STORK Materials Technology

Stork Herron Testing Laboratories

6/24/2005

Faretec Inc.
1610 West Jackson St.
#6 & #10
Painsville, OH 44077

TEST REPORT

Date Received: 6/22/2005

Test Report No.: FAR032-05-06-98315-1 P.O. No.: 2347

Sample Description: One (1) CT-6 Leg Traction Splint, Item # 1126624, one (1) competitors splint.

The purpose of this test was to measure the force that is generated from the traction splint device use for leg injuries. Each splint was tested to failure; failure was determined by the unit's inability to generate a load on the hydraulic cylinder that was used to measure the force. The units were strapped to a 4" x 6" piece of lumber to simulate a human leg. A calibrated hydraulic cylinder was attached to the wood to measure the output generated during use. A calibrated force gage was attached the string/strap to measure the input force while pulling. Stork-Herron Testing Labs tested two (2) different splints, one made by Faretec and one made by Kendrick. The splints were setup and tested three times each, but only the last test was to failure and those values recorded. Two readings were taken before the splints were taken to failure; the purpose of this was to get repeatable data to ensure the setup was effective. The results for the Kendrick splint suggest that the binding that occurs in the clip that holds the strap, along with the straps and rods picking up tension do not allow the input force to translate to the output force until the input force reaches 20 pounds. After the assembly picks up tension the gain in the output force is constant. The failure mode for this sample was the rod yielding then bending and taking a permanent set. The results for the Faretec suggest that the pulley system transfer the lower input forces well. At the higher input forces the assembly did not transfer the forces as well as it did at lower input forces due to the assembly flexing under the higher force. The failure mode for the faretech unit was the rod fracturing and splintering under the recorded load.

Input Force	Faretec	Kendrick
10 lbs	12 lbs.	0 lbs.
20 lbs	23 lbs.	2 lbs.
30 lbs	30 lbs.	4 lbs.
40 lbs	34 lbs.	8 lbs.

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Manager of Product Evaluation