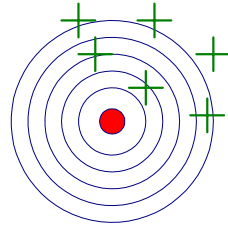


## ***What are Accuracy, Repeatability and Precision?***

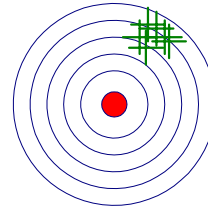
Repeatability, accuracy, and precision are important performance characteristics for any gauging system.

- *Repeatability* says how close together repeated measurements are, or the variance of the measures (see Figure 1- next page).
- *Accuracy* says how close the measures are to the true value. You can think of it as the mean difference between repeated measures and the true value.
- *Precision* means the number of digits to which the measurement gauge can be read.

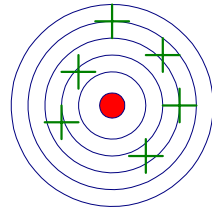
● True Value  
+ Measured Values



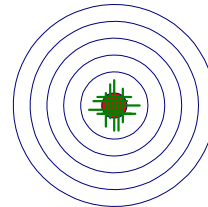
Poor Accuracy  
Poor Repeatability



Poor Accuracy  
Good Repeatability



Good Accuracy  
Poor Repeatability



Good Accuracy  
Good Repeatability

Figure 1. Accuracy is how close you are to the center (the true value) and repeatability is how close together the measurements are