Michel
VAILLANT

ALUMINIUM HORSESHOES MANUFACTURER

MV Sport Horseshoes
MV and JMD Kinetherapeutic Horseshoes
JMD Race Horses Kinetherapeutic Horseshoes

Innovative Farriery Products

www.horseshoe.fr

MICHEL VAILLANT, AN INNOVATIVE MANUFACTURER

Our company has been designing and producing specific equine hoof products for over 100 years.
Our knowledge and important industrial culture reprensent a strong advantage for both our manufacturing process and our marketing strategy. We only invest in high-tech tools and machines. Working consistently with top quality makes our company innovative and sucessful in the market.
Specialized in the sporthorse locomotion, we have logically expanded to the design and production of Aluminum horseshoes.

Our 3 ultimate goals with those Aluminum shoes are to :

- Offer a therapeutic shoeing solution for most of the locomotive illnesses/pathologies in collaboration with veterinary researches.
- Contribute to sport performances while maximizing the horse's wellbeing.
- Improve the aluminum shoes' quality to obtain the best ratio between efficiency and durability.

A CLOSE COLLABORATION WITH PROFESSOR JEAN-MARIE DENOIX

Jean-Marie Denoix is a veterinarian and an associate Professor at the «National Veterinary School of Maisons-Alfort» (France). He is largely recognized by his peers as one of the best horse locomotion experts of the world. Pr. Denoix also manages the «CIRALE» which is a unique organization specialized on the research and the diagnostic of horses' locomotive disorders.

Since the 80's, Professor Denoix and his team have been regularly collaborating with the company, Michel Vaillant during specific events, trainings and conventions; such as the KINESIC, first ongoing training program for farriers, specialized in the anatomy of the horse, and in bio mechanical and therapeutic shoeing.

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 aluminum 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 orthopedic shoeing concept was introduced after two decades of bio mechanical researching by Professor Denoix. These findings have proven that articular or tendinous forming can be relieved individually by changing the longitudinal and transversal's balance of the horse's hooves specifically by altering the manner of which the hoof penetrates soft and reactive grounds.

WHY ALUMINUM ?

Primarily for its light weight compare to a steel shoe wich will lighter the lower limbs and reduce the stress on the different structures.

In the past, we used to think that heavy steel shoes were more shock absorbing, we know now that heavy shoes increase vibrations.

Lightening the lower limb allows for the specific movements to be performed more efficiently such as faster or higher depending on the discipline.
The technicity of modern alloys combined with our skills and industrial knowledge, able us to offer extremely resistant aluminum shoes. Our shoes are as wear resistant as any other steel shoes (based on 5 to 6 weeks shoeing). Our endurance race shoes are regularly tested during 55 to 100 miles endurance races without needing the farrier's assistance during the race.

SUMMARY

MV Sport Range

MV Kinetherapeutic Range

JMD Kinetherapeutic Range

JMD Race Horses Kinetherapeutic Range

Michel VAILLANT

Sizes correspondence table :

Saddle shoes sizes

	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
3x0	119x115	114x117	122x120	116x119	120x116	113x118
2x0	125x123	122x125	128x126	121x125	127x122	122x125
0	131x131	128x131	134x132	127x131	135x128	128x130
1	138x139	135x138	140x138	131x137	140x135	135x137
2	145x146	142x145	146x144	139x143	146x142	140x143
3	152x152	148x152	152x150	145x149	155x146	147x150
4	160x159	155x159	159x157	152x156	162x155	155x157
5	165x173	166x162	166x164	158x163	170x162	163x167

MV sport & JMD kinetherapeutic ranges

	FRONT width X length	HIND width X length
3x0	121x121	117x119
2x0	128x128	123x126
0	136x136	129x131
1	142x142	136x138
2	148x148	142x144
3	156x156	147x150
4	164x164	153x158

Same width for the Rocking Support, Bonapartix and Laminitix shoes. For the length find the dimensions on our website :
www.michel-vaillant.com

JMD PS thoroughbred range

	FRONT width X length	HIND width X length
3 (27)	117x110	113x113
4 (28)	124x116	118x117
5 (29)	129x119	124x121
6 (30)	133x125	129x127
7 (31-32)	138x129	133x132

JMD TR trotter range

	SAME SHAPE FOR FRONT AND HIND width X length
2x0	121x127
0	126x130
1	131x137
2	140x147
3	150x155

COVER ROLLER Shoe front

◆ **DESCRIPTION :** Shoe with wide coverage and a bevelled outer rim. Front shape. Designed in high-tech aluminium alloy. Non-tempered alloy : hot work possible up to 450 °C. 3 clips for use with 1 toe clip or 2 quarter clips. Thickness 10 mm. Coverage and weight in size 1 : 30 mm throughout. 237 g.

◆ **CONCEPT AND REACTION ON THE GROUND :**
- Wide coverage to distribute pressure and protect the sole.
- Bevelled outer rim on toe and on quarters to promote rolling in straight lines and turns.

◆ **BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS :**
- Distributes loads and improves comfort.
- Reduces stress during the propulsion phase.

◆ **INDICATIONS :**
Preventive sport shoe made to optimize comfort and performance whilst reducing stress.
- Heavy saddle horses (over 500 kg).
- Horses with sensitive feet.
- Horses working on uncomfortable grounds (hard, stony...).

ENDURO & ENDURO XL Shoes front

◆ **DESCRIPTION :** Enduro version specifically developed for endurance riding. Enduro XL version developed for sport horses in general (show jumping, eventing...). Front shape. Designed in high-tech aluminium alloy. Non-tempered alloy : hot work possible up to 450 °C. 3 clips for use with 1 toe clip or 2 quarter clips. Thickness 10 mm. Enduro version : Coverage and weight in size 2X0: 28 mm on the toe and 24 mm on the heels. 170 g. Enduro XL version : Coverage and weight in size 1 : 30 mm on the toe and 27 mm on the heels. 190 g.

◆ **CONCEPT AND REACTION ON 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 :**
Reduces stress on the fetlock joint suspensory ligament and on the superficial digital flexor tendon. Reduces general stress on the fetlock joint suspensory apparatus.

◆ **INDICATIONS :**
Preventive sport shoe made to optimize comfort and performance whilst reducing stress, particularly on the fetlock joint suspensory apparatus. Particularly recommended for endurance riding with Arabian horses who have a tendency to have high heels and are therefore predisposed to fetlock joint pathologies.

3D MOTION® Shoe front

- Designed with Dr Christophe Pelissier, chief veterinarian for the french endurance riding team.
- Tested and validated with Romain Laporte, rider of the french endurance riding team.

◆ **DESCRIPTION :** Shoe with a wide cover, a double bevel all around the shoe and a bevel on the inner rim. Thickness 14mm to guarantee a huge wear resistancse. Front shape. Designed in high-tech aluminium alloy. Non-tempered alloy : hot work possible up to 450 °C. 3 clips for use with 1 toe clip or 2 quarter clips. Coverage and weight in size 0 : 30mm throughout the shoe. 260g.

◆ **CONCEPT AND REACTION ON 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 leverage. Designed with a double bevel all around the shoe in order to promote maximum rolling in all directions when the shoe is new but also after wear. Bevelled inner rim and bevel up to the heels on the outer rim to promote sinking of the rear part of the foot into penetrable and compacted ground.

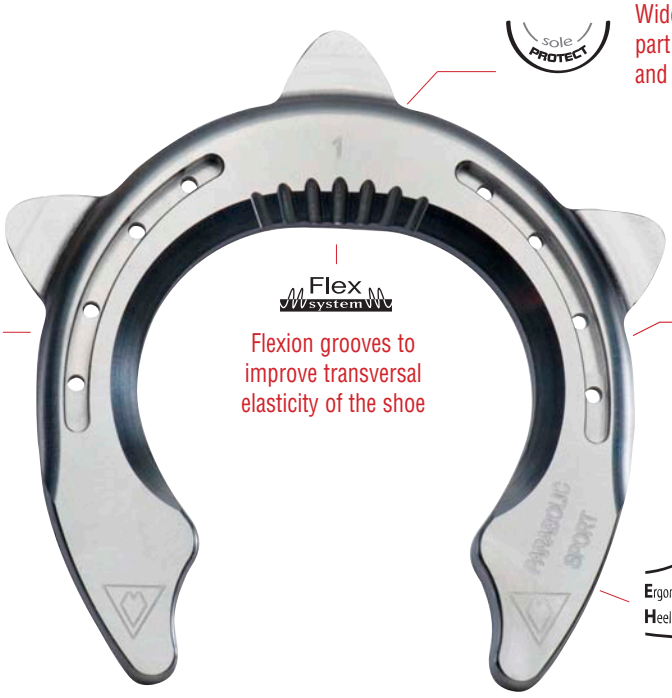
◆ **BIOMECHANICAL AND KINESITHERAPIC EFFECTS :**
- Reduces joint stress in particular on distal and proximal interphalangeal joints.
- Reduces collateromotion and rotation movements and stress on collateral ligaments.
- Reduces stress on the fetlock joint suspensory ligament and on the superficial digital flexor tendon. Reduces general stress on the fetlock joint suspensory apparatus.

◆ **INDICATIONS :**
Sport shoe made to optimize comfort and performance whilst reducing stress, particularly on joints and on the fetlock joint suspensory apparatus. Particularly recommended for endurance riding with Arabian horses who have a tendency to have high heels and are therefore predisposed to fetlock joint pathologies.

PARABOLIC SPORT Shoe front

◆ **DESCRIPTION :** Shoe with parabolic coverage: wide coverage on the toe – narrow on the branches – wide on the heels. Designed in high-tech aluminium alloy. Non-tempered alloy : hot work possible up to 450 °C. 3 clips for use with 1 toe clip or 2 quarter clips. Thickness 10 mm. Coverage and weight in size 1 : 31 mm on the toe, 24 mm on the branches and 31 mm on the heels. 200 g.

◆ **CONCEPT AND REACTION ON THE GROUND :**
- Wide coverage on the toe to protect the front part of the foot and to balance sinking between toe and heels on penetrable and compacted ground.
- Narrow branches to promote lateral or medial sinking in turns on penetrable and compacted ground.
- Wide coverage on the heels to limit sinking of the rear part of the foot on penetrable and compacted ground.
- Bevelled outer rim on the toe and the quarters to promote rolling in straight lines and turns.



◆ **BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS :**
- Reduces stress on podotrochlear apparatus.
- Reduces collateromotion movements.

◆ **INDICATIONS :**
Preventive sport shoe made to optimize comfort and performance whilst reducing stress, notably in turns.
- Sport horses involved in disciplines which require short and repeated turns.
- Horses with flat feet. Horses with weak heels.

PARABOLIC SPORT Shoe hind

◆ **DESCRIPTION :** Shoe with parabolic coverage: wide coverage on the toe – narrow on branches – wide on the heels. Long shape to ensure good support of the rear part of the foot. Designed in high-tech aluminium alloy. Non-tempered alloy : hot work possible up to 450 °C. 2 clips. Thickness 10 mm. Coverage and weight in size 1 : 30 mm on the toe, 25 mm on the branches and 30 mm on the heels. 193 g.

◆ **CONCEPT AND REACTION ON THE GROUND :**
- Wide coverage on the toe to protect the front of the foot and balance sinking between toe and heels on penetrable and compacted ground. Toe profile designed to optimize propulsion.
- Narrow branches to promote lateral or medial sinking in turns on penetrable and compacted ground.
- Wide coverage on the heels to limit sinking of the rear part of the foot on penetrable and compacted ground.
- Bevelled outer rim on the toe and the quarters to promote rolling in straight lines and turns.

◆ **BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS :**
- Reduces stress on podotrochlear apparatus.
- Reduces collateromotion movements.

◆ **INDICATIONS :**
Preventive sport shoe made to optimize comfort and performance whilst reducing stress, notably in turns
- Sport horses involved in disciplines which require short and repeated turns.
- Horses with flat feet. Horses with weak heels.

HYPERBOLIC SPORT® Shoe front

◆ **DESCRIPTION :** Shoe with narrow coverage and very light weight. Big bevel on the outer rim for a "hyper rolling" effect and bevelled heels. Designed in high-tech aluminium alloy. Non-tempered alloy : hot work possible up to 450 °C. 3 clips for use with 1 toe clip or 2 quarter clips. Thickness 10 mm. Coverage and weight in size 1 : 25 mm on the toe and 23 mm on the branches. 173 g.

◆ **CONCEPT AND REACTION ON THE GROUND :**
- Big bevel on the whole outer rim and thickness deliberately limited to 10 mm. Maximizes rolling in straight lines and turns when the shoe is new but also after wear.
- Bevelled inner rim and bevel up to the heels on the outer rim to promote sinking of the rear part of the foot into penetrable and compacted ground. Also balances wear between the toe and the heels to avoid having a wedge shoe at the end of the life of the shoe.
- Bevelled heels to promote the sinking of heels into penetrable and compacted ground. Also limits risks of shoe loss through overreaching.

Hyper rolling to reduce stress during the propulsion phase in straight lines and in turns, even after wear

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

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

◆ **BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS :**
- Reduces stress during the propulsion phase in straight lines and turns.
- Reduces stress on the fetlock joint suspensory ligament and on the superficial digital flexor tendon. Reduces general stress on the fetlock joint suspensory apparatus.

◆ **INDICATIONS :**
Preventive sport shoe made to optimize comfort and performance whilst reducing stress.
- Horses with high heels.
- Horses with very stressed fetlock joints.

HYPERBOLIC SPORT® Shoe hind

◆ **DESCRIPTION :** Hind sport shoe with a slightly covered square toe and bevelled branches on the inner and outer rims. Designed in high-tech aluminium alloy. Non-tempered alloy : hot work possible up to 450 °C. 2 clips. Thickness 10 mm. Coverage and weight in size 1 : 28 mm on the toe and 25 mm on the branches. 185 g.

◆ **CONCEPT AND REACTION ON THE GROUND :**
- Toe profile designed to optimize propulsion.
- Bevelled inner rim and bevel up to the heels on the outer rim to promote sinking of the rear part of the foot into penetrable and compacted ground.
- Bevelled outer rim to promote rolling in straight lines and turns.

◆ **BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS :**
- Reduces stress during the propulsion phase in straight lines and turns.
- Reduces stress on the fetlock joint suspensory ligament and on the superficial digital flexor tendon. Reduces general stress on the fetlock joint suspensory apparatus.

◆ **INDICATIONS :**
Preventive sport shoe made to optimize comfort and performance whilst reducing stress.
- Horses with high heels.
- Horses with very stressed fetlock joints.

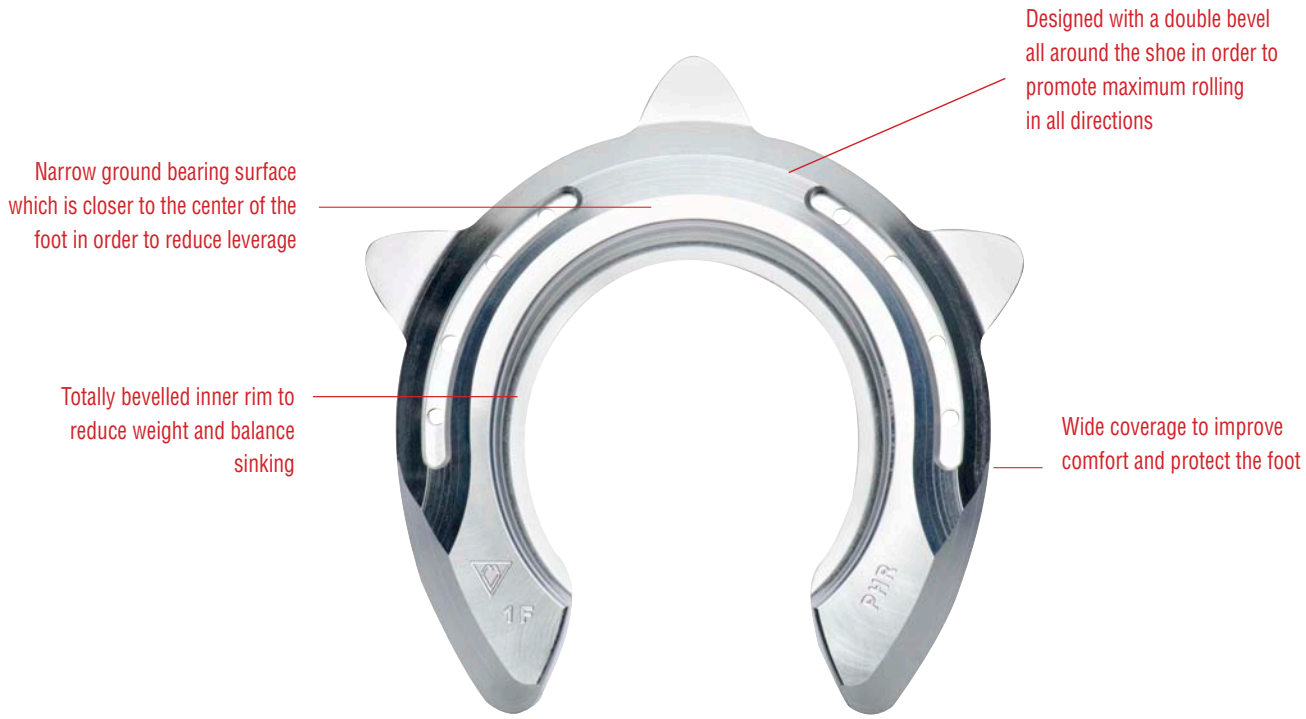
PHR Shoe front

Designed with Pierre-Henri Renault, farrier for high level show jumping horses.

◆ **DESCRIPTION :** Shoe with a wide cover, a double bevel all around the shoe and a bevel on the inner rim. Thickness limited to 12mm. Front shape. Designed in high-tech aluminium alloy. Non-tempered alloy : hot work possible up to 450 °C. 3 clips for use with 1 toe clip or 2 quarter clips. Coverage and weight in size 1 : 33mm throughout the shoe. 208g.

◆ **CONCEPT AND REACTION ON 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 leverage. 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 KINESITHERAPIC EFFECTS :**

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

◆ **INDICATIONS :**

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

ROCKING SUPPORT Shoe front

◆ **DESCRIPTION :** Egg bar shoe with a rear bearing surface beyond the heels and the frog. Front shape. Designed in high-tech aluminium alloy. Non-tempered alloy : hot work possible up to 450 °C. 3 clips for use with 1 toe clip or 2 quarter clips. Thickness 10 mm. Coverage and weight in size 1 : 28 mm on the toe, 25 mm on the branches and 35 mm on the rear bearing surface. 267 g.

◆ **CONCEPT AND REACTION ON THE GROUND :**
- Wide rear bearing surface to increase support and limit the sinking of heels into penetrable and compacted ground.
- Bevel on the rear of the outer rim (rocking) to reduce rear leverage.
- Big bevel on the outer rim to promote rolling of the toe and quarters.

◆ **BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS :**
Reduces stress on the distal sesamoid bone and on the deep digital flexor tendon. Reduces general stress on the podotrochlear apparatus.

◆ **INDICATIONS :**
Podotrochlear syndrome grade 2. Pathology of the deep digital flexor tendon and accessory ligament (distal check ligament).

W ROCKING SUPPORT Shoe front wedge

◆ **DESCRIPTION :** Egg bar shoe. 2,55° wedge rear bearing surface beyond the heels and the frog. Front shape. Designed in high-tech aluminium alloy. Non-tempered alloy: hot work possible up to 450 °C. 3 clips for use with 1 toe clip or 2 quarter clips. Thickness 14 mm on the rear bearing surface and 9 mm on the toe. Coverage and weight in size 1: 28 mm on the toe, 25 mm on the branches and 35 mm on the rear bearing surface. 284 g.

◆ **CONCEPT AND REACTION ON THE GROUND :**
- Wide rear bearing surface to increase support and limit the sinking of heels into penetrable and compacted ground.
- Bevel on the rear of the outer rim (rocking) to reduce rear leverage.
- 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 stress 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.

ROCKING SUPPORT Shoe hind

◆ **DESCRIPTION :** Egg bar shoe with a rear bearing surface beyond the heels and the frog. Hind shape. Designed in high-tech aluminium alloy. Non-tempered alloy : hot work possible up to 450°C. 2 clips. Thickness 10mm. Coverage and weight in size 1 : 28mm on the toe, 25mm on the branches and 35mm on the rear bearing surface. 260g.

◆ **CONCEPT AND REACTION ON THE GROUND :**
- Wide rear bearing surface to increase support and limit the sinking of heels into penetrable and compacted ground.

- Big bevel on the outer rim to promote rolling of the toe and quarters.

Big bevel on the outer rim to promote rolling

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

Rocking : bevel on the rear of the outer rim to reduce rear leverage

◆ **BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS :**
Reduces stress on the distal sesamoid bone and on the deep digital flexor tendon. Reduces general stress on the podotrochlear apparatus.

◆ **INDICATIONS :**
Podotrochlear syndrome grade 2. Pathology of the deep digital flexor tendon and accessory ligament (distal check ligament).Stabilization of the foot during the propulsion phase. Problems with instability of the common calcaneal tendon.

ARTHROPATHIX® Shoe front

Designed by Professor Jean-Marie Denoix, DVM, PhD director of the CIRALE (Normandy, France).

◆ **DESCRIPTION :** Shoe with a wide cover, onion heels, a double bevel and a thickness limited to 12 mm. Front shape. Designed in high-tech aluminium alloy. Non-tempered alloy : hot work possible up to 450 °C. 3 clips for use with 1 toe clip or 2 quarter clips. Coverage and weight in size 1 : 38 mm on the onion heel and 33 mm on the rest of the shoe. 257 g.

◆ **CONCEPT AND REACTION ON THE GROUND :**
Wide coverage in contact with the foot and onion heels to distribute loads. Narrow ground bearing surface which is closer to the center of the foot in order to reduce front, medial and lateral leverage. Designed with a double bevel all around the shoe in order to promote maximum rolling in all directions. 12 mm thickness which reduces leverage compared to a shoe with a thickness of 15 mm.

◆ **BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS :**
Reduces joint stress in particular on distal and proximal interphalangeal joints. Reduces collateromotion and rotation movements and stress on collateral ligaments.

◆ **INDICATIONS :**
Arthropathy on distal and proximal interphalangeal joints.

ONIONIX® Shoe front

Designed by Professor Jean-Marie Denoix, DVM, PhD director of the CIRALE (Normandy, France).

◆ **DESCRIPTION :** "Onion shoe" with an enlarged surface under the heels. Front shape. Designed in high-tech aluminium alloy. Non-tempered alloy : hot work possible up to 450 °C. 3 clips for use with 1 toe clip or 2 quarter clips. Thickness 10 mm. Coverage and weight in size 1 : 43 mm on the heels and 28 mm on the rest of the shoe. 231 g.

◆ **CONCEPT AND REACTION ON THE GROUND :**
Limits sinking of the heels into penetrable and compacted ground. Protects the bars and the heels. Distributes the load. Big bevel on the outer rim to promote rolling of the toe and quarters.

◆ **BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS :**
Reduces stress on the distal sesamoid bone and on the deep digital flexor tendon. Reduces general stress on the podotrochlear apparatus. Reduces pressure and increases comfort on heels.

◆ **INDICATIONS :**
Podotrochlear syndrome grade 1. Pathology of the deep digital flexor tendon and accessory ligament (distal check ligament). Sensitivity on heels, abscesses on heels, bruises.

BONAPARTIX® L Shoe front

Designed by Professor Jean-Marie Denoix, DVM, PhD director of the CIRALE (Normandy, France).

◆ **DESCRIPTION :** Reverse shoe also called “Napoléon shoe” in France. Rear support beyond the heels and the frog. Open toe. Front shape. Designed in high-tech aluminium alloy. Non-tempered alloy : hot work possible up to 450 °C. 2 quarter clips. Thickness 10 mm. Coverage and weight in size 1 : 35 mm for the rear support and 25 mm on the rest of the shoe. 230 g.

◆ **CONCEPT AND REACTION ON 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 leverage. Open toe and bevelled ends of branches to promote maximum rolling. Bevel on toe quarters to limit collateromotion and rotation during propulsion in turn.

◆ **BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS :**
Reduces stress 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).

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BONAPARTIX® S Shoe front

Designed by Professor Jean-Marie Denoix, DVM, PhD director of the CIRALE (Normandy, France).

◆ **DESCRIPTION :** Reverse shoe also called “Napoléon shoe” in France. Rear support under the base of the frog. Shorter model than the Bonapartix® L. Open toe. Front shape. Designed in high-tech aluminium alloy. Non-tempered alloy : hot work possible up to 450 °C. 2 quarter clips. Thickness 10 mm. Coverage and weight in size 1 : 36 mm for the rear support (42 mm under the base of the frog) and 25 mm on the rest of the shoe. 226 g.

◆ **CONCEPT AND REACTION ON 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 leverage. 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 stress 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).

SUSPENSORIX® Shoe front

Designed by Professor Jean-Marie Denoix, DVM, PhD director of the CIRALE (Normandy, France).

◆ **DESCRIPTION :** Shoe with a wide toe and bevelled narrow branches. Designed in high-tech aluminium alloy. Non-tempered alloy : hot work possible up to 450 °C. 3 clips for use with 1 toe clip or 2 quarter clips. Thickness 10 mm. Coverage and weight in size 1 : 35 mm on the toe. On branches : 25 mm foot side and 15 mm ground side. 198 g.

◆ **CONCEPT AND REACTION ON THE GROUND :**
On penetrable and compacted ground: wide front support to limit sinking of the toe into the ground. Narrow bevelled branches to promote the sinking of heels. Enlarged surface under the heels on the foot side for more comfort. Slightly bevelled outer rim on the toe to promote rolling.

◆ **BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS :**
Reduces stress on the fetlock joint suspensory ligament and on the superficial digital flexor tendon. Reduces general stress on the fetlock joint suspensory apparatus (suspensory ligament, proximal scutum, straight and oblique sesamoidean ligaments).

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

SUSPENSORIX® Shoe hind

Designed by Professor Jean-Marie Denoix, DVM, PhD director of the CIRALE (Normandy, France).

◆ **DESCRIPTION :** Shoe with a wide toe and bevelled narrow branches. Designed in high-tech aluminium alloy. Non-tempered alloy : hot work possible up to 450 °C. 2 clips. Thickness 10 mm. Coverage and weight in size 1 : 35 mm on the toe. On branches : 25 mm foot side and 15 mm ground side. 182 g.

◆ **CONCEPT AND REACTION ON THE GROUND :**
On penetrable and compacted ground: wide front support to limit sinking of the toe. Narrow bevelled branches to promote the sinking of heels. Enlarged surface under the heels on the foot side for more comfort. Slightly bevelled outer rim on the toe to promote rolling.

◆ **BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS :**
Reduces stress on the fetlock joint suspensory ligament and on the superficial digital flexor tendon. Reduces general stress on the fetlock joint suspensory apparatus (suspensory ligament, proximal scutum, straight and oblique sesamoidean ligaments).

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

ASYMETRIX® Shoe front

Designed by Professor Jean-Marie Denoix, DVM, PhD director of the CIRALE (Normandy, France).

◆ **DESCRIPTION :** Asymmetric shoe with branches of different widths : a wide branch with an onion heel and a narrow bevelled branch. Designed in high-tech aluminium alloy. Non-tempered alloy : hot work possible up to 450 °C. 3 clips for use with 1 toe clip or 2 quarter clips. Thickness 10 mm. Coverage and weight in size 1 : 38 mm on the onion heel. 30 to 27 mm for the wide branch. 27 mm on the toe. Narrow and bevelled branch : 25 mm foot side and 15 mm ground side. 204 g.

◆ **CONCEPT AND REACTION ON 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). Bevelled outer rim on the toe and toe quarter opposite the lesion to promote 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 :**
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).

ASYMETRIX® Shoe hind

Designed by Professor Jean-Marie Denoix, DVM, PhD director of the CIRALE (Normandy, France).

◆ **DESCRIPTION :** Asymmetric shoe: a wide branch with an onion heel and a narrow bevelled branch. Designed in high-tech aluminium alloy. Non-tempered alloy : hot work possible up to 450 °C. 2 clips. Thickness 10 mm. Coverage and weight in size 1 : 38 mm on the onion heel. 30 to 28 mm for the wide branch. 28 mm on the toe. Narrow and bevelled branch : 25 mm foot side and 15 mm ground side. 195 g.

◆ **CONCEPT AND REACTION ON 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). Bevelled outer rim on the toe and toe quarter opposite the lesion to promote 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 :**
Deviations of the distal limb: valgus or varus (medial wide branch if valgus or lateral wide branch if varus). Subchondral bone compression lesions (narrow branch on the side of the lesion to reduce pressure). Distal arthrosis of the hock or spavin (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).

SUSPENSOR RAMIX® Shoe front

Designed by Professor Jean-Marie Denoix, DVM, PhD director of the CIRALE (Normandy, France).

◆ **DESCRIPTION :** Shoe with asymmetric branches (a wide branch and a narrow bevelled branch) as well as a wide toe and heels bevelled at their ends. Designed in high-tech aluminium alloy. Non-tempered alloy : hot work possible up to 450 °C. 3 clips for use with 1 toe clip or 2 quarter clips. Thickness 10 mm. Coverage and weight in size 1 : 30 mm for the wide branch. 32 mm on the toe. Narrow and bevelled branch : 25 mm foot side and 15 mm ground side. 206 g.

◆ **CONCEPT AND REACTION ON THE GROUND :**
On penetrable and compacted ground: the wide branch provides support and limits sinking.
The narrow bevelled branch promotes sinking (enlarged surface under the heel on the foot side for more comfort). The wide toe and the bevelled heels promote heels sinking.

◆ **BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS :**
Depending on the application of the shoe (medial or lateral wide branch): reduces tensions on one branch of the fetlock joint suspensory ligament or on one oblique sesamoidean ligament.

◆ **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).

SUSPENSOR RAMIX® Shoe hind

Designed by Professor Jean-Marie Denoix, DVM, PhD director of the CIRALE (Normandy, France).

◆ **DESCRIPTION :** Shoe with asymmetric branches (a wide branch and a narrow bevelled branch) as well as a wide toe and heels bevelled at their ends. Designed in high-tech aluminium alloy. Non-tempered alloy : hot work possible up to 450 °C. 2 clips. Thickness 10 mm. Coverage and weight in size 1 : 30 mm for the wide branch. 35 mm on the toe. Narrow and bevelled branch : 25 mm foot side and 15 mm ground side. 208 g.

◆ **CONCEPT AND REACTION ON THE GROUND :**
On penetrable and compacted ground: the wide branch provides support and limits sinking. The narrow bevelled branch promotes sinking (enlarged surface under the heel on the foot side for more comfort). The wide toe and the bevelled heels promote heels sinking.

◆ **BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS :**
Depending on the application of the shoe (medial or lateral wide branch): reduces tensions on one branch of the fetlock joint suspensory ligament or on one oblique sesamoidean ligament.

◆ **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).

LAMINITIX® Shoe front

Designed by Professor Jean-Marie Denoix, DVM, PhD director of the CIRALE (Normandy, France).

◆ **DESCRIPTION :** "M" shaped shoe. Wide rear support under the heels and frog. Open toe. Front shape. Designed in high-tech aluminium alloy. Non-tempered alloy : hot work possible up to 450 °C. 2 quarter clips. Thickness 12 mm. Coverage and weight in size 1 :
35 mm for the rear support and 25 mm for the rest of the shoe. 292 g.

◆ **CONCEPT AND REACTION ON THE GROUND :**
Wide surface for optimum support of the rear part of the foot. Frog support to support the foot under the frog. No bearing surface at the toe. Easy control of the sole and access to treat sites of necrosis. Perforated frog support for reduced weight and to permit the injection of silicone under the frog.

◆ **BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS :**
Moves the bearing surface back onto the rear part of the foot. Supports the distal phalanx. Avoids painful support under the toe and minimizes dorsal compressions of the coronae corium.

◆ **INDICATIONS :**
Shoe mainly used in cases of laminitis. By cutting the frog support at its 2/3 part along the line, it is possible to use the shoe for podotrochlear syndrome grade 3.5 (between reverse shoe grade 3 and wedge reverse shoe grade 4).

JMD THOROUGHBRED

ONIONIX® PS Shoe front

Designed by Professor Jean-Marie Denoix, DVM, PhD director of the CIRALE (Normandy, France).

◆ **DESCRIPTION :** Race horse model. “Onion shoe” with an enlarged surface under the heels. Front shape. Designed in high-tech aluminium alloy. Non-tempered alloy: hot work possible up to 450 °C. 3 clips for use with 1 toe clip or 2 quarter clips. Thickness 8 mm. Coverage and weight in size 5 : 34 mm on the heels and 20 mm on the rest of the shoe. 114 g.

◆ **CONCEPT AND REACTION ON THE GROUND :**
Limits sinking of the heels into penetrable and compacted ground. Protects the bars and the heels. Distributes the load. Big bevel on the outer rim to promote rolling of the toe and quarters.

◆ **BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS :**
Reduces stress on the distal sesamoid bone and on the deep digital flexor tendon. Reduces general stress on the podotrochlear apparatus. Reduces pressure and increases comfort on heels.

◆ **INDICATIONS :**
Podotrochlear syndrome grade 1. Pathology of the deep digital flexor tendon and accessory ligament (distal check ligament). Sensitivity on heels, abscesses on heels, bruises.

SUSPENSORIX® PS Shoe front

Designed by Professor Jean-Marie Denoix, DVM, PhD director of the CIRALE (Normandy, France).

◆ **DESCRIPTION :** Race horse model. Shoe with a wide toe and bevelled narrow branches. Front shape. Designed in high-tech aluminium alloy. Non-tempered alloy: hot work possible up to 450 °C. 3 clips for use with 1 toe clip or 2 quarter clips. Thickness 8 mm. Coverage and weight in size 5: 29 mm on the toe. On branches: 18 mm foot side and 11 mm ground side. 103 g.

◆ **CONCEPT AND REACTION ON THE GROUND :**
On penetrable and compacted ground: wide front support to limit sinking of the toe into the ground. Narrow bevelled branches to promote the sinking of heels. Enlarged surface under the heels on the foot side for more comfort. Slightly bevelled outer rim on the toe to promote rolling.

◆ **BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS :**
Reduces stress on the fetlock joint suspensory ligament and on the superficial digital flexor tendon. Reduces general stress on the fetlock joint suspensory apparatus (suspensory ligament, proximal scutum, straight and oblique sesamoidean ligaments).

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

JMD THOROUGHBRED

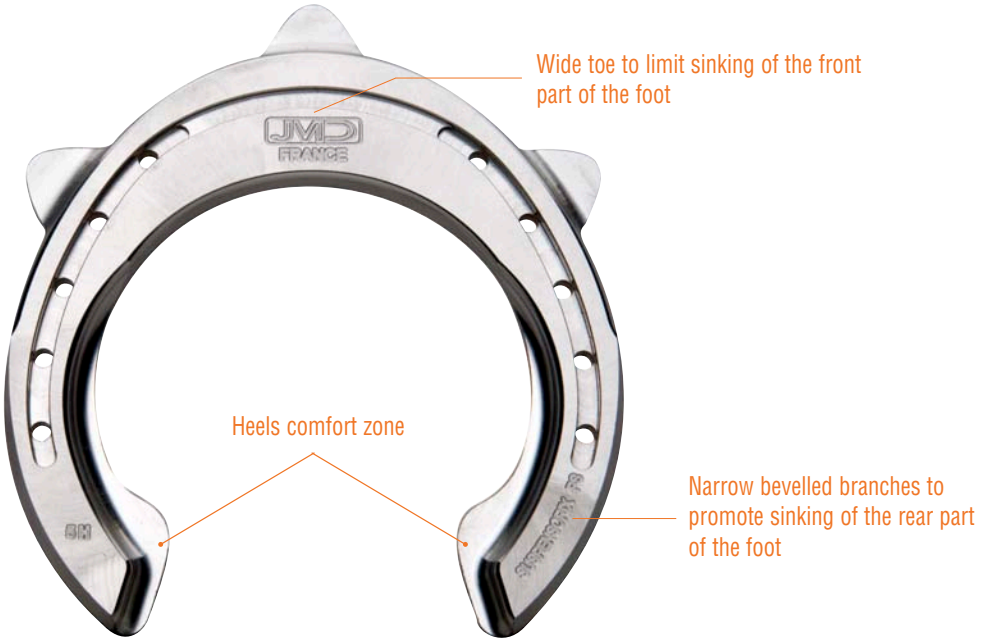
SUSPENSORIX® PS Shoe hind

100% FRENCH TOUCH

Designed by Professor Jean-Marie Denoix, DVM, PhD director of the CIRALE (Normandy, France).

◆ **DESCRIPTION :** Race horse model. Shoe with a wide toe and bevelled narrow branches. Hind shape. Designed in high-tech aluminium alloy. Non-tempered alloy: hot work possible up to 450 °C. 3 clips for use with 1 toe clip or 2 quarter clips. Thickness 8 mm. Coverage and weight in size 5: 29 mm on the toe. On branches: 18 mm foot side and 11 mm ground side. 94 g.

◆ **CONCEPT AND REACTION ON THE GROUND :**
On penetrable and compacted ground: wide front support to limit sinking of the toe into the ground. Narrow bevelled branches to promote the sinking of heels. Enlarged surface under the heels on the foot side for more comfort.



◆ **BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS :**
Reduces stress on the fetlock joint suspensory ligament and on the superficial digital flexor tendon. Reduces general stress on the fetlock joint suspensory apparatus (suspensory ligament, proximal scutum, straight and oblique sesamoidean ligaments).

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

JMD THOROUGHBRED

ASYMETRIX® PS Shoe front

Designed by Professor Jean-Marie Denoix, DVM, PhD director of the CIRALE (Normandy, France).

◆ **DESCRIPTION :** Race horse model. Asymmetric shoe with branches of different widths : a wide branch with an onion heel and a narrow bevelled branch. Designed in high-tech aluminium alloy. Non-tempered alloy : hot work possible up to 450 °C. 3 clips for use with 1 toe clip or 2 quarter clips. Thickness 8 mm. Coverage and weight in size 5 : 32 mm on the onion heel. 26 to 22 mm for the wide branch. 22 mm on the toe. Narrow and bevelled branch : 18 mm foot side and 10 mm ground side. 100 g.

◆ **CONCEPT AND REACTION ON 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.

◆ **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).

TROTTER

BONAPARTIX® S TR Shoe front or hind

Designed by Professor Jean-Marie Denoix, DVM, PhD director of the CIRALE (Normandy, France).

◆ **DESCRIPTION :** Trotter model. Reverse shoe also called “Napoléon shoe” in France. Rear support under the base of the frog. Open toe. For front or hind feet. Designed in high-tech aluminium alloy. Non-tempered alloy : hot work possible up to 450 °C. 2 quarter clips. Thickness 8 mm. Coverage and weight in size 1 : 24mm for the rear support (29 mm under the base of the frog) and 18 mm on the rest of the shoe. 116 g.

◆ **CONCEPT AND REACTION ON 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 leverage. 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 stress 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).

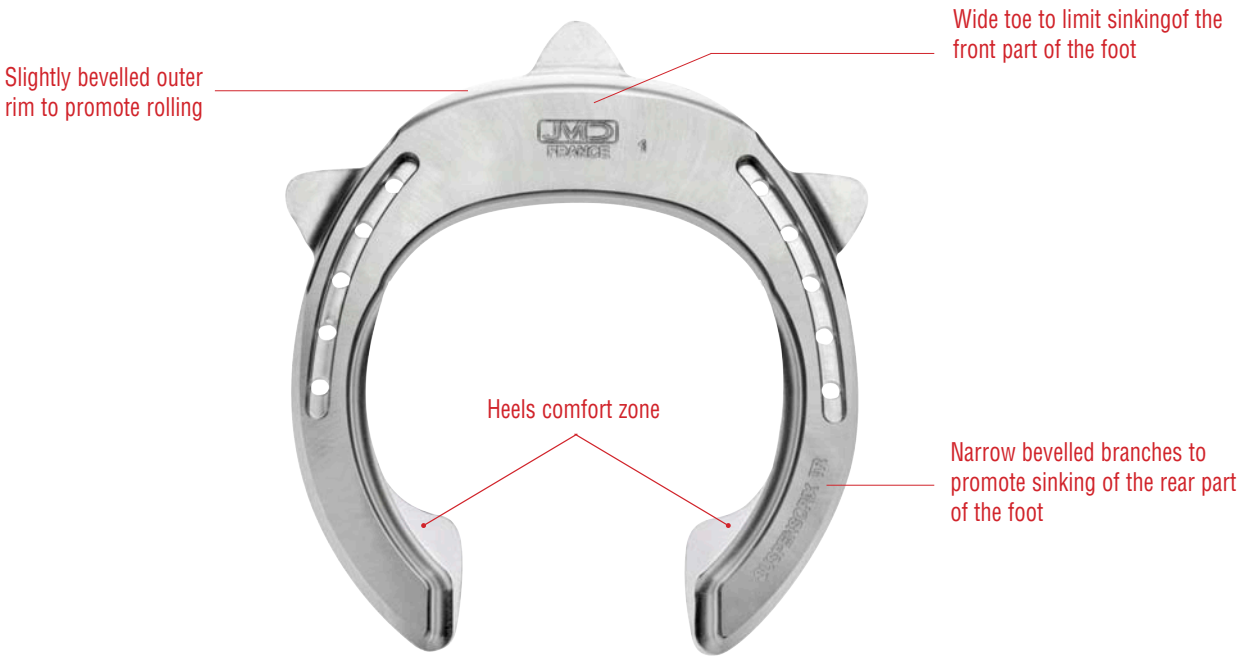
JMD TROTTER

SUSPENSORIX® TR Shoe front or hind

Designed by Professor Jean-Marie Denoix, DVM, PhD director of the CIRALE (Normandy, France).

◆ **DESCRIPTION :** Trotter shoe with a wide toe and bevelled narrow branches. For front or hind feet. Designed in high-tech aluminium alloy. Non-tempered alloy : hot work possible up to 450°C. 3 clips for use with 1 toe clip or 2 quarter clips. Thickness 8mm. Coverage and weight in size 1 : 30mm on the toe. On branches : 18mm foot side and 10mm ground side. 110g.

◆ **CONCEPT AND REACTION ON THE GROUND :**
On penetrable and compacted ground: wide front support to limit sinking of the toe into the ground. Narrow bevelled branches to promote the sinking of heels. Enlarged surface under the heels on the foot side for more comfort. Slightly bevelled outer rim on the toe to promote rolling.



◆ **BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS :**
Reduces stress on the fetlock joint suspensory ligament and on the superficial digital flexor tendon. Reduces general stress on the fetlock joint suspensory apparatus (suspensory ligament, proximal scutum, straight and oblique sesamoidean ligaments).

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

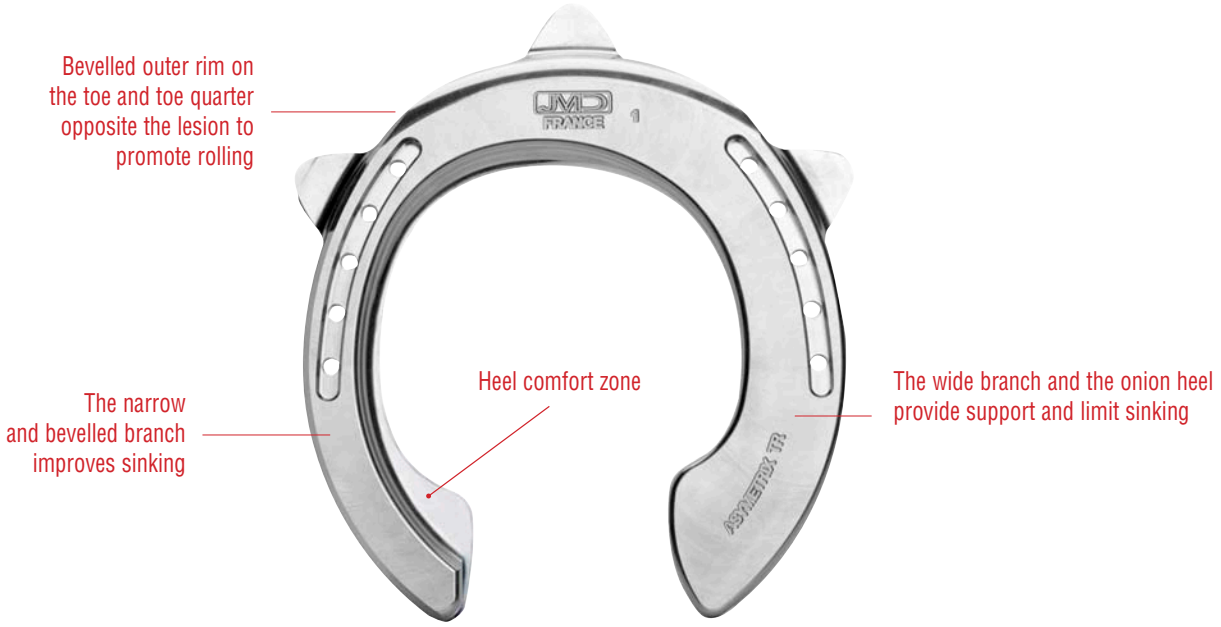
TROTTER

ASYMETRIX® TR Shoe front or hind

Designed by Professor Jean-Marie Denoix, DVM, PhD director of the CIRALE (Normandy, France).

◆ **DESCRIPTION :** Trotter asymmetric shoe with branches of different widths : a wide branch with an onion heel and a narrow bevelled branch. For front or hind feet. Designed in high-tech aluminium alloy. Non-tempered alloy : hot work possible up to 450 °C. 3 clips for use with 1 toe clip or 2 quarter clips. Thickness 8 mm. Coverage and weight in size 1 : 32 mm on the onion heel. 26 mm for the wide branch. 26 mm on the toe. Narrow and bevelled branch : 18 mm foot side and 12 mm ground side. 131g.

◆ **CONCEPT AND REACTION ON 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). Bevelled outer rim on the toe and toe quarter opposite the lesion to promote 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 :**
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).

TROTTER

SUSPENSOR RAMIX TR Shoe front or hind

Designed by Professor Jean-Marie Denoix, DVM, PhD director of the CIRALE (Normandy, France).

◆ **DESCRIPTION : Trotter** shoe with asymmetric branches (a wide branch and a narrow bevelled branch) as well as a widetoe and heels bevelled at their ends. For front or hind feet. Designed in high-tech aluminium alloy. Non-tempered alloy : hot work possible up to 450 °C. 3 clips for use with 1 toe clip or 2 quarter clips. Thickness 8 mm. Coverage and weight in size 1 : 25 mm for the wide branch. 26 mm on the toe. Narrow and bevelled branch : 18 mm foot side and 12 mm ground side. 131 g.

◆ **CONCEPT AND REACTION ON THE GROUND :**
On penetrable and compacted ground: the wide branch provides support and limits sinking. The narrow bevelled branch promotes sinking (enlarged surface under the heel on the foot side for more comfort). The wide toe and the bevelled heels promote heels sinking.

◆ **BIOMECHANICAL AND KINETHERAPEUTIC EFFECTS :**
Depending on the application of the shoe (medial or lateral wide branch): reduces tensions on one branch of the fetlock joint suspensory ligament or on one oblique sesamoidean ligament.

◆ **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).

- Created in France
- Designed in France
- Manufactured in France

Michel
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