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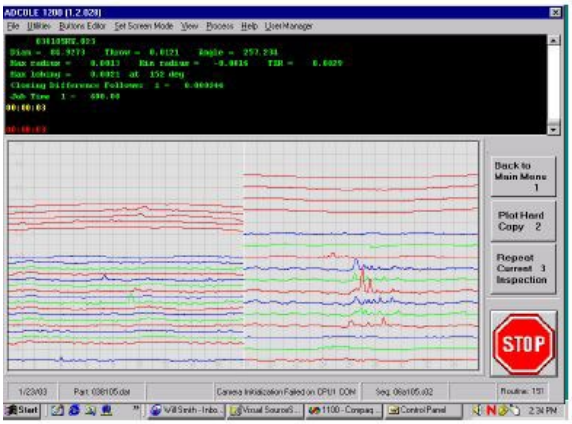
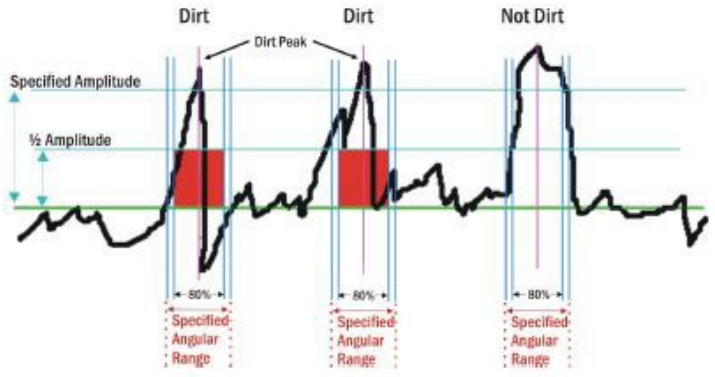
Asperity Removal Software Refined Error Data for Actionable Real Variance Action

GAGE SOFTWARE





Asperity removal eliminates dirt spikes by averaging data points on either side of the dirt spike, and connecting the points

Adcole Corporation's Asperity Removal Software enables organizations to remove dirt from radial and linear data, based on the definitions set up by the operator. The Asperity Removal software solution enables users to specify the maximum number of dirt spikes, minimum amplitude of potential dirt and angular width of potential dirt.

An asperity is an unintentionally included non-component feature such as dirt or debris. As many manufacturing environments suffer from airborne particles, it is very easy for dirt, metallic chips, grinding swarf, fibers, or other contaminants to find their way onto a component surface. If the component is measured, the asperities on the surface will have a significant impact on reported characteristic values.

Asperity removal eliminates defined dirt spikes by averaging data points on either side of the dirt spike, and connecting the points. With the dirt removed, the refined error data can focus on the real variance from the nominal values[i]. In addition, the software can:

- Enable asperity removal for just radial data or for just linear data
- Specify a unique span or length for the dirt in a linear scan
- Provide a "dirt check" for the radial data when dirt appears at the same location on multiple cuts[ii]

Asperity Removal Software enables operators to specify the following parameters:

- Amplitude of potential dirt
- Angular range of dirt (degrees)
- Number of dirt spikes (1-3)
- Linear range of dirt, linear measurement (inch or mm)
- Angular tolerance for dirt check[ii]

	Adcole Gage
Asperity Removal Software	**911** **1000** **1000-Z** **1100-S** **1100-GX** **1200** **1200-LX** **1302** **1304/1306** **1310** **1310-S**

Features

- Uses Gaussian filter to classify dirt spikes found in the roughness data (Adcole 1000 gage only)
- Optional dirt removal feature allows users to remove suspected dirt particles from roughness data (Adcole 1000 gage only)
- Offers fine tuning feature that allows users to classify their dirt definitions, enabling users to filter dirt spikes and provide a good picture of the part

Benefits

- Provides rapid, simple means to obtain accurate measurement values in challenging manufacturing environments
- Enables manufacturers to focus on real variances from nominal value
- Ensures that dirt removal (dirt check routine) is not masking a grinding issue. If dirt appears at a common angular location on all three radial traces within a specified tolerance, the software will flag the occurrence as a manufacturing issue and will not remove the dirt from the last cut reduced
- Allows the accurate measurement of parts without the need for additional re-measurement steps – providing increased throughput to manufacturers

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.

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[i] Asperity removal is not used for camshaft lobe radial analysis

[ii] The dirt check is used to ensure dirt removal is not masking a grinding issue. If dirt appears at some angular location on all three radial traces within a specified tolerance, then the software flags for a potential manufacturing issue and does not remove the dirt from the last cut reduced

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