

Reach Handler

Stress in Pantograph Under Inertial Loading

A production cell has need of a load handling system which can lift and manipulate heavy objects. Four handlers are to be mounted on a carousel, with independent elevation and reach.



The assembly includes bushings at arm end joints and pairs of tapered roller bearings at center joints. These were included in the simulation model and run in full contact so that reaction forces could be listed for these hardware components.





Reaction forces were taken for all bushings, bearings, and rollers. Data for sizing of lift and reach cylinders was also obtained.

Stone Lake Analytics, LLC www.stonelakeanalytics.com (815) 200-4FEA [4332] 1085 Old Clemson Hwy #E-203 Seneca, SC 29642

