Education & Training


# Saddle Lift to Enhance Independence of Horseback Riders with Disabilities

**WiSys: T170002US02**

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**WiSys Technology Foundation is seeking a strategic partner for manufacturing, marketing, sales, and distribution of a lift that allows para-equestrian riders to independently saddle their horses.**

## The Invention

Horseback riding is used therapeutically for riders with many types of disabilities caused by, for example, amputation, cerebral palsy, muscular dystrophy, multiple sclerosis, paralysis, spina bifida, or spinal cord injury. In many of these cases, riders who are normally restricted to a wheelchair utilize a horse's movement to improve their motor skills, coordination, balance, and core strength. Therapeutic horseback riding and the related practice of hippotherapy are used worldwide. In fact, over 870 member centers from over 40 countries in the Professional Association of Therapeutic Horsemanship (PATH) International serve more than 62,000 riders every year. There have been many technologies developed to promote independence of therapeutic riders, including ramps and other devices to help the riders themselves mount their horses. However, a major gap that exists in facilitating independence, especially for riders that are wheelchair-bound, is getting the saddle onto the horse before riding. Saddles can weigh as much as 50 pounds, and a horse's back can be four to six feet off the ground, too high to saddle from a seated position. Due to these restrictions, therapeutic riders typically need assistance in saddling the horse for them, hindering the riders' ability to independently execute the full horseback riding experience.

## Applications

- Enhances independence of riders with disabilities by assisting them in getting the saddle onto the horse by themselves

## Key Benefits

- System comprised of a self-releasing/unlocking mechanism for ease of use
- Adjustable to all saddle types
- Easy to use with minimal training
- Pulleys reduce effort needed to lift weight of saddle
- Avoids damage to saddle

## Stage of Development

A prototype has been developed with support from the McNair Scholars Program and the UW-River Falls Agricultural Engineering Department. The prototype has been tested by a person with physical disabilities saddling a live horse. Minor adjustments may be made to optimize comfort for the user and aesthetics, but the current prototype design is fully functional.

**Tech Fields**

- Animals, Agriculture & Food : General agriculture technologies
- Education & Training : Medical & health



For current licensing status, please contact Jennifer Souter at jennifer@wisys.org or (608) 316-4151