

Case Study: The SafeTack® Patent (U.S. Patent Awarded to Double D Trailers for Innovative SafeTack Reverse Slant Horse Trailer)

OVERVIEW

It has been shown in scientific studies that horses are less stressed when transported in a rear-facing horse trailer.

(To read more about the scientific studies, see Case Study no. 2)

However, standard rear-facing trailers still have some serious safety flaws, which Brad Heath believed could be corrected. While Double D Trailers did not design a new rear-facing trailer, their patented trailer design is loaded with safety features over and above the competitor's rear-facing offerings.

In 2015, Double D Trailers' owner, Brad Heath, was awarded U.S. Patent #9132762 in 2015 for an innovative horse trailer that is called the SafeTack® Reverse Slant Horse Trailer, and there are already many happy Double D Trailers customers with this model throughout the United States.

Read on to find out why Double D Trailers thought it necessary to design such a trailer and proceed with the patent process.

OPPORTUNITIES & CHALLENGES

Loading and unloading a horse through a narrow door is a situation that can cause serious problems and injuries.

The problem that most trailers have (either reverse or forward-facing trailers) is that the horse loads on the side or the rear, and then exits out a very narrow door in the back. Typically, these doors and ramps are a very narrow 39" wide for the horses to exit. "It's a very confining and claustrophobic space. A lot can happen to a human trying to walk out that small narrow door with a large horse."

Double D Trailers decided to address the safety shortfall of this narrow door, along with other associated safety issues at the same time, that are found in most reverse slant load designs. At Double D Trailers, the most important goal when designing a trailer is horse and handler safety.

SOLUTION

There are several key features that make the Double D Trailers reverse horse trailer a safer and smarter option. Brad explained, "The SafeTack Reverse Slant Load trailer addresses the shortfalls of what other manufacturers in the industry were (and still are) doing." He emphasized one important point. "We have not developed the reverse slant [trailer]. Rear-facing trailer designs have been around for many years." Instead, Double D Trailers took an existing concept and applied a new layout. While they were at it, they added several new safety features.

The main problem with the standard trailer is that most load the horse on the side or rear, and then exit the horse out a very narrow back door. Double D Trailers eliminated the problem of the narrow opening by adding in the SafeTack compartment and adding double-hinged dividers. The SafeTack compartment swings out like a second door, allowing a wide-open area for your horse to pass. Double-hinged dividers in the interior of the trailer allow the horses to easily move through the trailer to exit without awkward backing and maneuvering. "When you're unloading with the SafeTack Reverse, you have the entire back of the trailer available for loading and unloading."

But Double D Trailers didn't stop there when redesigning the trailer. Another safety feature on the Double D Trailers design is an extra partition behind the rear horse. When the rear ramp of the trailer is open, this partition prevents the horse from immediately trying to unload. "It's very safe to have this extra partition in place."

However, the design process did have its challenges. Creating and validating a design that made sense on paper - and worked in real life - was certainly a challenge. "The biggest challenge was the double-hinged divider," he explained. "Trying to get it to swing from both ends, and to figure out the safety issues associated with it, was challenging."

OTHER FEATURES & BENEFITS

This SafeTack Reverse Slant horse trailer design also has drop down windows on both sides of the trailer as well as overhead pop-up vents at the head and tail of the horse. This allows owners to face their horse in a rear or forward direction without loss of accessibility or airflow.

With the combined benefits of the moveable rear SafeTack compartment, the double-hinged divider partitions, the drop-down windows, and the wide ramp, the patented Double D Trailers SafeTack Reverse slant load trailer is a truly safe and well-designed trailer.

SOLUTION (CONTINUED)

Navigating the patent process took much longer than expected as well. "We submitted the paperwork to the U.S. Patent office in May of 2013. The first trailer was also built sometime in 2013. The approval came in 2015." Despite requesting a 'fast-track' processing for the patent, it still took 2 1/2 years for the patent to be approved. However, the advantage of a patent is its protection against other manufacturers copying the design.

"You will find this [design] unique to Double D Trailers. No one else in the United States has this. And now with the patent, others will not be able to copy it."

WHAT OUR CUSTOMERS HAVE TO SAY



How have Double D Trailers customers received the new design? Here's what a few happy customers had to say:

Barb Pedoto of Oxford, Ohio says, *"We love our new Double D Trailer! We get compliments everywhere we go, and people are amazed at the SafeTack compartment. ... The center divider takes a little getting used to but now my horses can face the rear and travel more happily! I was drawn to Double D because of the SafeTack but there are many more reasons to recommend it. So happy we bought it!"*

Karen Jones of Newnan, Georgia says, *"I love my new Double D Trailer... I got their patent pending reverse/forward facing SafeTack 2H Slant Gooseneck. Brad designed a hay/feed room for it and I enlarged the dressing room. I can't wait to haul my horses in it; it is so much roomier than any of my previous 3 trailers! I have one problem loader that loves being able to walk forward in and OUT! I highly recommend Brad and Double D for a great trailer designing experience, extraordinary customer service and a fabulous product!"*

The patented SafeTack Reverse Slant Load trailer from Double D Trailers can be configured in a bumper pull or gooseneck. It is also built into various sizes ranging from two to six horses (five and six horse models only available in gooseneck).

Double D Trailers specializes in custom-built trailers for its clients. Your horse trailer is protected by a US patent - and built to Double D Trailer's high safety standards – but you'll be happy to know that you can add your own touch to it as well. "We're very flexible in our designs!" Brad added.

If you want to design your own trailer, just click [here](#).