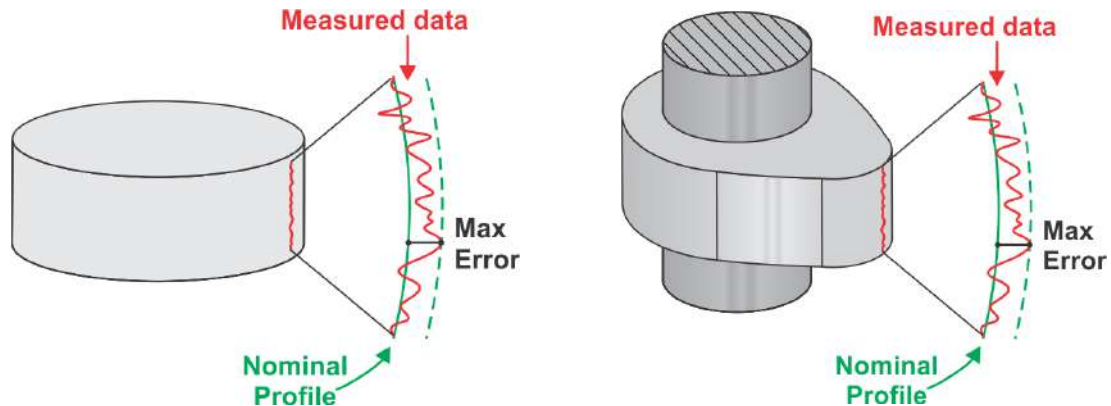


## Linear Profile Measurement

Linear Convexity, Linear Concavity and Linear Barreling Measurements in an Easily Understood Format

GAGE SOFTWARE



*Linear Profile Measurement software allows for plotting of measured profile to nominal profile with tolerance bands, and profile error with tolerance bands.*

**Adcole Corporation's Linear Profile Measurement software** provides the ability to compare a linear scan of a journal or a lobe to a known radius. This radius is specified based on nominal information. The output is the largest positive error, largest negative error, and peak-to-valley error. The software allows for plotting of measured profile to nominal profile with tolerance bands, and profile error with tolerance bands.

Linear Profile Measurement software offers linear convexity, linear concavity and linear barreling measurements in an easily understood format.

### Linear Convexity & Concavity

The linear convexity measurement is based on determining the maximum positive value of the linear scan data relative to a straight line which has been drawn through the end points of the linear scan. If the linear data that is being analyzed for straightness is not using the data from the full scan, then the straight line is drawn through the end points of the data to be analyzed.

The linear concavity measurement is based on determining the minimum value of the linear scan data relative to a straight line drawn

through the end points of the linear scan. If the linear data that is being analyzed for straightness is not using the data from the full scan, then the straight line is drawn through the end points of the data to be analyzed. The result from this value can be a positive or negative value.

### Linear Profile

The Linear Profile Measurement software is engineered to map linear profile error relative to a known, or specified profile radius. This capability provides the total profile error, plus the maximum positive and maximum negative data points profile error. The linear profile capability enables users to plot/view both the profile and profile error numerically and graphically. The graphical output shows that the profile is being ground with the proper form and at the intended height axial location – the linear profile is properly aligned. In this way, manufacturers can prove that their grinding processes are correct and on-spec.

### Linear Barreling

The linear barreling measurement is based on determining the value of the center point of the linear data relative to a straight line drawn through the end points of the linear scan.

If the linear data that is being analyzed for straightness is not using the data from the full scan, then the straight line is drawn through the end points of the data to be analyzed.

The result from this value can be a positive or negative value. Linear barreling is different from linear convexity in that it only compares the value of the center of the linear scan to the line through the end points.

<b>Linear Profile Measurement Software</b>	<b>Adcole Gage</b>
	<b>911</b> <b>1100</b> <b>1100-GX</b> <b>1200-DH</b> <b>1200-LX</b> <b>1200-SH</b> <b>1304</b>

<b>LINEAR PROFILE MEASUREMENT SOFTWARE</b>	
<b>Operating System</b>	32-Bit versions of Windows 10
<b>.NET Framework</b>	4.5
<b>Monitor Resolution</b>	1280 x 1024 minimum
<b>Adcole Gages Supported</b>	911, 1100, 1100-GX, 1200-SH, 1200-DH, 1200-LX, 1304
<i><b>Gage software prior to 2018 requires a software upgrade</b></i>	

## Features

- Enables engineers to compare a linear scan of a journal or a lobe to a known radius
- Provides output data, including plotting of measured profile to nominal profile with tolerance bands, and profile error with tolerance bands
- Specifies radius of high value components based on nominal information
- Allows for accurate comparison of measured data to nominal linear radius even over an extremely small segment

## Benefits

- Delivers both linear convexity and linear concavity measurements in an easily understood format
- Offers powerful insights about the granular measurement details of high value, hard to manufacture components
- Provides linear profile information in numeric and graphical outputs
- Imparts a complete set of data and analysis so that engineers can perform root cause analysis and optimize their organization's manufacturing process

## Adcole Software Support

Adcole software support is provided by an expert software engineering team that is backed by 50 years of industry experience and ISO 9000:2015 annual certification. Software support, software upgrade services, custom software services and training are offered to our global customer base. Regular email and phone support is available 8 AM – 6 PM EST.