

Roller Correction

The eccentricity of the roller results in a sinusoid error in the encoder signal, which creates a fluctuation in the color-registration on the paper.

The Roller Correction can measure and remove the sinusoid error in the encoder signal and with that reduce the fluctuation in the color-registration on the paper.

GUI

The GUI shows in the Field "Correction Amplitude" 2 Values per Encoder-Board:

- **Actual** [μm]
- **New** [μm]

The values display the maximal corrected color-register difference.

The **Actual** value is from the correction running now.

The **New** value is from the newly measured correction values.

Expected values range from 0 μm up to about 100 μm . What value is better than another can only be determined with certainty by comparing the color-registration of the different prints.

The GUI shows also a Button to confirm the newly measured correction values. Confirming the new values will apply the measured correction values to the actual correction.

The button is active when the machine printed 50m or more at once with at least 40 m/min. The button is deactivated when printing less. We recommend measuring the correction values with 60 m/min. After pressing the Button, the color-registration needs to be checked and re-adjusted.

Index

The correction is applied based on the index of the encoder. Each encoder receives one index per revolution of the roller. Index count `index_cnt` and steps per revolution `inc_per_rev` can be found in the putty interface.