

WillowWood Fusion™ Foot

Test for Vertical Deflection was performed as follows:

The lower contact surface of the fixture is a horizontal plate with ball bearing under it so that it allows translation in the A/P direction of the foot. The foot is set on the horizontal plate with the appropriate heel block under the heel of the foot.

A preload of 50 N is applied to the foot without the Receiver alignment screws of the fixture contacting the pyramid mounted to the foot. The 4 alignment screws are then adjusted inwards until all 4 screws contact the pyramid. The screws are then tightened to 12 ft lbs.

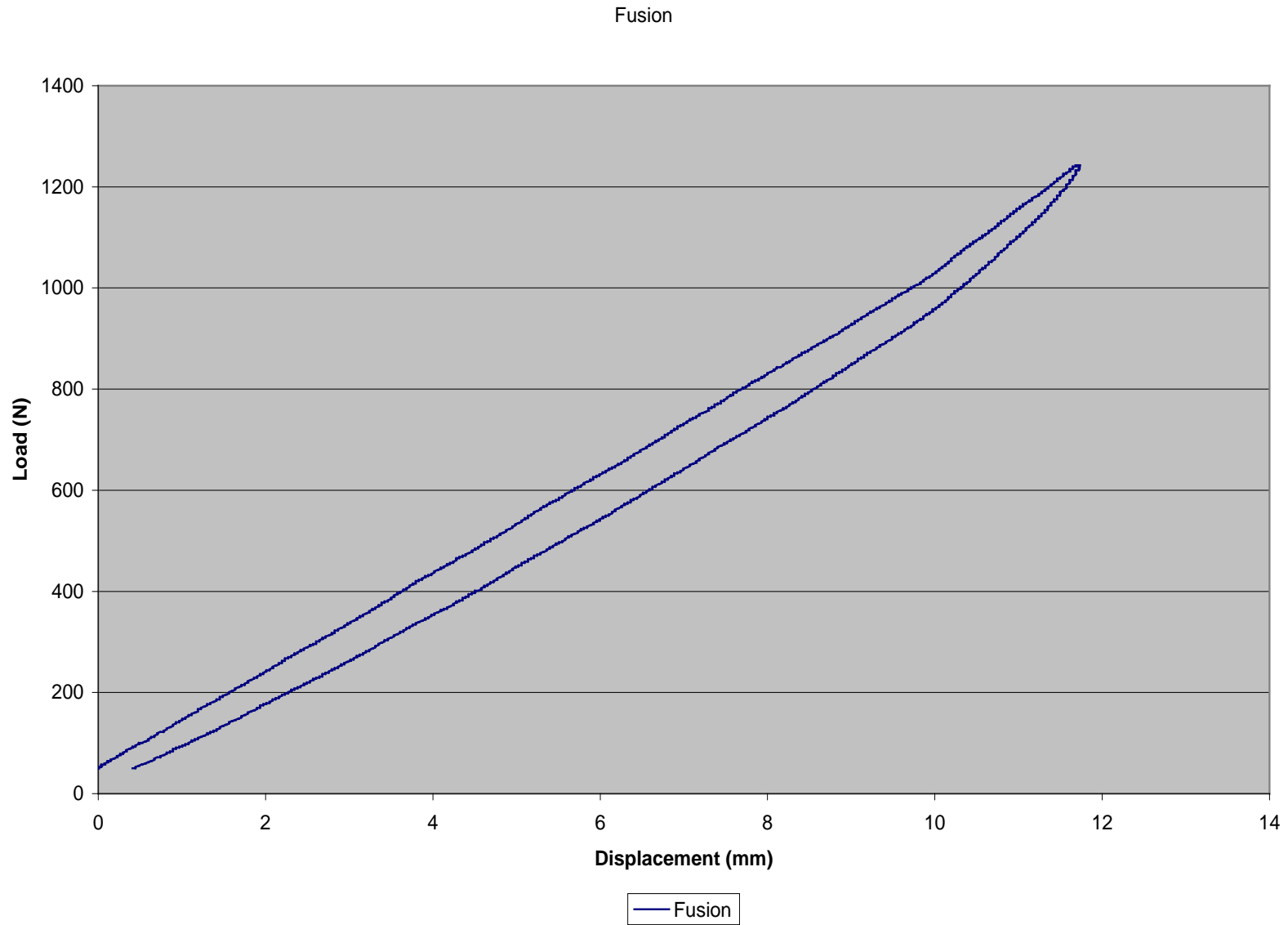
The foot is loaded in the vertical direction from 50 N to 1230 N at a rate of 200 N/S. The foot is then unloaded back to 50N at a rate of 200 N/S. The maximum displacement is then recorded. The setup for the test is shown in Fig. 1. The test was performed on a 27cm Fusion Foot with the appropriate specifications for an activity level 3 patient that weighs 180 lbs. In the case of the Fusion Foot, this correlates to a Category 3 foot.

The vertical deflection curve for this foot is shown in Graph 1. The maximum displacement recorded was 11.7mm.



Figure 1. Test Setup for Vertical Deflection

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Graph 1. Vertical Deflection curve for 27cm Cat 3 Fusion Foot