



866.650.1728



Made in the USA

## Overview, Bed Specifications and Competitive Products

The patented Westcot™ line of beds and support products were developed out of the evacuation experience during Hurricane Andrew in South Florida in 1992. Most of the special needs patients, the frail and aged were sent to the then typical Red Cross shelter or high school gym where all evacuees were treated equally – some type of army cot or a section of the floor. Recognizing the critical need to address the special needs population who often require medical care from simple head and foot elevation to oxygen and IV solutions, Mike Weston of Servision, designed the first Westcot™ and began production. Through a series of events, the beds are now exclusively produced at our manufacturing plant, Tube Enterprises Inc. in Kings Mountain, NC and marketed by our Integrity Medical Solutions (IMS) company, mostly through a distributor base that specializes in EMS products and services.

The bed has evolved over time with product changes being driven by both client and caregiver feedback. The current model 400 versions incorporate changes that have come from the deployment of tens of thousands of the beds at hundreds of events including all the major hurricanes since 1992, in NYC during the September 11 attacks and numerous other local, state, national and international disasters. Lessons learned during these deployments as well as meetings with doctors, nurses and emergency management personnel and organizations such as the Red Cross, Health and Human Services in Washington DC and the Veterans Administration, have led to the product attributes and features noted on the product cards. From safety to convenience and comfort, the Westcot™ line is built to be the industry standard in value, patient safety and comfort while maintaining portable/storable & easy to use characteristics for the caregivers and emergency managers.

Salient characteristics of the Westcot™ are not copies of other's work but evolutions of the product to improve safety, comfort and ease of use and include:

- **Spring and Deck Design on Spreader Rods** – The Spring and Deck design of our product is fundamental to patient care and recovery. Unlike the fix slings which are much like a drum skin, the spring decked bed allows for a very comfortable bed without the need to have an extra thick mattress to achieve the same effect. Too, weight is more evenly distributed and thus the deck doesn't work to destroy the frame when loaded, especially from an "impact" load vs. a "settle" load. Properly attached decks must include crimping the springs. This ensures the springs stay connected even when the bed is folded and the deck is not under tension. Other spring and deck knock-offs of the Westcot™ eliminate this step thus you'll often find detached springs when you unfold even a new bed. Spreader rods are used instead of grommets to more evenly spread the load vs. concentrating it.

- **Lightweight 6000 Series Aircraft Aluminum Frames** – keeps the bed light (comparable steel beds weigh 50% more) and eliminates rust which occurs as soon as the paint on the steel is compromised. Steel also rust from within.
- **Spun Tubes** – competitive products use plastic ends caps which were eliminated from the Westcot™ products as these caps come out and open the bed up to traps for dirt, blood borne pathogens, bacteria and increase the chance for “finger choppers”.
- **Leg Locks and Braces**– all legs have locks to ensure safe operation and proper alignment of the legs when bed in use
- **Instructional and Safety Labeling** – supports the set up and use of the bed which is often not used for months to years and deployed by volunteer help vs. professionals
- **Mattresses which meet FED STD CFR1633 for Flammability** – Standard set by CPSC in 2007. All mattresses have law labels. Mattress is made from reinforced antimicrobial waterproof vinyl which allows it to be used for years vs. some competitive products made from absorbent materials. We manufacture the Westcot mattress at our plant.
- **Easy to Decon** – all components of the Westcot were tested for the impact of typical hospital grade disinfectants. No corrosion issues found.
- **Domestic Warranty** – We offer a standard 1 year Warranty but again recognize that these products are often put into storage when received. The fact that the bed is not used until that year is up does not eliminate our accountability to provide you with a defect free bed. If the product is defective, we will repair or replace it – period. We are also, relatively speaking, around the corner vs. across an ocean.

As with all products that set standards, knock-offs fill the market, many of which were built by competitors buying the Westcot™ and sending it to China to be duplicated with what they perceive to be enough changes to avoid patent infringements. The failure to date in our opinion of these products is that the competing companies do not understand manufacturing much less bed design thus they immediately begin to compromise in order to save costs or due to the lack of skill sets to manufacture properly relative to the needs of the patient. Many take common lawn and garden furniture standards and assembly techniques to develop the bed and then assume adding head and foot elevators gives them a product which meets or exceeds the Westcot™ standard and your expectations. Further, these imported beds seldom see any inspection. Often, especially when purchased in large quantities, the beds are drop shipped in containers to a central location and then reshipped, never being inspected or tested. We inspect every bed as we BUILD every bed. We are not brokers for other’s work or quality.

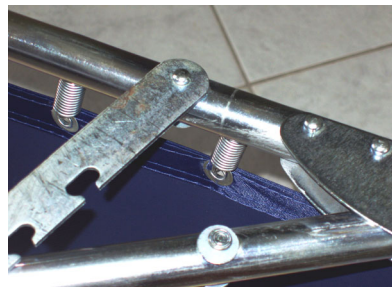
Weight capacity claims would seem to tell a buyer that one bed is better than another. Where’s the test equipment and test data? Does a 500# capacity bed tell the buyer that it will take a direct load of 500# anywhere on the bed or a 500# load evenly distributed over the entire bed frame? Does it take it one time or thousands of times? Does the bed maintain its shape and functions after being loaded to the maximum capacity or do the decks sag and the frames bend? There may not be catastrophic failure the initial times, but

is the bed still fully functional? A human being lying down is not only “thicker” at 500# but “wider”. Does the bed address this issue by offering an even wider deck?



Westcots™ Spring and Deck system eliminates the sag of sewn on fixed decks and the potential for deck failure under load on those cots designed with rods inserted in the tubular frames, a method more commonly found in patio furniture.

The Spring and Deck system also offers the comfort that the patient needs as it gives with the patient’s movement versus a fixed “drum” like skin.



These pictures are of other beds that we’ve tested. They were all new. Some claim 400# capacity or greater and some had no claims. They made it thru our test for only as long as 4 cycles to as many as 2800 before total failure. During the testing to failure, parts are snapping off, rivets coming out, frames are bending T-Bracket and Braces breaking and decks sag.

We understand these issues - we’ve had the same ones in the past. Thus the Westcot™ 400 designs to do all possible to eliminate these issues.

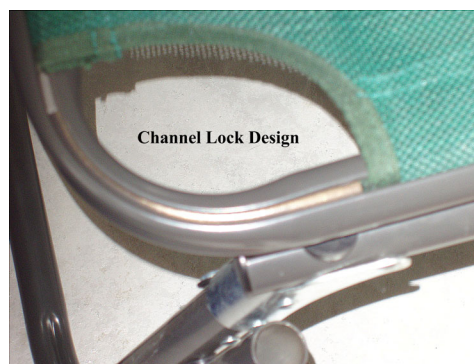
Most bed capacity claims come from taking the claimed capacity, such as 400#, and spreading that load evenly across the bed. That distorts the real life need as patients sit first and transfer most of their weight to that seat spot before pivoting into the bed. As such we test to reflect the repeated demand that comes from that “cycling” of a patient getting in and out of the bed. The sitting action followed by the constant shifting of the patient during their convalescents compounded by weight, stretch, pull and torque on various parts of the bed will find the weakest link and begin the breakdown there. As those parts fail they stress the next parts in-line until total failure occurs.

No product is totally immune but we’ve worked from the advantage point of thousands of beds in numerous deployments teaching us what better to do to eliminate failures, improve patient comfort and produce a product which is safe and remains that way over time.

## Product Comparisons – Deck Design

The Westcot 400, the Westcot 400 APC (Active Patient Care) as well as our staff surge cots are all spring and deck design. Our feedback from patients and providers is that for patient care, comfort and recovery, spring and deck is the choice.

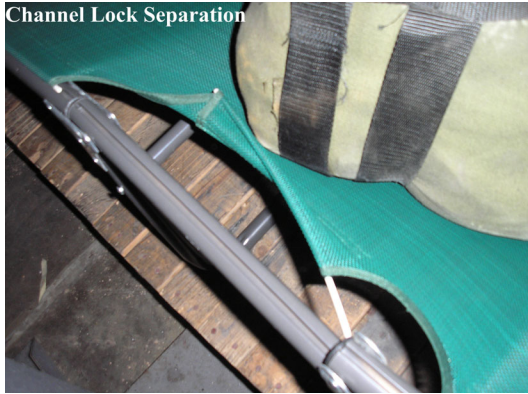
The spring and deck design compares with two other styles both of which act more like a drum skin as they are fixed in place. The Sling Deck is one that has sewn pockets through which the tubing slides (pic below, left) and Channel Lock (pic below, right) uses pockets and rods fitted into a channel



In our testing, the Sling Deck Design proved stronger but stretched and sagged over time. It does not have any memory so that sag remains.



Channel Lock design is traditional in the lawn and garden market. Small pockets are sewn around the perimeter of the sling into which rods, steel or composite, are slid and then these are slid into channels that are extruded when the tubing is made. In our test, under our testing criteria, this method failed. We are certain the bed was not made to hold 400#+ loads, but in the real world, that potential exists. The failure of the deck was after only 4 cycles but most likely was compounded as other parts of the bed failed from cycle 1 which only exacerbated the deck design problem.



Failure at the center of the bed where the center leg and T-Bracket is located, is more often, our test have shown, a bed design issue and T-Bracket design issue in combination versus one or the other. Part of the design failure is lack of a Leg Lock at this position. If the bed decking doesn't "give" with the load, than the rest of the bed's parts must overcome the load. Some can do it for awhile, as seen in the sling deck design failure at 2,780 cycles and some can barely overcome it as noted in the channel lock deck failure at 4 cycles. Again, these are using TEI/IMS criteria of 400#+ settle load testing in the seat area and not any test methods of the competitive product. Our standard requires 5,000 cycle testing minimum.



**Failure at 2780 cycles**



**Failure at 4 cycles**



**Westcot™ 400 T-Bracket**