Measuring the Elongation

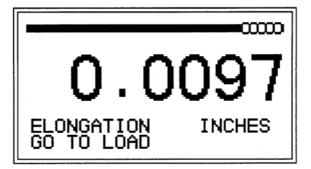
On the previous page, we have stored the unloaded length of the bolt. Many values besides the length of the bolt are stored. These include the gain and threshold settings, the amplitude of the peaks, and the frequency of the echo. All these settings are retained for each bolt, and when measuring elongation, the stored values are recalled and compared to the current measurement.

Replace the transducer

Place the transducer back on the bolt, in the same location you used when measuring the unloaded length. From the main menu of the USM-2, select "Measure". Verify that the bolt group and temperature displayed is correct and press enter or F3 to continue.

Select the bolt number corresponding to the bolt you are measuring. The USM-2 will now start measuring the elongation or load of the bolt.

The USM-2 will jump to load if the load factor in the group is not zero. Otherwise the display will show the elongation of the bolt.



Optimize the signal

Just as in the unload length measurement, you can view the waveform or information by pressing the F2 or F1 key. Note that the gain key is active and can be used to adjust the signal amplitude to match the unloaded length gain.

You may want to move the transducer around very slightly trying to maximize the signal bar. Also try to get the minimum reading.

To save the reading, press the enter key.

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