

Objective Image Quality Analysis

Instrumentation for “Turning Adjectives into Numbers”

- **Appearance/Print Quality Quantification:**
 - **Tone (Grey Scale)**
 - **Color Reproduction**
 - **Sharpness & Details**
 - **Image Defects**
 - **Gloss & DOI**
- **Functional Analysis on Components & Systems:**
 - **Inkjet print head QC; flexo/offset printing plate analysis**
 - **Process control & failure analysis**
 - **Security features & print quality on security prints**
 - **Forensic analysis and counterfeit detection**
 - **Texture analysis**
- **Tools**
 - **Image analysis systems**
 - **Spectroscopy & spectrophotometry (visible & beyond)**



PIAS-II, a Compact, Versatile Image Quality Analysis System



- ***Handheld OBJECTIVE print quality analysis, anytime, anywhere***
- ***High resolution, quantitative***
- ***Research, development, standards, specifications, quality control, forensic analysis communications ...***

- ***Interchangeable optics for multi-spectral analysis UV-VIS-NIR***
- ***UV fluorescence, IR absorption, IR fluorescence, anti-stoke features, OVD – optical variable devices, OVI – optical variable ink, ...***



PSpec, a Family of Innovative Handheld Spectrophotometers



- ***Color & Density Analysis on prints***



- ***Color analysis – textiles, plastics, ceramics, metals, paint, coating, ...***



- ***UV Fluorescence spectral analysis***

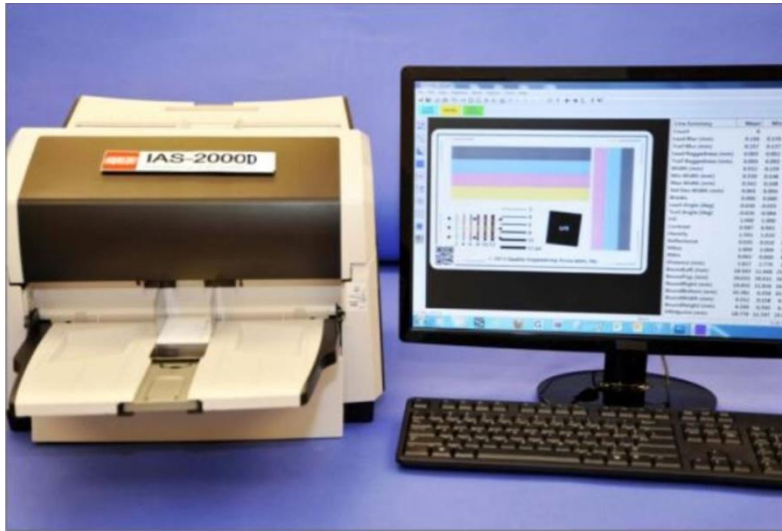


- ***IR absorbance spectral analysis***

Quality Engineering Associates, Inc. (QEA), Billerica, MA, USA www.qea.com



IAS-2000 & IAS-1000 Automated Print Quality Analysis Systems



IAS-2000 Family

- *High speed document scanner with automatic document feeder*
- *High productivity quality analysis system*
- *Quality statistics*
- *Quality management*

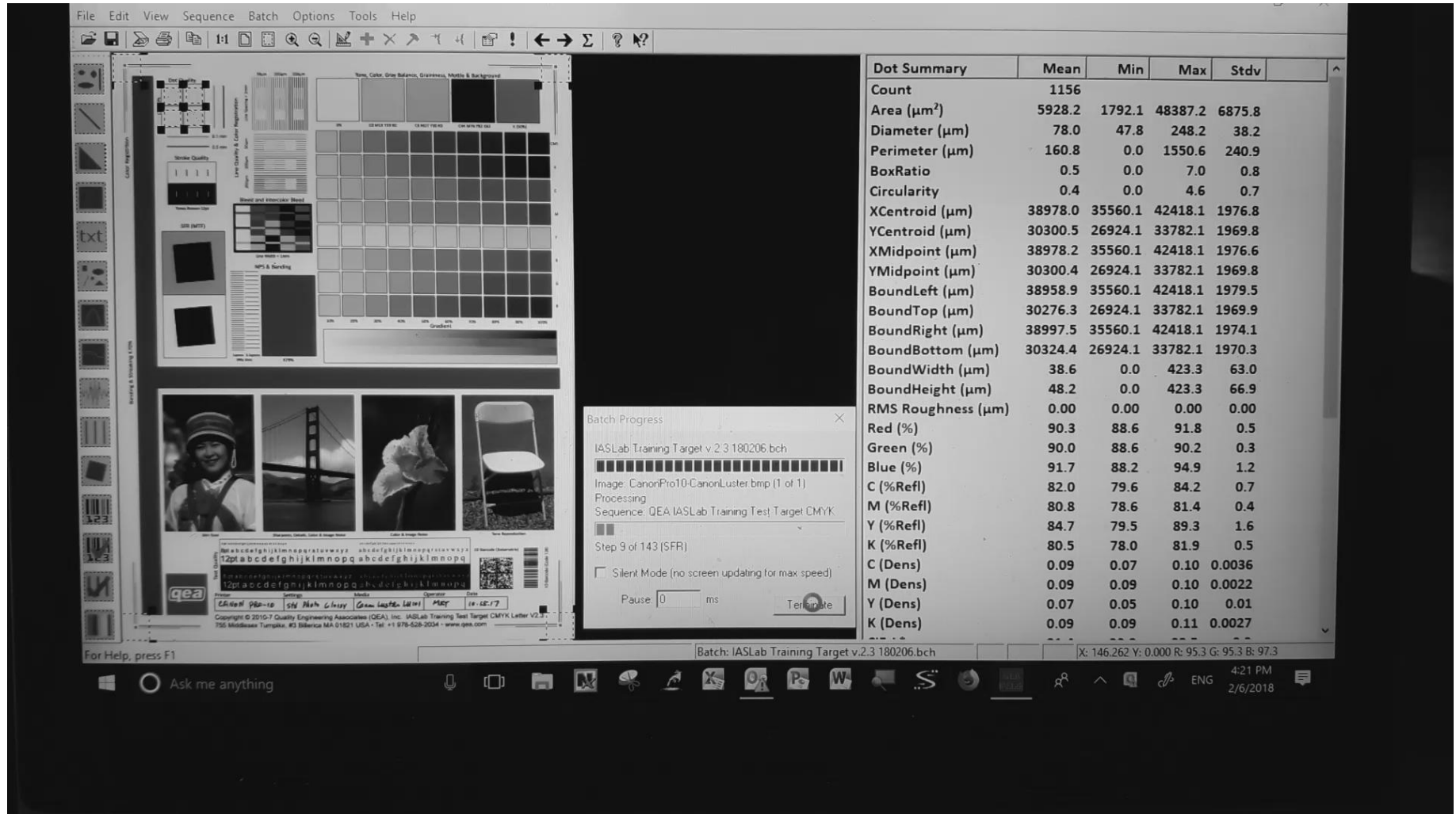


IAS-1000 Family

- *Large format quality analysis system*
- *Integrated, comprehensive quality analysis*
- *Statistical process control*
- *Quality management*



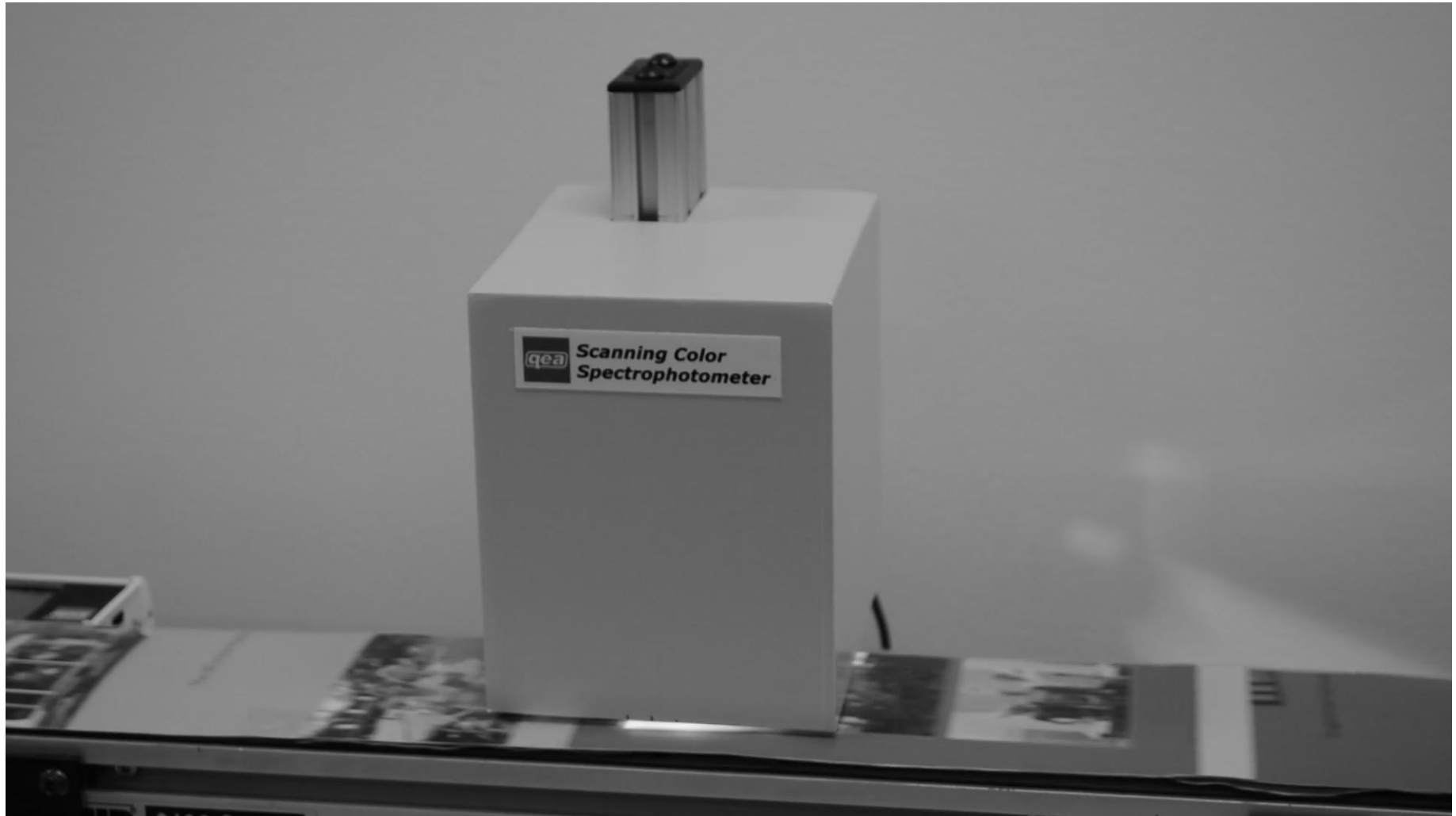
Automated Objective Print Quality Analysis



High Productivity Analysis



Scanning Spectrophotometry (Color Measurement)



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