

dynaPRO

Testing & Engineering Validation



Trapezoidal Longsill

Low Cycle Fatigue Torsional Load Test

To test the structural integrity of the unitized body and trapezoidal longsill of the the DynaPro Dump.

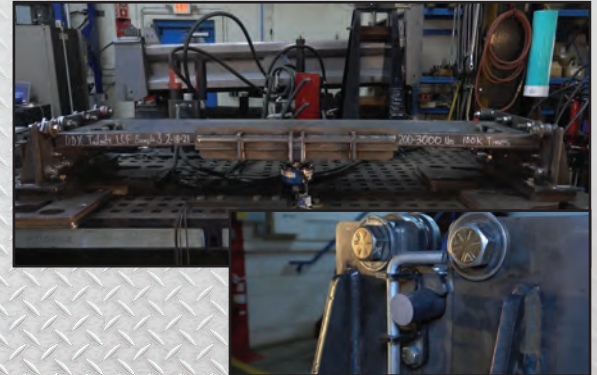
- In the first, the front passenger side corner was fixed from moving vertically, and the full scissor lift cylinder load (before relief) was applied through the scissor lift mounting location.
- The second load case instead pushes upward on the corner that was previously fixed, and replaces the lift cylinder with a fixed bar.



Low Cycle Fatigue Tailgate Bending & Latch Test

To test the strength and durability of the the DynaPro Dump body tailgate against cargo carrying stress and fatigue.

- 3,000 lb. load at 100,000 cycles



Elevated Bed Road Test

To test the stability and strength of the connection points between the DynaPro Dump body and the DynaPro 78700 Hoist.

- 8,445 lb. load at 10° - 5mph, 10mph & 15mph

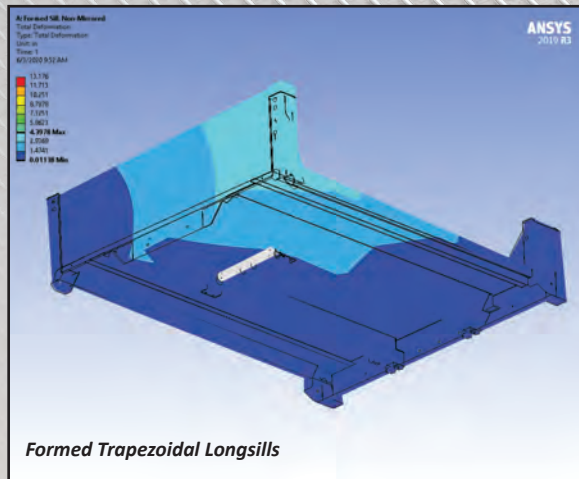


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RESULTS: Low Cycle Fatigue Torsional Load Test

- The general displacement plots look similar across the two test variations with the trapezoidal sill showing more torsional stability, and 3 times less load displacement.

Test 1: Cylinder Load



Test 2: Corner Load

