mm Pince/ toe	Branch/ branch	Talon étroit / heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
3x0	FMVPARABOLIXP3X0	25,8	21,5	25,8	117	118,7	142
2x0	FMVPARABOLIXP2X0	27,1	22,6	27,1	123	124,8	158
0	FMVPARABOLIXP0	28,4	23,7	28,4	129	130,9	170
1	FMVPARABOLIXP1	30	25	30	136	138	189
2	FMVPARABOLIXP2	31,3	26	31,3	142	144	209
3	FMVPARABOLIXP3	32,4	27	32,4	147	149,1	221
4	FMVPARABOLIXP4	33,7	28,1	33,7	153	155,2	240

## PARABOLIX®

### front

Shoe with parabolic surface area: wide surface at toe, narrow on branches, wide at heels.

Made from hi-tech aluminium alloy. Non-tempered alloy : can be used for risk-free hot shoeing up to 450°C. 3 clips to allow use with option of 1 toe clip or 2 lateral clips.

Thickness 10 mm.

### PRINCIPLE AND INTERACTION WITH THE GROUND

Large surface area at toe to protect the front of the foot and balance penetration between the toe and heels on compacted and penetrable grounds. Narrow branches to facilitate the foot's lateral or medial penetration on turns on compacted and penetrable grounds.

Large surface at heels to limit penetration of rear of foot on compacted and penetrable grounds.

Bevelled outer rim at toe, side walls and quarters to increase rolling on straight lines and turns.

### BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS

Generally, reduces stress on podotrochlear apparatus. Reduces collateromotion movements.

## PARABOLIX®

### hind

Shoe with parabolic surface area: wide surface at toe, narrow on branches, wide at heels.

Made from hi-tech aluminium alloy. Non-tempered alloy: can be used for risk-free hot shoeing up to 450°C. 2 lateral clips.

Thickness 10 mm.

### INDICATIONS

Preventive sport shoe made to optimize comfort and performance whilst reducing stresses, notably in turns.

- Sport horses involved in disciplines which require short and repeated turns.
- Horses with flat feet. Horses with weak heels.

# PHR

## front

Developed with Pierre-Henri Renault, farrier on CSI 5\*

Shoe with a wide cover, a double bevel all around the shoe and a bevel on the inner rim. Front shape.

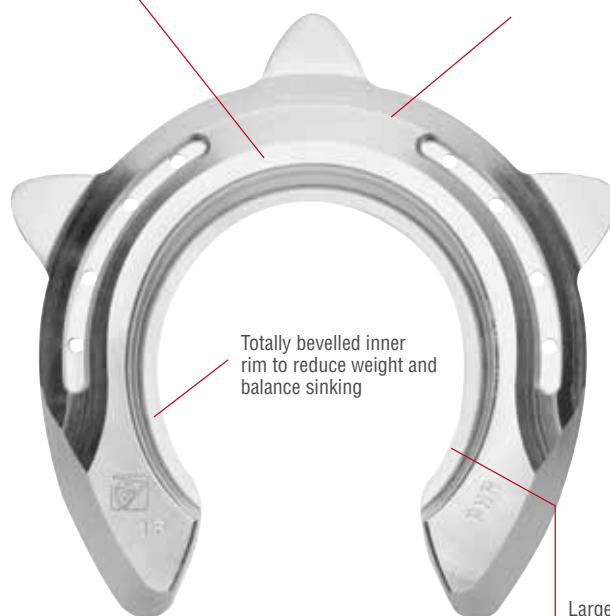
Made from hi-tech aluminium alloy.

Non-tempered alloy : can be used for risk-free hot shoeing up to 450°C. 3 clips to allow use with option of 1 or 2 clips.

Thickness limited to 12 mm.

Narrow ground bearing surface which is closer to the center of the foot in order to reduce lever arm

Double bevel all over shoe for maximum promotion of rolling in all directions



Totally bevelled inner rim to reduce weight and balance sinking

Large surface to ensure foot comfort and protection

Taille	Reference	Size mm Pince/ toe	Branche/ branch	Talon/ heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
3x0	FMVPHRA3X0	28,1	28,1	28,1	121	121	160
2x0	FMVPHRA2X0	29,7	29,7	29,7	128	128	179
0	FMVPHRA0	31,6	31,6	31,6	136	136	195
1	FMVPHRA1	33	33	33	142	142	214
2	FMVPHRA2	34,3	34,3	34,3	148	148	226
3	FMVPHRA3	36,2	36,2	36,2	156	156	252
4	FMVPHRA4	38,1	38,1	38,1	164	164	310

## PRINCIPLE AND INTERACTION WITH THE GROUND

Wide coverage in contact with the foot to distribute loads and protect the sole. Narrow ground bearing surface which is closer to the center of the foot in order to reduce front, medial and lateral lever arm. Designed with a double bevel all around the shoe in order to promote maximum rolling in all directions.

Totally bevelled inner rim to reduce weight and to balance sinking into soft grounds between toe and heels.

## BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS

- Reduces joint stresses in particular on distal and proximal interphalangeal joints.
- Reduces collateromotion and rotation movements and stresses on collateral ligaments.

## INDICATIONS

Sport shoe made to optimize comfort and performance whilst reducing stresses, particularly on joints.

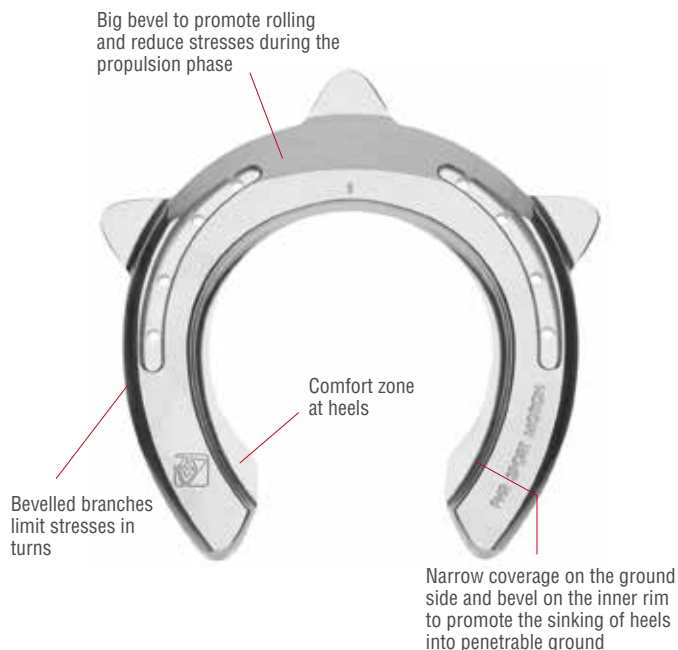
## ALUMINIUM SHOES DATA SHEETS

1

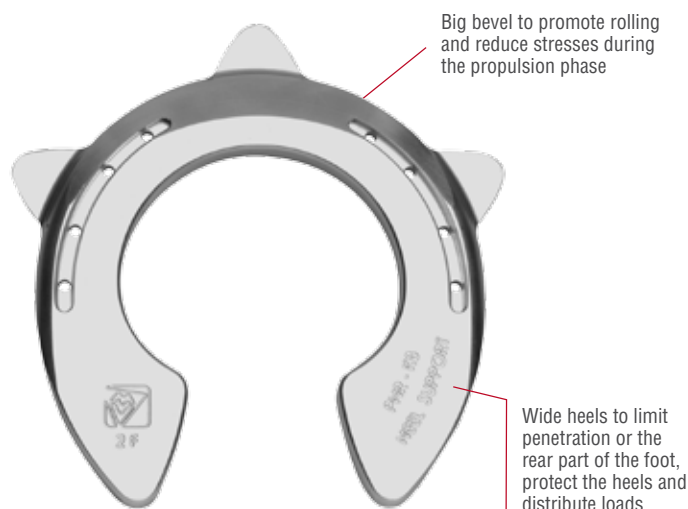
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Taille	Reference	Size mm Pince/ toe	Branches/ branch	Talon/ heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
3x0	FMVPHRSPTMOTIONA3X0	25,5	23	23	121	121	139
2x0	FMVPHRSPTMOTIONA2X0	27	24,3	24,3	128	128	156
0	FMVPHRSPTMOTIONA0	28,7	25,8	25,8	136	136	178
1	FMVPHRSPTMOTIONA1	30	27	27	142	142	195
2	FMVPHRSPTMOTIONA2	31,2	28,1	28,1	148	148	208
3	FMVPHRSPTMOTIONA3	32,9	29,6	29,6	156	156	233
4	FMVPHRSPTMOTIONA4	34,6	31,1	31,1	164	164	263



Taille	Reference	Size mm Pince/ toe	Branches/ branch	Talon/ heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
3x0	FMVPHRKBHEELA3X0	23	22,8	33,9	121	121	158
2x0	FMVPHRKBHEELA2X0	24,3	24,1	35,7	128	128	177
0	FMVPHRKBHEELA0	25,8	25,8	38,7	136	136	201
1	FMVPHRKBHEELA1	27	26,7	40,9	142	142	220
2	FMVPHRKBHEELA2	28,1	27,9	42	148	148	240
3	FMVPHRKBHEELA3	29,6	29,4	45,1	156	156	266
4	FMVPHRKBHEELA4	31,8	30,9	47,7	164	164	294

## PHR SPORT MOTION

### front

Developed with Pierre-Henri Renault, farrier on CSI 5\*

Shoe specifically developed for show jumping. Designed to suit with the majority of horses involved in this discipline. Big bevel on the toe and toe quarters. Bevel on the inner rim.

Front shape. Made from hi-tech aluminium alloy. Non-tempered grade: can be used for risk-free hot shoeing up to 450°C. 3 clips to allow use with option of 1 or 2 clips. Thickness 10 mm.

### PRINCIPLE AND INTERACTION WITH THE GROUND

- Foot side : wide coverage to distribute loads. Enlarged surface under the heels for more comfort and protection.
- Ground side : narrow coverage on branches and bevel on the inner rim to promote the sinking of heels into penetrable and compacted ground.
- Strongly bevelled outer rim on the toe and the side walls to promote rolling.

### BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS

- Reduces joint stresses in particular on distal and proximal interphalangeal joints.
- Reduces stresses on the suspensory ligament and on the superficial digital flexor tendon. Reduces general stress on the fetlock joint and the suspensory apparatus.

### INDICATIONS

Sport shoe made to optimize comfort and performance while reducing stresses, particularly on distal joints and on the suspensory apparatus. Recommended to prevent fetlock joint pathologies on show jumping horses moving on the very compacted grounds of modern arenas.

## PHR KB HEEL SUPPORT

A low cost shoe - Alumix (please see p34)

### front

Developed with Pierre-Henri Renault and Kenan Burgaud

Shoe with large heels providing increased ground bearing surface at heels. Large bevel on side wall.

Front shape. Made from hi-tech aluminium alloy. Non-tempered grade: can be used for risk-free hot shoeing up to 450°C. 3 clips to allow use with option of 1 or 2 clips. Thickness 10 mm.

### PRINCIPLE AND INTERACTION WITH THE GROUND

- Wide surface in contact with foot and large heels to distribute loads. Limited heel penetration on compacted and penetrable grounds.
- Protects bars and heels. Distributes loads.
- Large bevel on side wall to increase rolling.

### BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS

- Reduces joint stresses in particular on distal and proximal interphalangeal joints.
- Reduces stress on podotrochlear apparatus.
- Reduces pressure and increases heel comfort.

### INDICATIONS

Sport shoe made to optimize comfort and performance while reducing stresses, particularly on distal joints. Sensitive heels.

- Horses with flat feet. Horses with weak heels. Horseshoe model particularly adapted to French saddlebred which often got flat feet and low heels



# Pad GRANDPAS

Developed with Philippe Grandjean, farrier, and Sébastien Pasca, veterinarian.

Plate shoe with integrated profiled aluminium cross piece intended to change a horse's gait to provide better prevention and greater comfort.

Each model can be adapted to 3 shoe sizes.

Thickness: 3 mm (small size) or 4 mm (Large size).



Shoe with Grandpas plate.



Profiled crosspiece.  
Dimensions can be adapted in  
width by grinding (according  
to the shoe size) or to create  
asymmetric ground bearing  
surface

Taille	Reference	Largeur/ Width	Longueur/ Length	Épaisseur/ Thickness	1 shoe Weight g
3x0 à 0	PLAQUEMVG/GRANDPAS0	140	140	3	150
1 à 3	PLAQUEMVG/GRANDPAS3	160	160	4	250

## PRINCIPLE AND INTERACTION WITH THE GROUND

Aluminium plate with a raised cross piece cut from a block. It should be opened in a V at the level of the caudal third of the frog. This ensures that the sole is fully protected. When combined with a parabolic shoe, it regenerates the ground bearing surface surfaces of the unshod foot, which are essential to optimise the gait, and provides comfortable ground bearing surface during the rest phase: small ground bearing surface surface at heels, cross piece providing a progressive increase in the ground bearing surface surface area, good surface area at toe ensuring a starting block effect during propulsion.

Asymmetric ground bearing surface can be obtained by grinding away part of the width of the cross piece.

The sole's concave cavity must be filled by silicon with very low hardness: type MV2-10 shore A.

## BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS

It allows a return to a natural gait by facilitating:

- Heel penetration
- Heel expansion work thanks to their load being born on the plate's smooth surface which also ensures good blood circulation and good support for the phalange,
- Progressive return to normal foot contact with the ground,
- Forward rotation facilitated by the presence of the cross piece which reduces loads on the deep digital flexor tendon.
- Elimination of all solar pressure and freeing of the caudal third of the frog which improves proprioception.

The plate provides support surfaces without increasing lever arm.

Allows good energy conservation and recovery during stride.

## INDICATIONS

Curative and preventive role because of the comfort that it provides. Especially well-suited to horses at risk or which already have navicular syndrome. Highly effective for club foot or asymmetric ground bearing surface. Especially recommended for horses that place their foot on the toe or side wall, that stumble or that have feet with sensitive soles.

## ALUMINIUM SHOES DATA SHEETS

1

2

3

4



Big bevel on the outer rim to promote rolling

Rocking : bevel on the rear of the outer rim to reduce rear lever arm

Wide rear bearing surface to increase support and limit sinking of heels



Offset holes to facilitate shoe forging and shaping

Taille	Reference	Size mm Pince/ toe	Branch/ branch	Talon/ heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
3x0	FMVROCKINGSUPPORTA3X0	23,8	21,3	29,8	121	138,8	178
2x0	FMVROCKINGSUPPORTA2X0	25,2	22,5	31,5	128	146,9	191
0	FMVROCKINGSUPPORTA1	27	24	34	136	157	226
1	FMVROCKINGSUPPORTA0	28	25	35	142	163	235
2	FMVROCKINGSUPPORTA2	29	26	36	148	168	275
3	FMVROCKINGSUPPORTA3	30,7	27,4	38,4	156	179	305
4	FMVROCKINGSUPPORTA4	31	28	38	164	184	315

Taille	Reference	Size mm Pince/ toe	Branch/ branch	Talon/ heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
3x0	FMVROCKINGSUPPORTP3X0	24	21,5	30,1	121	135,7	175
2x0	FMVROCKINGSUPPORTP2X0	25,3	22,6	31,6	128	141,9	200
0	FMVROCKINGSUPPORTP0	26,5	23,7	33,2	136	148,9	213
1	FMVROCKINGSUPPORTP1	28	25	35	142	157	237
2	FMVROCKINGSUPPORTP2	29,2	26,1	36,5	148	163,9	250
3	FMVROCKINGSUPPORTP3	30,2	27	37,8	156	169,7	270
4	FMVROCKINGSUPPORTP4	31,5	28,1	39,3	164	176,6	295

## ROCKING SUPPORT

### front

Egg bar shoe where the rear ground bearing surface surface is behind the heels and frog. Front shape.

Made from hi-tech aluminium alloy. Non-tempered alloy: can be used for risk-free hot shoeing up to 450°C. 3 clips to allow use with option of 1 toe clip or 2 lateral clips. Thickness 10 mm.

### PRINCIPLE AND INTERACTION WITH THE GROUND

Bevelled outer rim at rear to reduce the rear lever arm and limit the 'snowshoe' effect during the foot-landing phase.  
Large bevel on the outer rim to increase rolling at toe, side walls and quarters.  
Wide rear ground bearing surface cross piece to increase support and limit heel penetration on compacted and penetrable grounds.  
Pierced cross piece with offset holes to facilitate shoe transformation when a narrower or wider shape is required.

## ROCKING SUPPORT

### hind

Egg bar shoe where the rear ground bearing surface surface is behind the heels and frog. Rear shape.

Made from hi-tech aluminium alloy. Non-tempered grade: can be used for risk-free hot shoeing up to 450°C. 2 lateral clips. Thickness 10 mm.

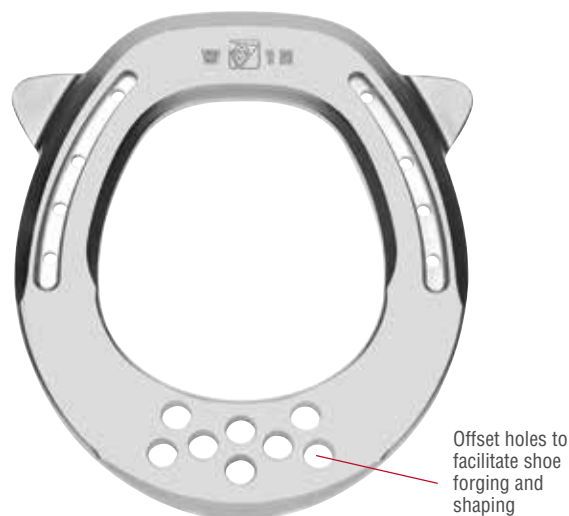
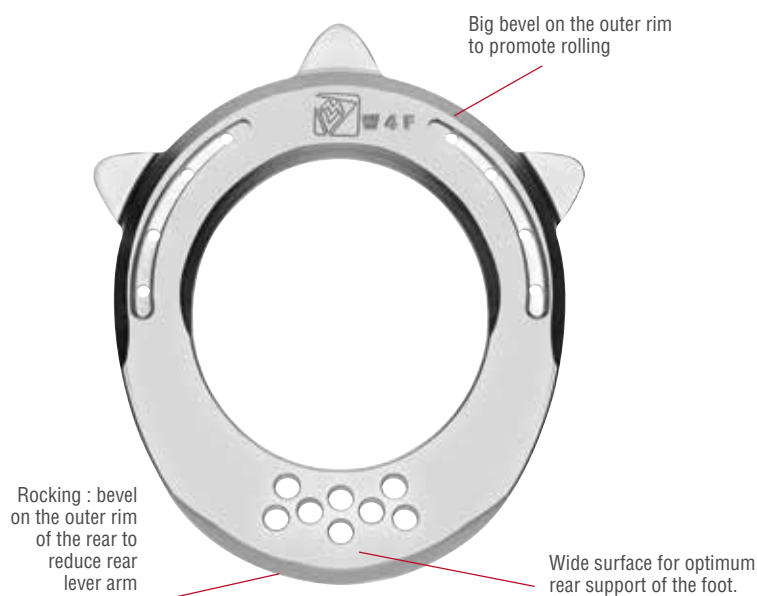
### BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS

Reduces stresses during propulsion in straight lines and turns. Reduces stresses on the distal sesamoid bone and on the deep digital flexor tendon. Reduces general stress on the podotrochlear apparatus.

### INDICATIONS

**FRONT** Grade 2 navicular syndrome. Lesions of the deep digital flexor tendon or its accessory ligament (distal check ligament).

**REAR** Grade 2 navicular syndrome. Deep digital flexor tendon pathologies. Foot stabilisation during propulsion. Instability of the point of the hock.



Taille	Reference	Size mm Pince/ toe	Branche/ branch	Talon/ heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
3x0	FMWROCKINGSUPPORTA3X0	24	21,3	30,2	121	139,6	220
2x0	FMWROCKINGSUPPORTA2X0	25,4	22,5	32	128	147,7	233
0	FMWROCKINGSUPPORTA0	27	24	34	136	157	272
1	FMWROCKINGSUPPORTA1	28,1	25	35,5	142	163,9	300
2	FMWROCKINGSUPPORTA2	29,3	26,1	37	148	170,8	320
3	FMWROCKINGSUPPORTA3	30,7	27,4	38,4	156	179	350
4	FMWROCKINGSUPPORTA4	32,5	28,9	41	164	189,3	365

Taille	Reference	Size mm Pince/ toe	Branche/ branch	Talon/ heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
3x0	FMWROCKINGSUPPORTP3X0	24	21,5	30,1	121	135	176
2x0	FMWROCKINGSUPPORTP2X0	25,3	22,6	31,6	128	141,9	200
0	FMWROCKINGSUPPORTP0	26,5	23,7	33,2	136	148	223
1	FMWROCKINGSUPPORTP1	28	25	35	142	157	255
2	FMWROCKINGSUPPORTP2	29,2	26,1	36,5	148	163,9	286
3	FMWROCKINGSUPPORTP3	30,2	27	37,8	156	169,7	305
4	FMWROCKINGSUPPORTP4	31,5	28,1	39,3	164	176,6	347

## ROCKING SUPPORT W

### wedged front

Egg bar shoe. 2,55° wedge rear bearing surface beyond the heels and the frog. Front shape.

Made from hi-tech aluminium alloy. Non-tempered alloy : can be used for risk-free hot shoeing up to 450°C.

3 clips for use either with 1 toe clip or 2 lateral clips.

Thickness: 14 mm at rear and 9 mm at toe.

## ROCKING SUPPORT W

### wedged hind

Egg bar shoe with 2° compensation.

Rear ground bearing surface behind the heels and frog.

Rear shape. Made from hi-tech aluminium alloy. Non-tempered alloy: can be used for risk-free hot shoeing up to 450°C. 2 lateral clips Thickness: 14 mm at rear and 8 mm at toe.

### PRINCIPLE AND INTERACTION WITH THE GROUND

- Wide rear bearing surface to increase support and limit the sinking of heels into penetrable and compacted ground. Perforated rear support with holes in staggered rows for easy shaping.
- Bevel on the outer rim of the rear (rocking) to reduce rear lever arm.
- Big bevel on the outer rim to promote rolling of the toe and quarters.
- Wedge shoe to raise the heels.

### BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS

Reduces stresses on the distal sesamoid bone and on the deep digital flexor tendon.  
Reduces general stress on the podotrochlear apparatus.

### INDICATIONS

Podotrochlear syndrome grade 3.5 (between reverse shoe grade 3 and wedge reverse shoe grade 4). Pathology of the deep digital flexor tendon and accessory ligament (distal check ligament).  
Wedge shoes should be reserved for old horses and/or at the end of the competition career because they can cause tendons retractions.

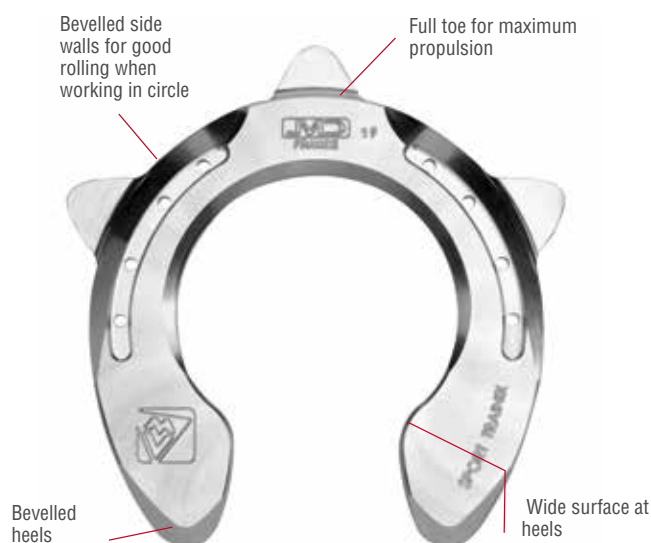
## ALUMINIUM SHOES DATA SHEETS

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Taille	Reference	Size mm Pince/ toe	Branches/ branch	Talon/ heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
3x0	FJMDSPORTTRAINIXA3X0	21,3	23	31,5	121	121	155
2x0	FJMDSPORTTRAINIXA2X0	22,5	24,3	33,9	128	128	173
0	FJMDSPORTTRAINIXA0	23,9	25,8	36,7	136	136	197
1	FJMDSPORTTRAINIXA1	25	27	38,6	142	142	205
2	FJMDSPORTTRAINIXA2	26	28,1	40,9	148	148	213
3	FJMDSPORTTRAINIXA3	27,4	29,6	43,9	156	156	248
4	FJMDSPORTTRAINIXA4	28,8	31,1	46,1	164	164	278

## SPORT TRAINIX

### front

Model designed by Professor Jean-Marie Denoix.

Aluminium competition and training shoe intended for use by healthy horses. No rolling at toe to provide maximum propulsion. Bevel at side walls.

Increased heel support provided by large onion heels. Bevelled heels. Front shape. Made from hi-tech aluminium alloy with high mechanical strength. Non-tempered alloy : can be used for hot or cold shoeing (up to 450°C) without loss of hardness. 3 clips for use either with 1 toe clip or 2 lateral clips. Thickness 10 mm.

### PRINCIPLE AND INTERACTION WITH THE GROUND

Shoe for healthy horses.

Toe with maximum propulsion.

No rolling at toe because it reduces performance and propulsion. Bevelled only on side walls to facilitate rolling when working in circle.

A healthy horse is never lame when moving in a straight line but can be uncomfortable on a hard circle.

Collateromotion and rotation cause more pain than extension. Horses have greater need for a bevel on the side walls than at the toe.

Enlarged heels, small onion heels for better load distribution for horses with tendency for weak heels but also adequate support for a shoe plate if required.

The heels are bevelled to reduce impact shock and provide better shock absorption on landing.

### BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS

Increases propulsion with a non-bevelled toe on horses free of extension problems. Reduces stresses in collateromotion and rotation.

Supports the foot's rear if predisposition to fragile and under-run/low heels.

### INDICATIONS

Sport and training shoe enhancing performance thanks to maximum propulsion whilst preventing and relieving traumatism when working in circle.



Taille	Reference	Size mm Pince/ toe	Branches/ branch	Talon/ heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
2x0	FJMDTRAINIXTRA2X0	18,5	18,5	18,5	120,2	125	106,4
0	FJMDTRAINIXTRA0	19,2	19,2	19,2	125	130	110,8
1	FJMDTRAINIXTRA1	20	20	20	129,8	135	115,4
1,5	FJMDTRAINIXTRA1,5	20,7	20,7	20,7	134,6	140	128,3
2	FJMDTRAINIXTRA2	21,5	21,5	21,5	139,8	145,3	133,2
3	FJMDTRAINIXTRA3	22,3	22,3	22,3	144,7	150,5	137,8

## TRAINIX TR

### mixed shape for race horses (trotter)

Modèle dessiné par le Pr. Jean-Marie Denoix.

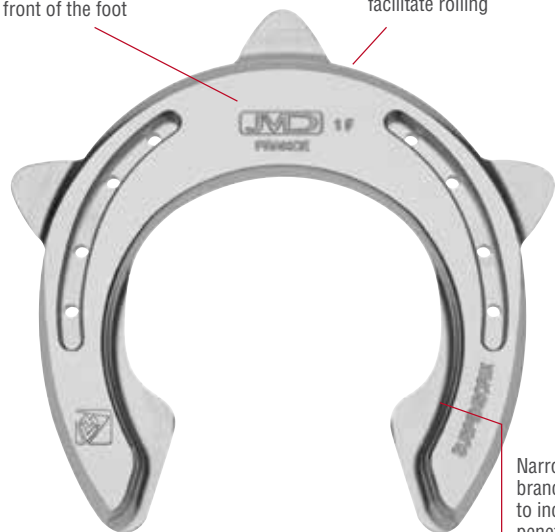
Shoe for race horses (trotter). No clip. No rolling at toe to provide maximum propulsion. Bevel at side walls. Bevelled heels.

Mixed shape can be used for front or rear feet.

Bevelled heels. Front shape. Made from hi-tech aluminium alloy with high mechanical strength. Non-tempered alloy : can be used for hot or cold shoeing (up to 450°C) without loss of hardness. Thickness 8 mm.

Wide surface at toe to  
limit penetration of the  
front of the foot

Bevelled outer rim to  
facilitate rolling



Narrow bevelled  
branches  
to increase  
penetration  
of the rear of the  
foot



Comfort zone at heels

Taille	Reference	Size mm Pince/ toe	Branch/ branch	Talon étroit / heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
3x0	FJMDSUSPENSORIXA3X0	29,8	21,3	21,3	121	121	144
2x0	FJMDSUSPENSORIXA2X0	31,5	22,5	22,5	128	128	163
0	FJMDSUSPENSORIXA0	33,5	23,9	23,9	136	136	184
1	FJMDSUSPENSORIXA1	35	25	25	142	142	191
2	FJMDSUSPENSORIXA2	36,4	26	26	148	148	209
3	FJMDSUSPENSORIXA3	38,4	27,4	27,4	156	156	227
4	FJMDSUSPENSORIXA4	40,4	28,8	28,8	164	164	265

Taille	Reference	Size mm Pince/ toe	Branch/ branch	Talon étroit / heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
3x0	FJMDSUSPENSORIXP3X0	30,1	22	22	117	118,7	138
2x0	FJMDSUSPENSORIXP2X0	31,6	23,1	23,1	123	124,8	154
0	FJMDSUSPENSORIXP0	33,2	24,4	24,4	130,9	129	173
1	FJMDSUSPENSORIXP1	35	25,5	25,5	136	138	191
2	FJMDSUSPENSORIXP2	36,5	26,6	26,6	142	144	207
3	FJMDSUSPENSORIXP3	37,8	27,6	27,6	147	149,1	220
4	FJMDSUSPENSORIXP4	39,3	28,7	28,7	153	155,2	238

## SUSPENSORIX®

front

Model designed by Professor Jean-Marie Denoix.

Shoe with wide toe and narrow bevelled branches. Designed using hi-tech aluminium alloy. Non-tempered alloy: can be used for risk-free hot shoeing up to 450°C. 3 clips to allow use with option of 1 or 2 clips.  
Thickness 10 mm.

### PRINCIPLE AND INTERACTION WITH THE GROUND

On compacted and penetrable grounds:  
Large anterior ground bearing surface to limit toe penetration.  
Narrow bevelled branches to increase heel penetration.  
Enlarged surface in contact with foot at heels for greater comfort.  
Slightly bevelled outer rim at toe to facilitate rolling.

### BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS

Reduces stresses on the suspensory ligament and on the superficial digital flexor tendon. Reduces general stress on the suspensory apparatus (suspensory ligament, proximal scutum, straight and oblique sesamoidean ligaments).

## SUSPENSORIX®

hind

Model designed by Professor Jean-Marie Denoix.

Shoe with wide toe and narrow bevelled branches. Designed using hi-tech aluminium alloy. Non-tempered grade: can be used for risk-free hot shoeing up to 450°C. 2 clips.  
Thickness 10 mm.

### INDICATIONS

Desmopathy of the suspensory ligament.  
Pathology of the superficial digital flexor tendon.  
Desmopathy of the sesamoidean ligaments (straight and oblique).  
Arthrosis of the fetlock joint.





Taille	Reference	Thickness Epaisseur	Size mm Pince/ toe	Branche/ branch	Talon étroit / heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
2	FJMDSUSPENSORIX-PSA2	8	24,7	15,8	15,8	113	105,5	81
3	FJMDSUSPENSORIX-PSA3	8	25,5	16,4	16,4	117	109,2	90
4	FJMDSUSPENSORIX-PSA4	8	27,1	17,4	17,4	124	115,7	96
5	FJMDSUSPENSORIX-PSA5	8	28	18	18	128	119,5	104
6	FJMDSUSPENSORIX-PSA6	8	29	18,7	18,7	133	124,1	115
7	FJMDSUSPENSORIX-PSA7	8	30,1	19,4	19,4	138	128,8	125
4	FJMDSUSPENSORIX-PSA4-10	10	27,1	17,4	17,4	124	115,7	125
5	FJMDSUSPENSORIX-PSA5-10	10	28	18	18	128	119,5	135
6	FJMDSUSPENSORIX-PSA6-10	10	29	18,7	18,7	133	124,1	150
7	FJMDSUSPENSORIX-PSA7-10	10	30,1	19,4	19,4	138	128,8	160
8	FJMDSUSPENSORIX-PSA8-10	10	31,5	20,25	20,25	142	134,4	165

Taille	Reference	Size mm Pince/ toe	Branche/ branch	Talon étroit / heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
2	FJMDSUSPENSORIX-PSP2	24,7	15,8	15,8	108	106,2	72
3	FJMDSUSPENSORIX-PSP3	25,5	16,4	16,4	112	110,1	77
4	FJMDSUSPENSORIX-PSP4	27,1	17,4	17,4	118	116,8	89
5	FJMDSUSPENSORIX-PSP5	28	18	18	123	121	100
6	FJMDSUSPENSORIX-PSP6	29	18,7	18,7	128	125,9	106
7	FJMDSUSPENSORIX-PSP7	30,1	19,4	19,4	133	130,8	115

## SUSPENSORIX®PS

front for race horses (thoroughbred)

## SUSPENSORIX®PS

hind for race horses (thoroughbred)

Model designed by Professor Jean-Marie Denoix.

Model for thoroughbreds. Shoe with wide toe and narrow bevelled branches. Front or rear shapes. Made from hi-tech aluminium alloy. Non-tempered alloy: can be used for risk-free hot shoeing up to 450°C. 3 clips to allow use with option of 1 or 2 clips. Thickness 8 mm (or 10 mm in front for wear resistance).

### PRINCIPLE AND INTERACTION WITH THE GROUND

On compacted and penetrable grounds:  
Large anterior ground bearing surface limits toe penetration.  
Narrow bevelled branches to increase heel penetration.  
Enlarged surface in contact with foot at heels for greater comfort.  
Slightly bevelled outer rim at toe to facilitate rolling.

### BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS

Reduces stresses on the suspensory ligament and on the superficial digital flexor tendon.  
Reduces general stress on the suspensory apparatus (suspensory ligament, proximal scutum, straight and oblique sesamoidean ligaments).

### INDICATIONS

For race horses.  
Desmopathy of the suspensory ligament.  
Pathology of the superficial digital flexor tendon. Desmopathy of the sesamoidean ligaments (straight and oblique).  
Arthrosis of the fetlock joint.

# SUSPENSORIX®TR

mixed shape for race horses (trotter)

Model designed by Professor Jean-Marie Denoix.

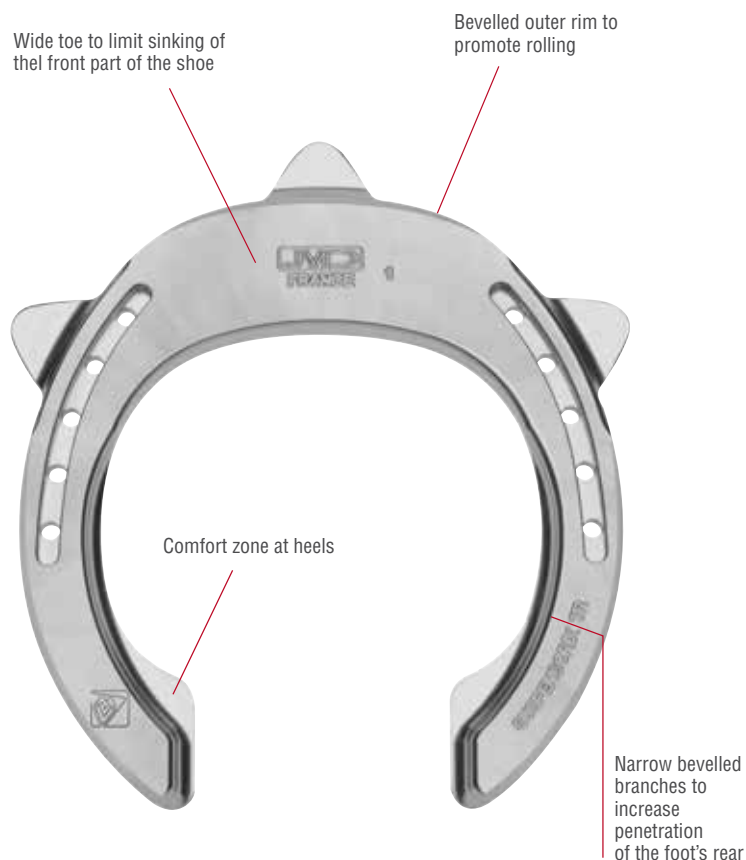
Shoe for race horses (trotter) with wide toe and narrow bevelled branches.

Mixed shape that can be used for front or rear feet.

Made from hi-tech aluminium alloy.

Non-tempered alloy: can be used for risk-free hot shoeing up to 450°C. 3 lateral clips.

Thickness 8 mm.



Taille	Reference	Size mm Pince/ toe	Branch/ branch	Talon étroit / heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
2x0	FJMSUSPENSORIX-TR2X0	27,6	16,3	16,3	120,2	125	106
0	FJMSUSPENSORIX-TR0	28,8	17	17	125	130	114
1	FJMSUSPENSORIX-TR1	30	17,65	17,65	129,8	135	118
2	FJMSUSPENSORIX-TR2	31	19	19	139,8	145,3	140
3	FJMSUSPENSORIX-TR3	32,1	19,6	19,6	144,7	150,5	145

## PRINCIPLE AND INTERACTION WITH THE GROUND

On compacted and penetrable grounds:  
Large anterior ground bearing surface to limit toe penetration.  
Narrow bevelled branches to increase heel penetration.  
Enlarged surface in contact with foot at heels for greater comfort.  
Slightly bevelled outer rim at toe to facilitate rolling.

## BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS

Reduces stresses on the suspensory ligament and on the superficial digital flexor tendon.  
Reduces general stress on the suspensory apparatus (suspensory ligament, proximal scutum, straight and oblique sesamoidean ligaments).

## INDICATIONS

For race horses (trotters) (standar bredes).  
Desmopathy of the suspensory ligament.  
Pathology of the superficial digital flexor tendon. Desmopathy of the sesamoidean ligaments (straight and oblique).  
Arthrosis of the fetlock joint.

# SUSPENSOR ONIONIX®

## hind

Model designed by Professor Jean-Marie Denoix.

Shoe with wide toe and wide double bevel to allow the ground bearing surface centre to be set back (reducing digital lever arm).

Shoe with large onion and greatly increased surface at heels. Rear shape.

Made from hi-tech aluminium alloy with high mechanical strength. Non-tempered alloy : can be used for hot or cold shoeing (up to 450°C) without loss of hardness. 2 lateral clips.

Thickness 10 mm.



Taille	Reference	Size mm Pince/ toe	Branche/ branch	Talon droit / heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
3x0	FJMDSUSPENSORONIONIXP3X0	25,8	20	39	113,8	119	160
2x0	FJMDSUSPENSORONIONIXP2X0	27,1	21	41	119,5	125	170
0	FJMDSUSPENSORONIONIXP0	28,4	22,3	43	125,3	131	187
1	FJMDSUSPENSORONIONIXP1	30	23,5	45,6	132	138	208
2	FJMDSUSPENSORONIONIXP2	31,3	24,5	48,2	137,7	144	228
3	FJMDSUSPENSORONIONIXP3	33	25,9	51,4	145,4	152	252
4	FJMDSUSPENSORONIONIXP4	33,9	26,21	52,8	149,2	156	260

Large onion heels to limit penetration of the foot's rear, protect the bars and heels and distribute loads nearer to the foot centre

## PRINCIPLE AND INTERACTION WITH THE GROUND

Set the shoe's ground bearing surface centre as far back as possible to reduce digital lever arm.

Obtained by using a wide double bevel on the toe and large onions which provide support for the heels set as near as possible to the foot pressure centre (and not on the foot's rear as with an egg bar shoe).

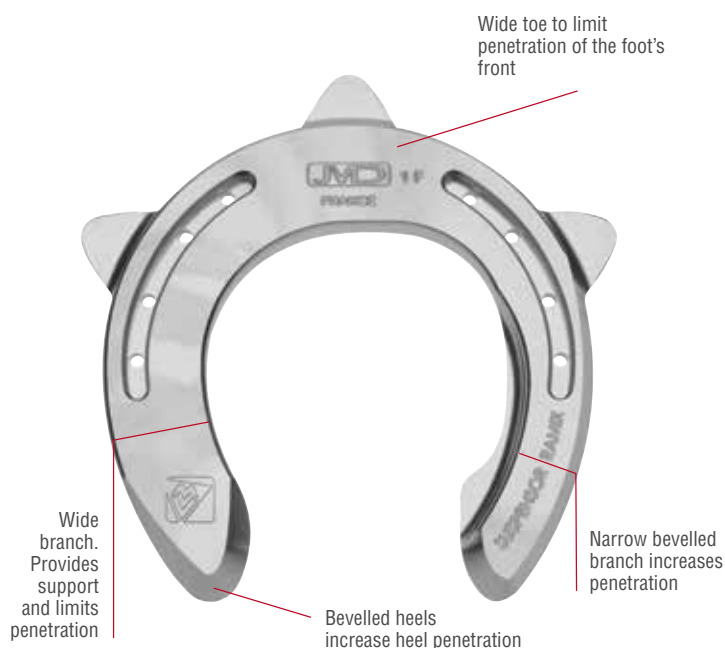
## BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS

It is no longer possible to stimulate the deep digital flexor tendon using a wide toe in horses with dropped fetlocks because it has no tension (laxity). In order to reduce fetlock extension with the same load, the shoe's ground bearing surface centre has to be moved backwards which can be accomplished by reducing digital lever arm. Heel support is achieved by increasing the rear ground bearing surface area using large onion that brings ground bearing surface to the foot's centre, in contrast to an egg bar shoe which moves it to the back of the foot.

## INDICATIONS

Designed for horses with dropped hind fetlocks.

Horses with laxity of the tendons including the suspensory ligament. Degenerative pathologies of the fetlock joint suspensory ligament with dropped fetlock.



Taille	Reference	Size mm Pince/ toe	Branch/ branch	Talon étroit / heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
3x0	FJMDSPENSORRAMIXA3X0	27,2	21,3 - 25,5	21,3 - 25,5	121	121	152
2x0	FJMDSPENSORRAMIXA2X0	28,85	22,5 - 27	22,5 - 27	128	128	169
0	FJMDSPENSORRAMIXA0	30,6	23,9 - 28,7	23,9 - 28,7	136	136	194
1	FJMDSPENSORRAMIXA1	32	25 - 30	25 - 30	142	142	206
2	FJMDSPENSORRAMIXA2	33,3	26 - 31,2	26 - 31,2	148	148	228
3	FJMDSPENSORRAMIXA3	35,1	27,4 - 32,9	27,4 - 32,9	156	156	252
4	FJMDSPENSORRAMIXA4	36,9	28,8 - 34,6	28,8 - 34,6	164	164	283

Taille	Reference	Size mm Pince/ toe	Branch/ branch	Talon étroit / heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
3x0	FJMDSPENSORRAMIXP3X0	30,1	22 - 25,8	22 - 26,6	117	118,7	152
2x0	FJMDSPENSORRAMIXP2X0	31,6	23,1 - 27,1	23,1 - 28	123	124,8	166
0	FJMDSPENSORRAMIXP0	33,2	24,4 - 28,7	24,4 - 29,4	130,9	129	182
1	FJMDSPENSORRAMIXP1	35	25,5 - 30	25,5 - 31	136	138	203
2	FJMDSPENSORRAMIXP2	36,5	26,6 - 31,2	26,6 - 32,3	142	144	220
3	FJMDSPENSORRAMIXP3	37,8	27,6 - 32,4	27,6 - 33,5	147	149,1	233
4	FJMDSPENSORRAMIXP4	39,3	28,7 - 33,7	28,7 - 34,8	153	155,2	262

## SUSPENSOR RAMIX®

### front

Model designed by Professor Jean-Marie Denoix.

Shoe with branches with different surface areas (one wide branch and one narrow bevelled branch), wide toe and heels that are bevelled at their ends. Made from hi-tech aluminium alloy. Non-tempered alloy: can be used for risk-free hot shoeing up to 450°C. 3 clips to allow use with option of 1 or 2 clips.

Thickness 10 mm.

#### PRINCIPLE AND INTERACTION WITH THE GROUND

On compacted and penetrable grounds:  
The wide branch provides support and limits penetration.

The narrow bevelled branch increases penetration (increased surface area in contact with foot at heel for greater comfort).

The wide toe and bevelled heels increase heel penetration.

#### BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS

Depending on the application of the shoe (medial or lateral wide branch) :  
reduces tensions on one branch of the suspensory ligament or on one oblique sesamoidean ligament.

## SUSPENSOR RAMIX®

### hind

Model designed by Professor Jean-Marie Denoix.

Shoe with branches of different surface areas (one wide branch and one narrow bevelled branch), wide toe and heels that are bevelled at their ends. Made from hi-tech aluminium alloy. Non-tempered grade: can be used for risk-free hot shoeing up to 450°C. 2 lateral clips. Thickness 10 mm.

#### INDICATIONS

Desmopathy of the medial branch of the suspensory ligament or of the medial oblique sesamoidean ligament (medial wide branch).

Desmopathy of the lateral branch of the suspensory ligament or of the lateral oblique sesamoidean ligament (lateral wide branch).



Taille	Reference	Size mm Pince/ toe	Branche/ branch	Talon étroit / heel	Largeur/ Width	Longueur/ Length	1 shoe Weight g
2x0	FJMSUSPENSORRAMIX-TR2x0	23	16,3 - 23,1	16,3 - 23,1	120	124,8	111
0	FJMSUSPENSORRAMIX-TR0	24	17 - 24	17 - 24	125	130	118
1	FJMSUSPENSORRAMIX-TR1	24,9	17,6 - 25	17,6 - 25	129,8	135	131
2	FJMSUSPENSORRAMIX-TR2	26,8	19 - 26,9	19 - 26,9	139,4	145	148
3	FJMSUSPENSORRAMIX-TR3	28,6	20,2 - 28,7	20,2 - 28,7	149	155	163

## SUSPENSOR RAMIX® TR

mixed shape for race horses (trotter)

Model designed by Professor Jean-Marie Denoix.

Shoe for race horses (trotter) with branches of different surface areas (one wide branch and one narrow bevelled branch), wide toe and heels that are bevelled at their ends. Mixed shape can be used for front or rear feet.

Made from hi-tech aluminium alloy.

Non-tempered alloy : can be used for risk-free hot shoeing up to 450°C. 3 clips to allow use with option of 1 or 2 clips.

Thickness 8 mm.

### PRINCIPLE AND INTERACTION WITH THE GROUND

On compacted and penetrable grounds: The wide branch provides support and limits penetration. The narrow bevelled branch increases penetration (increased surface area in contact with foot at heel for greater comfort). The wide toe and bevelled heels increase heel penetration.

### BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS

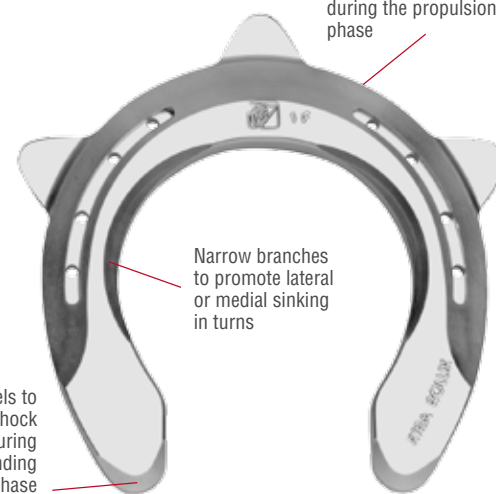
Depending on the application of the shoe (medial or lateral wide branch) : reduces tensions on one branch of the suspensory ligament or on one oblique sesamoidean ligament.

### INDICATIONS

For race horses (trotters) (standard bred).

Desmopathy of the medial branch of the suspensory ligament or of the medial oblique sesamoidean ligament (medial wide branch).

Desmopathy of the lateral branch of the suspensory ligament or of the lateral oblique sesamoidean ligament (lateral wide branch)..



«Full rolling»  
Bevel to promote rolling  
and reduce stresses  
during the propulsion  
phase

Narrow branches  
to promote lateral  
or medial sinking  
in turns

Bevelled heels to  
increase shock  
absorption during  
the foot landing  
phase

Taille	Reference	Size mm Pince/ toe	Branche/ branch	Talon/ heel	Largeur/ width	Longueur/ Length	1 shoe Weight g
2x0	FJMXTRAROLLIX02	24,7	19,6	23,8	121	121	142
2x0	FJMXTRAROLLIX02S	26,1	20,7	25,2	128	128	159
0	FJMXTRAROLLIX00	27,7	22	26,8	136	136	176
1	FJMXTRAROLLIX01	29	23	28	142	142	194
2	FJMXTRAROLLIX02	30,2	23,9	29,1	148	148	212
3	FJMXTRAROLLIX03	31,8	25,2	30,7	156	156	235
4	FJMXTRAROLLIX04	33,5	26,5	32,3	164	164	259

## XTRA ROLLIX

A low cost shoe - Alumix (please see p34)

front

Shoe with a wide coverage, large bevel and a bevel on the inner rim. Front shape. Made from hi-tech aluminium alloy. Non-tempered grade: can be used for risk-free hot shoeing up to 450°C. 3 clips to allow use with option of 1 or 2 clips.

Thickness 10 mm.

### PRINCIPLE AND INTERACTION WITH THE GROUND

Wide coverage in contact with the foot to distribute loads and protect the sole. Narrow ground bearing surface which is closer to the center of the foot in order to reduce front, medial and lateral lever arm. Designed with a double bevel all around the shoe in order to promote maximum rolling in all directions. Bevelled on the inner rim branches to lighten the shoe and promote the heels sinking in turns on soft ground.

### BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS

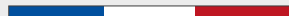
Reduces joint stresses especially on distal and proximal interphalangeal joints.

### INDICATIONS

Sports shoe intended to optimise comfort and performance whilst reducing stresses particularly on joints.



Made in France



**Over 300 standard models**  
**Custom products manufactured upon request**  
**Designed and made in France**



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INNOVATION SPIRIT ■

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