The Natural Angle

Volume 18: Issue 2

This newsletter Published for Ken Davis & Sons, Inc.

Dave Farley Demonstrates Modifications Using the New Kerckhaert SX-10

Dave Farley, APF-I CF visited the FootPro Shop and did a variety of shoe modifications using the new Kerckhaert SX-10 unclipped shoes. The SX-10 is a 3/8" thick shoe that allows you to do various modifications without sacrificing the strength of the shoe. You can find videos of these modifications on the FPD YouTube channel - youtube.com/farrierproducts.

Heel clean out Modification

The heel clean out modification is used to promote the sole to naturally clean out or unload the material that collects or packs into the foot and sometimes snowballs. Open the heels by hammering the inside of each heel, or grinding bevels on each heel. Taper the material from the ground side of the shoe. This shoe modification helps the foot to clean, especially if the horse is working at higher speeds.

Onion Modification

The onion modification is done by forging and displacing steel, widening the material to cover or protect an area of the sole, especially at the seat of corn at the juncture of the bar and hoof wall. There are many ways to accomplish this modification. This demonstration was done by placing the shoe on the horn and simply hammering the SX10 material inward to cover the area of the corn. This forging exercise can be forged on any area of the shoe where the foot is compromised by a puncture, bruise or being cut too short.

Double Lateral Heel Modification

The double lateral heel modification is done similar to a trailer but we take almost an inch or more of material to forge a longer trailer, forging it more outward or more laterally. Then, using the horn, hammer it back into the heel area of the shoe. This provides more lateral support without as much length as a trailer. It can be forged wider by hammering from the hoof side of the shoe outward. This modification is used for horses with run under bilateral heels or contracted run under heels. For example, the type of hoof conformation that loses traction or support on tight fast turns.

Continued on page 2

Continued from page 1

Rolled Toe Modification

The rolled toe modification is a very simple one. It requires forging the toe of the shoe approximately from the center or middle of the branch from the second nail hole outward to the second nail hole of the opposite branch. This forging of the toe area will widen the width of the branch as it thins the material the direction it's being hammered. This thinning and widening of the toe encourages the foot to break over easier and sometimes faster. This modification is helpful to take stress off the soft tissues in that limb at the break over of the foot. If you have a horse that naturally breaks over either laterally or medially, you can adjust the roll to allow that breakover in that direction.

Lateral Support Modification

The lateral support modification is made by forging the steel at the heel of the shoe from the hoof side. Placing the ground side of the shoe on the edge of the anvil and holding the hammer at approximately 45 degrees, hammer the material outward. This will widen the branch or heel area. This modification is forged to help support a contracted or run under heel. It is very commonly helpful on hind feet but can also be used for fronts.

Trailer Modification

A trailer modification is made by turning the end of the branch of the shoe to line up with the diagonal toe of the shoe. It can be medial or lateral but most often is used laterally. The trailer modification should extend farther back and outward to alter the landing of the foot. This modification, if used laterally, will widen a horse's landing. Useful for a horse that rope walks. ■

Shearing Forces

by Seth R Holestine, CJF

It's late afternoon and a long, hot July day is almost done when the text comes through. A customer has a horse with a shoe off, so you tell them you will be by in a couple to put it back on. The shoe is hanging on the stall door with three sheared nails. Not only do you have the hassle of an extra stop to fix the pulled shoe, but you'll either have to remove the nail shanks from the foot, or risk finding them with your knife or nippers next cycle. Few things are as troublesome for everyone involved (farrier, owner, trainer...) as sheared nails. Currently, the hoof care industry is blessed with an abundance of choices in nail selection from quite a few different sources, which makes it easy to blame the nail manufacturer when we come back to a sheared nail. However, there are multiple contributing factors to consider when encumbered by sheared nails. Most often when I encounter sheared nails it is either due to excessive movement or poor nail fit.

Poor nail fit can lead to a sheared nail in a couple of different ways. A nail hole that is too tight will create a stress point on the nail at the foot surface, often leading to nail failure. Over forging the shoe while shaping or modifying can wreck a previously good nail hole.

Depending on how much we have changed the original nail hole, it may be difficult to fix without ending up with an oversized hole. In this case, it may be best to use a different nail hole, as loose nail holes can also contribute to failed nails. When using a slim blade nail, you may want to tighten the nail fit during your shaping heat to avoid loose nail fit at the beginning of the cycle. Often (especially when a horse lives or works in sandy, abrasive footing) the nail holes will exhibit excessive wear before the rest of the shoe is worn out. Care should be taken to use either an oversized nail (when appropriate for the hoof) or resize the nail holes. When building handmade shoes, fixing pinched nail holes, or punching additional holes into keg shoes, care should be taken to use properly tuned punches and pritchels for the intended nail type and size to avoid under or oversized or misshapen nails holes. This will prevent a large portion of the sheared nails that we see.

If we consider the forces applied to a horseshoe, it is impressive that just a few small nails keep a shoe on a hoof at all. It is critical to consider the horse's job, size,

Continued on page 4

Continued from page 3

and habits when determining a shoeing plan suitable for the entire cycle. For many of the horses I care for, it is not realistic to depend on just the nails to secure the shoe for the duration of a shoeing cycle. Proper use of clips will greatly reduce the shearing force that is applied to the nails. I use clips on a large percentage of the horses that I work on. If the horse jumps, spins, stops or turns hard, is a big mover, wears a traction shoe or uses added traction devises, is a stall kicker, paws, is expected to be stomping at flies, or has a workload that includes prolonged, continuous impact and concussion, such as a working trail horse, I will likely incorporate clips into my shoeing plan to minimize the shearing forces applied to the nails.

Another factor to consider is hoof quality. A broken-out hoof will have less surface in contact with the shoe and possibly minimized contact with the nail shank. White Line and laminae that is compromised by bacteria and fungus can also cause poor contact with the nail shank leading to excessive movement. When dealing with a compromised hoof capsule, one should consider the use of clips and shortened shoeing cycle to lessen the chance of premature nail failure.

Inconsistent environments can cause significant changes to the hoof capsule. In springtime, in the mountains of Colorado, it is not uncommon for a horse to experience subzero temperatures, 70 degrees Fahrenheit, wet, waterlogged feet from spring runoff, and hard, dry feet from days spent inside or in a dry lot - all in the one shoeing cycle. These huge swings in the environment present an ever-changing hoof capsule that can result in popped clinches and loose shoes, which can cause excessive movement between the hoof wall and shoe. This difficult time of year is when I depend on the use of clips, short cycles, and cooperation with my customers to control the environment as much as possible, and still, I accept that a greater number of pulled shoes is a part of my reality for this time of year.

Continued on page 5

Continued from page 4

When I encounter sheared nails, I first look at my nail fit and make corrections accordingly. If there are no apparent issues there then I consider what forces may have caused the failure:

- Have we moved into fly season and maybe clips would help secure the shoe?
- Are the shoes getting loose and I should consider shortening the shoeing cycle?
- Has the horse's workload increased to the point where I should reexamine the shoeing plan?

If I encounter an excessive amount of nail failure I begin looking for correlations:

- Is there a clear pattern that indicates the failure is related to a certain nail/shoe combination? If so, I need to choose a nail that fits that shoe better.
- Is it related to one certain type of nail on horses at a particular location? I may consider a stronger nail that is better suited for the conditions.

In my experience, premature nail failure is commonly due to factors the farrier can control, or at least influence, and it is up to us to take a close look to remedy the issue. ■

Left: *Reset.* **Right:** *Repaired worn nail hole for proper nail fit on reset. Note that I lightly drive a stud punch into the foot side of the shoe at low heat.*

Left: *New shoe.* **Right:** *Modification of new shoe to better accept a Slim blade nail. Here again, I lightly drive a stud punch into the foot side of the shoe at low heat.*

HOOFCARE TIPS

THE BEST SOLE THICKNESS YOU CAN OFFER

by Larkin Greene • FPD, Inc.

VETTEC SOLE-GUARD IS, WITHOUT A DOUBT, THE MOST VERSATILE URETHANE POUR-IN PRODUCT AVAILABLE, AS WELL AS THE MOST UNDER-UTILIZED. IT POSSESSES THE STRONGEST BOND OF ANY POUR-IN URETHANE, AND IS AS TOUGH AGAINST THE GROUND AS A TRACTOR TIRE; HOWEVER, SOME FARRIERS SHY AWAY FROM IT BECAUSE IT CAN BE QUITE FIRM WHEN USED ON DEEPER POURS. THIS IS WHERE AN UNDERSTANDING OF THE MATERIAL ITSELF, AND THE VARIABLE METHODS FOR APPLYING IT, BECOME IMPORTANT.

Sole-Guard is unique in its composition and application. Because it bonds well, it can be used anywhere, from a thin layer as a coating to a thicker pad for protection against anything sharp that would otherwise bruise or injure the sole and/or frog. For example, it has been used quite successfully as a protective coating on Standardbreds **(figures 1 and 2)**. As a thin coating, it doesn't compromise traction but does protect the frog and sole from being abraded away by a hard stone dust or clay track **(figure 3)**.

Endurance riders were the first to discover an application that proved to be one of the best ways to protect the sole and frog, and give the horse confidence on limited and long-distance rides **(figures 4 and 5)**. By eliminating the common problems associated with a physical pad, a 1/8" to 1/4" thick layer of Sole-Guard applied, in combination with a good steel shoe, provided a huge benefit when the wrong rock put itself directly in the path of the horse's footfall. It essentially provides a way to increase sole thickness with a stronger, more durable material impervious to any sharp object that might otherwise result in the end of the ride.

As mentioned earlier, on deeper pours, Sole-Guard can be pretty firm, especially in regions where feet are typically softer. Fortunately, there is an easy solution. In the deepest parts of the foot like the commissures, a bead of softer material like Equi-Pak or Equi-Pak Soft can be laid down first, then the Sole-Guard can be applied over the softer urethane in a "layered" technique **(figure 6)**. The result is a softer material in the deep areas where sensitivity might occur, and a durable material where it needs to be: against the ground.

The true versatility of Sole-Guard spans far beyond the equine industry. It can be used to fix leaks in your hunting and fishing waders, glue down your floppy work boot

Continued on page 7

Figure 1. Standardbred Exposed Frog Pour - Kerckhaert Outer Rim with Vettec Sole-Guard

Figure 2. Standardbred Full Pour - Kerckhaert Outer Rim with full coverage Vettec Sole-Guard

Figure 3. Contoured Traction Pour - Kerckhaert Kings Plate with Vettec Sole-Guard

Figure 4. Endurance Package - Kerckhaert SX-7 with Vettec Sole-Guard

Figure 5. Trail Pour - Kerckhaert SSP with Vettec Sole-Guard for Solar Protection

Figure 6. Layered Pour - Kerckhaert SX-8 Select with Vettec Equi-Pak CS and Vettec Sole-Guard

Continued from page 6

sole, even seal the leaky rivets on your fishing boat. And, if you happen to have a pet elephant, Sole-Guard has been used successfully as a coating on Pachyderm feet to protect them from the abrasive decomposed granite often used in animal parks **(figure 7)**. Whenever you need a durable, flexible fix, Sole-Guard is a handy material to have in your toolbox. ■

Figure 7. Elephant Sole Protected with Vettec Sole-Guard

THE NATURAL ANGLE is published to provide you with new and useful information about the industry. It is published through a cooperative effort of FPD, Kerckhaert Horseshoes, Liberty Horseshoe Nails, Bellota, Bloom Forge, Vettec and your supplier.

If you have questions, comments or ideas concerning the articles published in the Natural Angle, please contact your distributor. We welcome your input. *The Natural Angle* is designed and edited by Graphic Response. ■

We Carry All Your Old Favorites and All the Best New Products

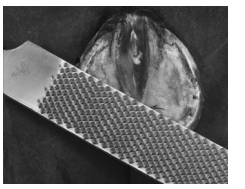
KERCKHAERT SX-7
Used for a wide variety of disciplines, these 1/4" shoes allow good nailing and fit without adding excess weight. Punched for City head nails. Available clipped and unclipped.

KERCKHAERT SX-8
These versatile shoes are used for trail, jumping, dressage and ranch work. 5/16" thick shoe with graduated widths. Punched for City head nails. Available clipped and unclipped.

NEW! KERCKHAERT SX-8 SELECT

Specifically designed for horses requiring extra heel support. Elongated, tapered heels and full toe. The widest part of the shoe is moved forward allowing for extended heel fit. Punched for 5 City, 5 Slim and 5 Combo Slim nails. Unclipped Hinds only.

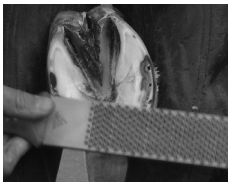
BELLOTA TOP LEVEL RASP (14")



The Bellota Top Level rasp is 12% wider (2" wide) and 10% thinner than regular rasps for perfect leveling balance and control. Aggressive rasp side (8 teeth/row) for easy cut, ideal for trimming and intermediate file side for excellent and efficient finish. Same weight as regular rasp models.

NEW! BELLOTA TOP LEVEL LONG RASP (17")
A longer version of the Top Level, ideal for larger hooves.

BELLOTA PRIME LEVEL RASP (14")



Same features and measurements as the Top Level, but with a chip breaker file side for smoothest finish.

NEW! KERCKHAERT SX-10

First 10mm Kerckhaert shoe in a front and hind pattern punched for City and Combo Slim nails. Features a full, balanced toe, extra thickness, graduated widths and a 10 nail hole pattern. This shoe is an excellent choice if you are looking for additional strength, wear, nailing and modification options. Available unclipped. Clipped coming December 2020!

KERCKHAERT SX ROLLER

This lighter, unclipped version of the Classic Roller is an excellent choice for horses requiring additional ease of breakover. One shape pattern, easily fit to fronts. Punched for 5 City, 5 Slim, 5 Combo and 5 Combo Slim nails.

Ken Davis & Sons, Inc.
367 East Blagrove Street
Richwood, OH 43344

Return Service Requested

FIRST CLASS
U.S. POSTAGE
PAID
HAGERSTOWN, MD 21740
PERMIT NO. 184