

Stain density measurement with FAG FLEX³PRO

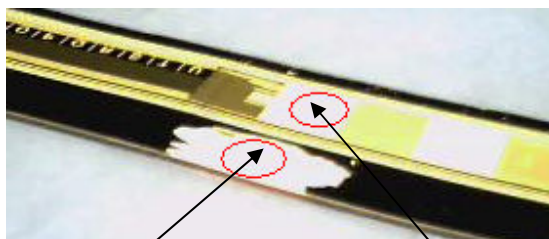
Stain density measurement with FAG FLEX³PRO

The control of the stain density is an important step in digital flexo. The stain density tells you, how much LAMS remains on your polymer after ablation. The Laser should be set up such as the 100% patch is as clean as possible. A stain density of 0.05 to 0.055 is a good setup. The stain density should not exceed 0.08.

The stain density has been controlled up to now with a transmission densitometer. The transmission densitometer is not needed any more as the FAG FLEX³PRO can be used to control the stain density.

CAUTION: The density measurement on the 50% patch has nothing to do with the stain density! Checking the 50% patch to measure a density of 0.3 gives you an idea about the linearity of your Laser. It is not the state of the art any more to use the densitometer for linearity control since image analysis measurement devices are available. The linearity today is measured with a planimetric system like the FAG FLEX³PRO.

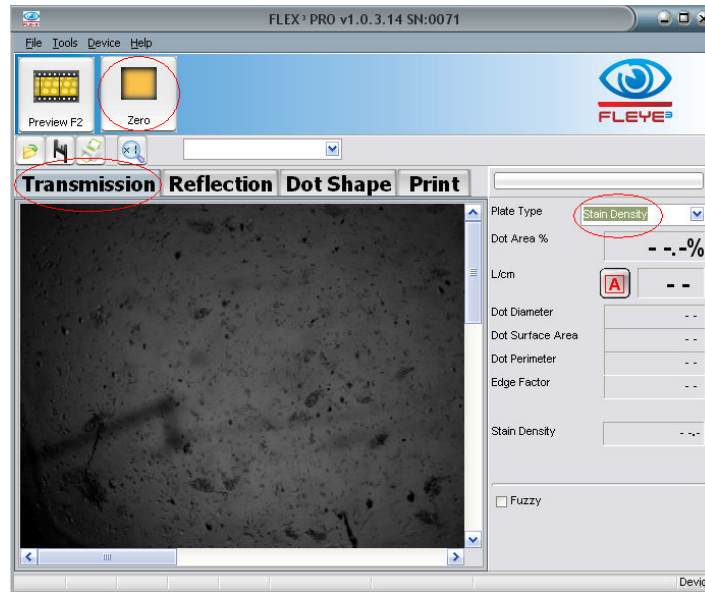
How to measure the stain density with the FAG FLEX³PRO



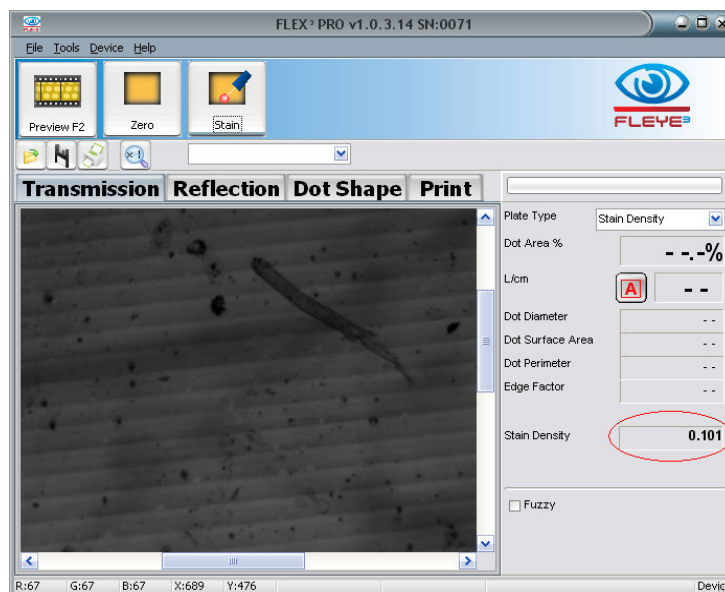
Taped area

ablated (imaged) area

- Image a 100% patch (negative – i.e. the LAMS is totally removed from the polymer)
- Clean the polymer from LAMS using a tape. In case of Asahi plates, double image a 100% patch
- Select the plate type Stain Density on the software page TRANSMISSION.
- Position the taped (or double ablated) area below the aperture, lower the sensor head and click ZERO.



- Now position the 100% patch below the aperture, lower the sensor head and click STAIN.
- The stain density as density difference between taped (double ablated) area and 100% patch is displayed.



The FAG FLEX³PRO is an intelligent densitometer that measures only on ablated areas and does exclude high density areas automatically. This makes the stain density control significantly more accurate, as dust or non perfect clean reference areas are not having an impact on the overall measurement result.