

July 2024

CTW Probe© software release Version 24.6.14.1918

Static Rod Force for low bleed dampers

While using the Rod Force command is very important in testing your dampers, there are times when a no-bleed or very small bleed damper can cause issues. The latest version of CTW Probe© allows you to do a “static” Rod Force.

With a no-bleed damper, just the act of moving to mid-stroke causes so much pressure build up that there is just not enough time for the resultant force to become steady. Now, you can simply get a Rod Force measurement without moving and be far more consistent with the modern no-bleed damper.

Add the command “Read Average Constant” to the beginning of a Test you created for your no bleed damper. You know that one corner that is trying to just be a solid rod.



Figure 1

Then, check the Force box and add the name “RodForce” (no spaces) to the Constant line. This will then allow you to load the damper into the machine as normal, apply the crossbar preload and when the Test is executed,

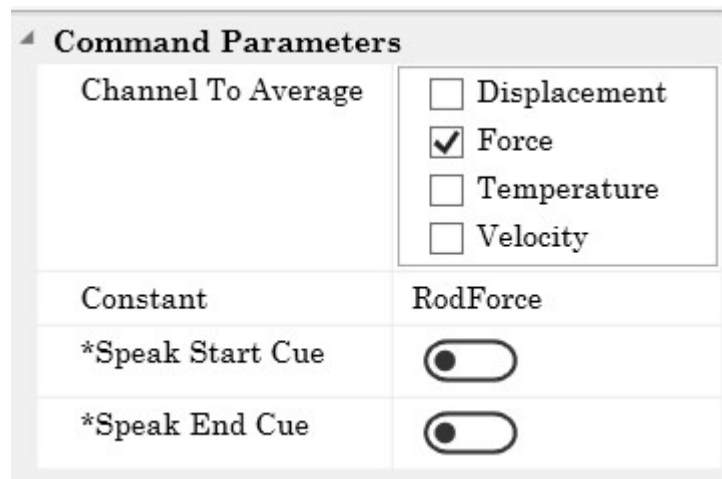


Figure 2

There are (2) ways that you can approach using this Feature. 1) You can add it at the very beginning of the Test (original method of Roehrig Shock6) and then run as normal. 2) You can run a Warmup first, then use a prompt and then add the command.

By using the Prompt, you can wait for the live force readout to settle before continuing and you have the damper at temperature. You can see both examples below.

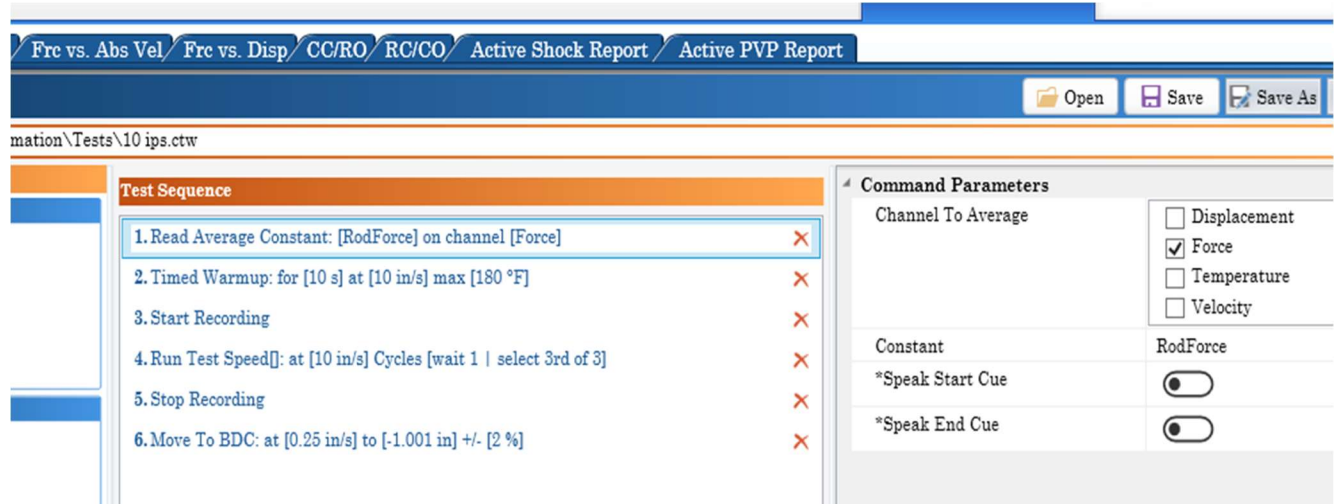


Figure 3: Read Average at the very beginning

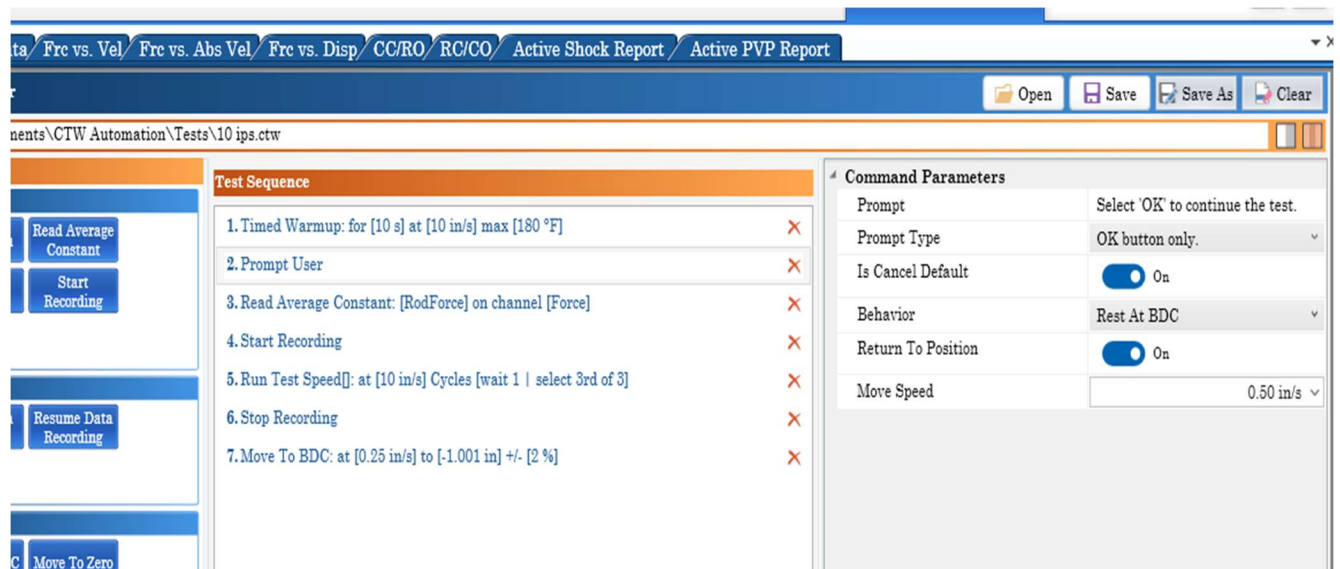


Figure 4: Read Average after the Warmup phase and using with the Prompt