

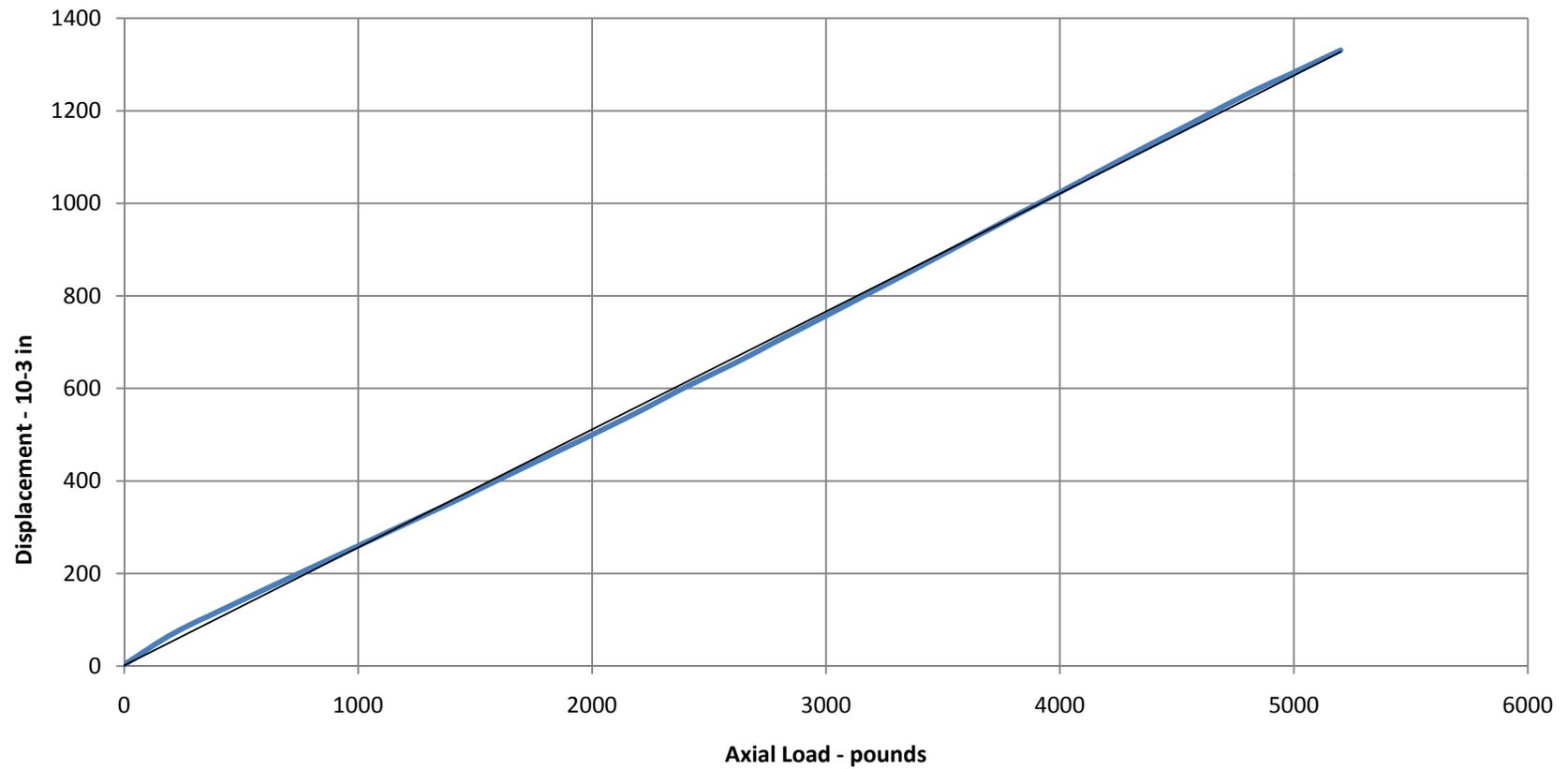
Bellville Washer Stack

(Verification by Testing)



Bellville Washer Stack

SET 1 - CYCLE 1 -- K = 3922 lb/in



Comparison of the Calculated to Test data for a single washer stack

Test data Spring Rate = 3,922. lb/in

Calculated from the required minimum load on the OH coil,
Total Load = 20,157.0 lbs. at 9.47 mm displacement or = .373 in.
There are 14 Stacks, with 26 Bellville spring each.

Therefore: $20,157/14 = 2,128.5$ lbs/mm,
 $2,128.5 \times 25.4$ mm/in = 54,064 lbs/in for 14 stacks,
Than $K = 54,064/14 = 3,862$. lb/in

Calculated K = 3,862 lb/in

Spring rate check, at .373 in disp. is: $3,862. \times .373 = 1,440$ lb per stack
therefore, total load for 14 stacks = $1,440. \times 14 = 20160$. lb