

ENGLISH

# ORTHOKIT 1.0 & 2.0

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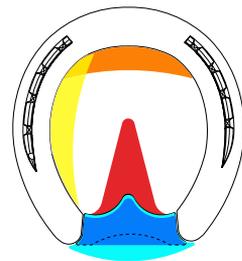
## ORTHOKIT 1.0

- Eggbar Shoe
- Heartbar Shoe
- Straightbar Shoe
- Straightbar Performance Shoe
- Wide Toe Shoe
- Wide Branch Shoe

Dimensions & Sizes

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## ORTHOKIT 2.0

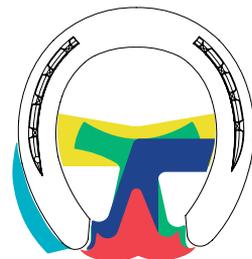
- Z-Bar
- Center Bar
- Spider Plate
- Lateral Extension
- Heart Bar

Dimensions

Sizes

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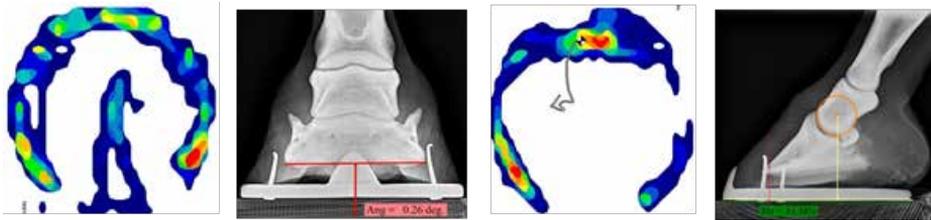


# WERKMAN ORTHOKIT 1.0 & 2.0

June 2013 saw the launch of a comprehensive scientific study on the subject of shoeing, funded by the Werkman Hoofcare Company and led by Dr. Jenny Hagen (Veterinary Anatomical Institute (Veterinär-Anatomisches Institut) of Leipzig University).

The study focused on the impact of various horseshoes and shoeing modifications, taking into account diverse soil types, on:

- the distribution pattern of the vertical compressive forces exerted on the hoof;
- the size of the load-bearing area;
- the gait pattern;
- the orientation of the phalanges.



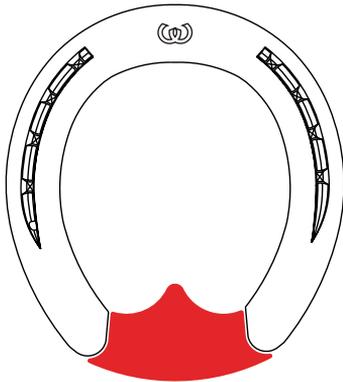
The results of this study were used for the development of the Werkman ORTHOKIT.

The Werkman ORTHOKIT provides you with an effective and straightforward means to turn Werkman horseshoes into various therapeutic shoes.

The ORTHOKIT 2.0 remains true to the original ideas, enlarging the range of easy to use orthopaedic horseshoe inserts designed by the experience of those in the field and supported by scientific research from the University of Leipzig.

This brochure explains how the ORTHOKIT modifications are made and how they function.

# EGGBAR SHOE 1.0



When using the bar on Warrior shoes with side or quarter clips or on the Warrior Special shoe, the effect of the modification is enhanced by the shape of the toe of the shoe.

## FIELD OF APPLICATION

- Pathologies of the deep flexor tendon
- Pathologies of the check ligament of the deep flexor tendon
- Chronic navicular disease
- Palmar foot pain
- Inflammations of the ligaments of the toe

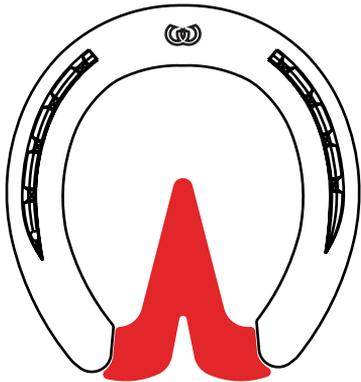
## EFFECT

- Expansion of the palmar support area and of the palmar lever arm
- Increase of the angle of the coffin bone on soft soil
- Reduction of the leverage exerted on the front section of the (toe of the) hoof on all soils
- Reduction of the tension of the deep flexor tendon and a reduced load on the navicular area
- Without frog contact: protection of frog and palmar hoof section ( navicular bone, attachment of the deep flexor tendon) on all types of soil
- With frog contact: continual increase of the load-bearing surface in the palmar hoof section, regardless of the type of soil



This Eggbar can easily be modified into an open toe shoe.

# HEART BAR SHOE 1.0



When using the bar on Warrior shoes with side or quarter clips or on the Warrior Special shoe, the effect of the modification is enhanced by the shape of the toe of the shoe.

## FIELD OF APPLICATION

- Founder/Laminitis
- Pathologies of the deep flexor tendon
- Pathologies of the check ligament of the deep flexor tendon
- Chronic navicular disease
- Palmar foot pain
- Inflammations of the ligaments of the toe
- Hoof cracks

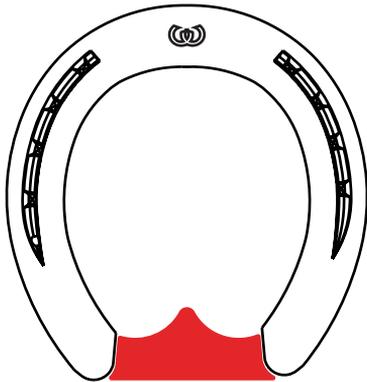
## EFFECT

- Expansion of the palmar support area without modification of the palmar lever arm
- Reduction of the risk of losing the horseshoe due to pulling the shoe (in comparison with shoeing with palmar extension)
- Increase of the angle of the coffin bone on soft soil
- Reduction of the tension of the deep flexor tendon and a reduced load on the navicular area
- Without frog contact: protection of frog and palmar hoof section (navicular bone, attachment of the deep flexor tendon) on all types of soil
- With frog contact: continual increase of the load-bearing surface in the palmar hoof section, regardless of the type of soil



This Heart Bar can easily be modified into an open toe shoe.

# STRAIGHT BAR SHOE 1.0



When using the bar on Warrior shoes with side or quarter clips or on the Warrior Special shoe, the effect of the modification is enhanced by the shape of the toe of the shoe.

## FIELD OF APPLICATION

- Founder/Laminitis
- Pathologies of the deep flexor tendon
- Pathologies of the check ligament of the deep flexor tendon
- Chronic navicular disease
- Palmar foot pain
- Inflammations of the ligaments of the toe
- Hoof cracks

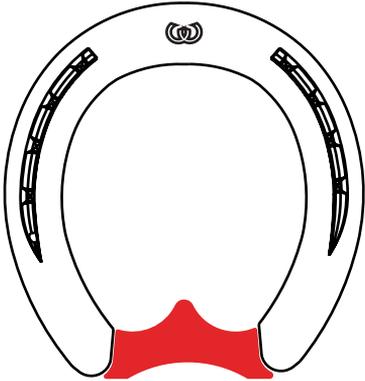
## EFFECT

- Expansion of the palmar support area without modification of the palmar lever arm
- Reduction of the risk of losing the horseshoe due to pulling the shoe (in comparison with shoeing with palmar extension)
- Increase of the angle of the coffin bone on soft soil
- Reduction of the tension of the deep flexor tendon and a reduced load on the navicular area
- Without frog contact: protection of frog and palmar hoof section (navicular bone, attachment of the deep flexor tendon) on all types of soil
- With frog contact: continual increase of the load-bearing surface in the palmar hoof section, regardless of the type of soil



This Straight Bar can easily be modified into an open toe shoe.

# STRAIGHT BAR PERFORMANCE SHOE 1.0



When using the bar on Warrior shoes with side or quarter clips or on the Warrior Special shoe, the effect of the modification is enhanced by the shape of the toe of the shoe.

## FIELD OF APPLICATION

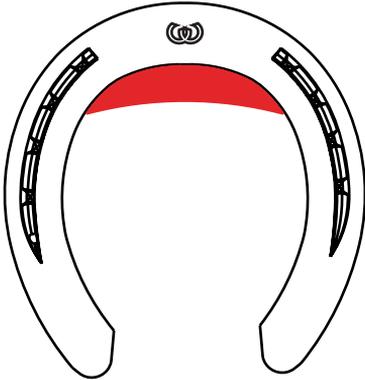
- Founder/Laminitis
- Pathologies of the deep flexor tendon
- Pathologies of the check ligament of the deep flexor tendon
- Chronic navicular disease
- Palmar foot pain
- Inflammations of the ligaments of the toe
- Hoof cracks

## EFFECT

- Expansion of the palmar support area without modification of the palmar lever arm
- The curved bar reduces the risk of losing the horseshoe due to pulling the shoe (in comparison with shoeing with palmar extension)
- Increase of the angle of the coffin bone on soft soil
- Reduction of the tension of the deep flexor tendon and a reduced load on the navicular area
- Without frog contact: protection of frog and palmar hoof section (navicular bone, attachment of the deep flexor tendon) on all types of soil
- With frog contact: continual increase of the load-bearing surface in the palmar hoof section, regardless of the type of soil



# WIDE TOE SHOE 1.0



By making the branches of the shoe narrower (grinding, fuller cutting) the effect of the horse-shoe is enhanced on soft soil.

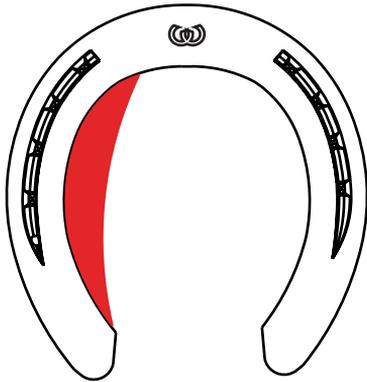
## FIELD OF APPLICATION

- Pathologies of the superficial flexor tendon
- Pathologies of the check ligament of the superficial flexor tendon
- Pathologies of the suspensory ligament and its check ligaments

## EFFECT

- Increase of ground contact area in the toe
- Reduction of the sinking in of the toe on soft soil
- Less upright orientation of the dorso-palmar coffin bone angle than with standard shoes on soft soil
- Position of the coffin bone matches the orientation on hard soil = constant
- On soft soil reduction of the tension of the superficial flexor tendon, the check ligament of the superficial flexor tendon and the suspensory ligament

# WIDE BRANCH SHOE 1.0



The inner or outer horseshoe branch can be widened by welding in a wide branch bar.

By narrowing the opposite branch (grinding, fuller cutting), the effect of the shoe is enhanced on soft soil.

Grinding/forging the outside (ground side) of the narrower branch ("rolling") intensifies the effect on any type of surface. Both can be combined.

## FIELD OF APPLICATION

- Damage to the collateral ligaments (widening on the side of the pathology / narrowing on the opposite side / rolling on the opposite side)
- Unilateral osteoarthritis of the toe joints (widening on the side opposite of the pathology / narrowing on the side of the pathology / rolling on the side of the pathology)

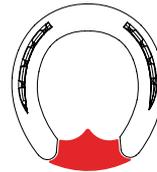
## EFFECT

- One-sided increase of ground contact area
- Increased sinking in of the opposite side on soft soil
- Relief of collateral ligaments on the widened side
- Relief for unilateral osteoarthritis on the side that was not widened

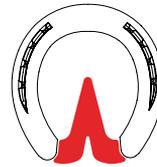
# DIMENSIONS 1.0

## ORTHOKIT 1.0

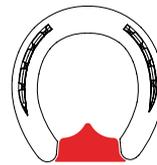
Model	Size	mm	
		Height	Width
Ortho S	Wide Toe Shoe	68.5	17.2
	Wide Branch Shoe	89.5	21.4
	Heart Bar Shoe	62.2	75.9
	Straight Bar Shoe	61	33.9
	Straight Bar Performance	61	33.9
	Eggbar Shoe	70.7	36.8
Ortho M	Wide Toe Shoe	79.3	20.1
	Wide Branch Shoe	102.8	25.1
	Heart Bar Shoe	68.7	84.1
	Straight Bar Shoe	66.6	37
	Straight Bar Performance	68	38
	Eggbar Shoe	79.2	40.8
Ortho L	Wide Toe Shoe	90.2	22.5
	Wide Branch Shoe	118	28.4
	Heart Bar Shoe	78.6	96.9
	Straight Bar Shoe	75.4	42.6
	Straight Bar Performance	75.4	42.6
	Eggbar Shoe	89.7	46.5



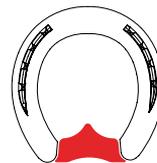
EGG BAR SHOE



HEART BAR SHOE



STRAIGHT BAR SHOE



STRAIGHT BAR PERF. SHOE



WIDE TOE SHOE



WIDE BRANCH SHOE

# COMMENTS 1.0

## SIZES

Size S fits flush for a Warrior front shoe size 0  
(Equates to Ryder Original Size 2 / Euroskill size 0)

Size M fits flush for a Warrior front shoe size 2  
(Equates to Ryder Original Size 4 / Euroskill size 2)

Size L fits flush for a Warrior front shoe size 5  
(Equates to Ryder Original Size 7 / Euroskill size 5)

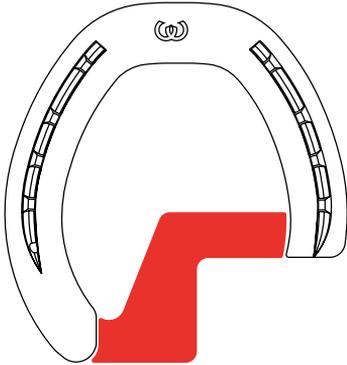
## IMPORTANT

The ORTHOKIT modifications have different effects on different types of soil. It is important to consider the bedding in the box and type of soils that the horse is worked on for optimum effect.

Keep in mind that relieving the load on an anatomical structure will always be accompanied by an increase in the load in another area.

The ends of the egg bar, heart bar, straight bar and performance bar are premade as left and rights. Make sure that the bars are dropped in the right way.

# Z-BAR 2.0



## FIELD OF APPLICATION

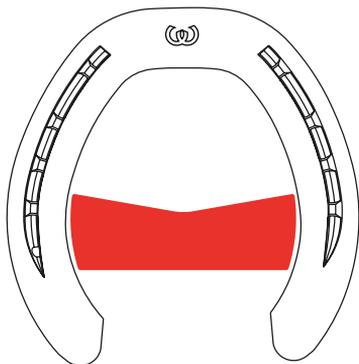
- Quarter cracks
- Sheared heels

## EFFECT

- The Z-Bar enables you to float a complete heel quarter on solid ground. This can bring relief to the stressed / injured area.



# CENTER BAR 2.0



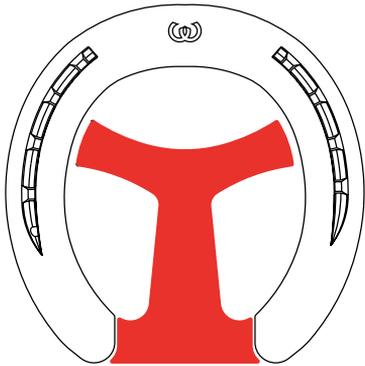
## FIELD OF APPLICATION

- Founder/Laminitis
- Pathologies of the deep flexor tendon
- Pathologies of the check ligament of the deep flexor tendon
- Chronic navicular disease
- Palmar foot pain
- Inflammations of the ligaments of the toe
- Hoof cracks

## EFFECT

- The Central Bar has a wide range of applications. Using this bar in conjunction with a hoof packing can provide support to a specific area. Additionally, using the Central Bar without packing can provide protection.
- If you weld in the Central Bar in the middle of the shoe with the dorsal border behind the tip of the frog you can cut out the toe of your original shoe and you will have a H-shoe. This shoe offers the positive effects of an open toe shoe without the need of having a bar at the palmar/plantar end of the shoe at the same time.

# SPIDER PLATE 2.0



## FIELD OF APPLICATION

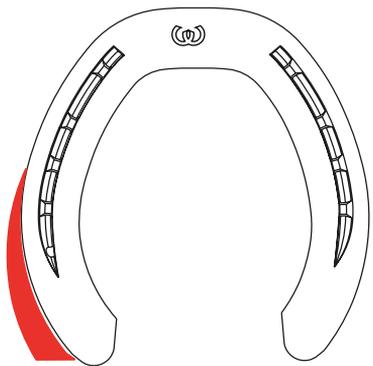
- Founder/Laminitis
- Pathologies of the deep flexor tendon
- Pathologies of the check ligament of the deep flexor tendon
- Chronic navicular disease
- Palmar foot pain
- Inflammations of the ligaments of the toe
- Hoof cracks

## EFFECT

- The Spider plate gives you a large area of support or protection.
- By using it on different positions of the shoe you can determine which area of the shoe will penetrate yielding ground less or more.



# LATERAL EXTENSION 2.0



## FIELD OF APPLICATION

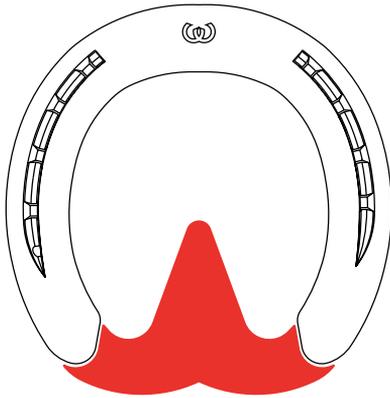
- Bone spavin
- Brushing

## EFFECT

- The Lateral Extension can be used to give the horse extra support.
- It can widen the the horses gait and therefore help horses with “brushing” problems.
- Horses with bone spavin can as well benefit from lateral extension shoes.



# HEART BAR 2.0



## FIELD OF APPLICATION

- Founder/Laminitis
- Pathologies of the deep flexor tendon
- Pathologies of the check ligament of the deep flexor tendon
- Chronic navicular disease
- Palmar foot pain
- Inflammations of the ligaments of the toe
- Hoof cracks

## EFFECT

- Expansion of the palmar support area without modification of the palmar lever arm.
- Reduces the risk of losing the horseshoe due to pulling the shoe (in comparison with shoeing with palmar extension).
- Increase of the angle of the coffin bone on soft soil.
- Reduction of the tension of the deep flexor tendon and a reduced load on the navicular area.
- Without frog contact: protection of frog and palmar hoof section (navicular bone, attachment of the deep flexor tendon) on all types of soil.
- With frog contact: continual increase of the load-bearing surface in the palmar hoof section, regardless of the type of soil.

# DIMENSIONS 2.0

## ORTHOKIT 2.0

Model	Size	mm	
		Height	Width
Z-Bar	Ortho Z-Bar L - 6 mm	80	95
	Ortho Z-Bar L - 8 mm	80	95
	Ortho Z-Bar M - 6 mm	66	85
Center Bar	Ortho Center-Bar L - 6 mm	37	112
	Ortho Center-Bar L - 8 mm	37	112
	Ortho Center-Bar M - 6 mm	32	96
Spider Plate	Ortho Spider Plate L - 4 mm	124	109
	Ortho Spider Plate M - 4 mm	97	93
	Ortho Spider Plate S - 4 mm	94	83
Lateral Extension	Ortho Lat. Ext. L - 8 mm	93	22
	Ortho Lat. Ext. M - 8 mm	81	18
	Ortho Lat. Ext. S - 8 mm	73	17
Heart Bar	Ortho Heart Bar L - 6mm	93	22
	Ortho Heart Bar M - 6 mm	81	18
	Ortho Heart Bar S - 6 mm	73	17



Z- BAR SHOE



CENTER BAR SHOE



SPIDER BAR SHOE



LATERAL EXTENSION



HEART BAR SHOE

# SIZES 2.0

## SMALL

Size S fits flush for a Warrior front shoe size 0  
(Equates to Ryder Original Size 2 / Euroskill size 0)

## MEDIUM

Size M fits flush for a Warrior front shoe size 2  
(Equates to Ryder Original Size 4 / Euroskill size 2)

## LARGE

Size L fits flush for a Warrior front shoe size 5  
(Equates to Ryder Original Size 7 / Euroskill size 5)

## EXCEPTION “LATERAL EXTENSION BAR”

This bar fits flush for Warrior hind shoes in the corresponding sizes.  
With the help of appropriate adjustment (grinding) these welding parts fit into different Werkman horseshoes.

# COMMENTS 2.0

## IMPORTANT

The ORTHOKIT modifications have different effects on different types of soil. It is important to consider the bedding in the box and type of soils that the horse is worked on for optimum effect.

Keep in mind that relieving the load on an anatomical structure will always be accompanied by an increase in the load in another area.

## REFILL KITS

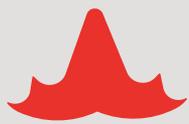
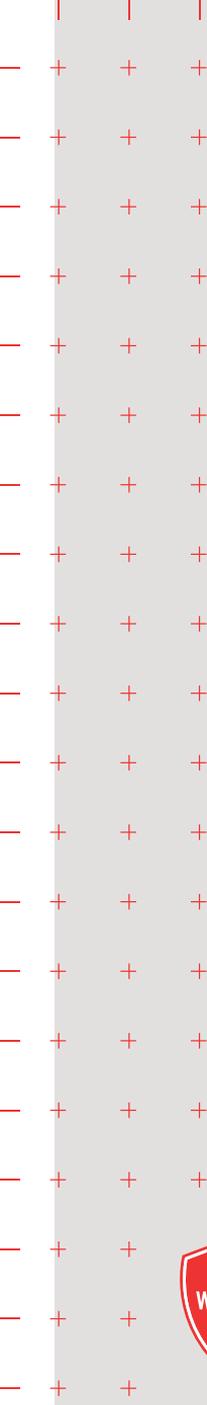
**Refill kits are available in all different models and sizes.  
10 pieces of one size and one model per box.**

For more information regarding the use of Werkman ORTHOKIT, please contact: [shop@werkmanhoofcare.com](mailto:shop@werkmanhoofcare.com) or visit [werkmanhoofcare.com/academy](http://werkmanhoofcare.com/academy)

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## DISCLAIMER

The Werkman ORTHOKIT should only be selected, used, and mounted by farriers and veterinarians who possess adequate knowledge of orthopedic shoeing. Inexpert or erroneous selection or mounting of the Werkman ORTHOKIT (especially when welding the parts together) can undo the desired effect and even cause damage. Therefore, C.V. Werkman disclaims any liability for potential injuries, damage, costs or other consequences, caused by inexpert or erroneous selection and/or mounting of the Werkman ORTHOKIT.



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