



luscher

Technologies

**X!Tend software for improving screen
print forms imaging**

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GR

Scope of presentation

- Introduction - Goal
- Rationale of development
- Selected example
- Concluding words



Introduction - Goal

- Screen printing is the preferred process for a set of high tech applications.
- There is the need to push the limits of imaging towards more accurate and finer details.
- A representative example is corresponding to the printing of conductor lines of solar cells
- Lüscher has analysed these needs and developed specific software to improve significantly Laser imaging of framed screens

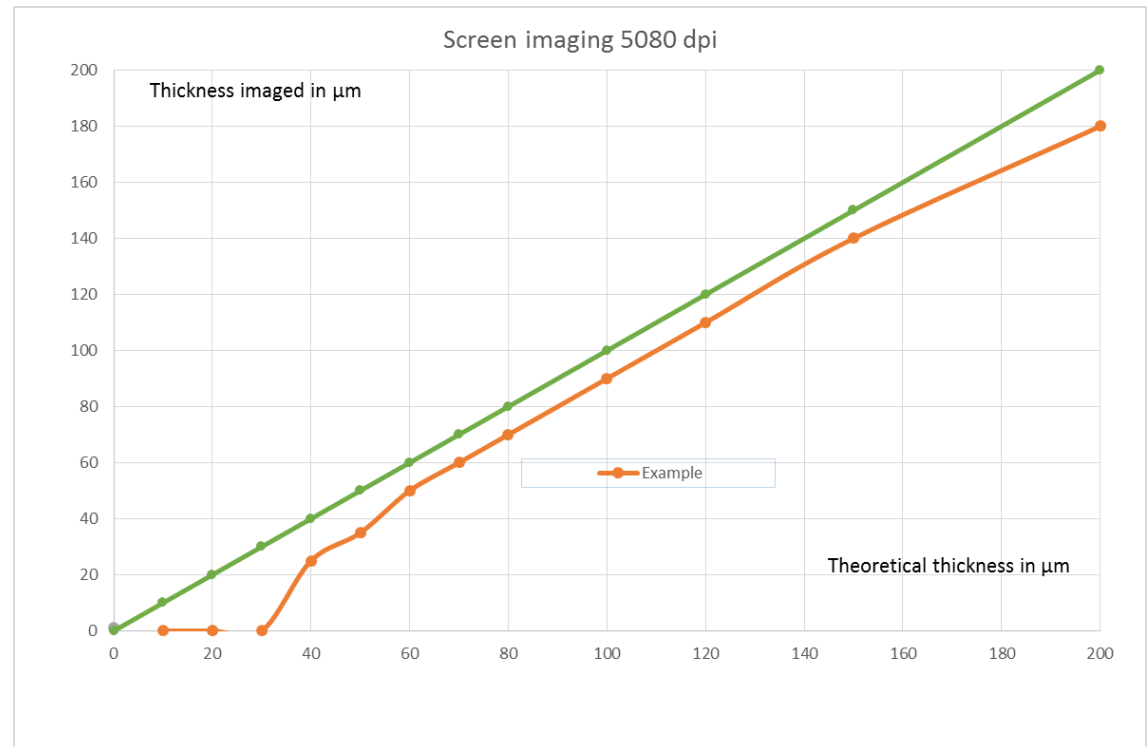
Rationale of development

- There are two elements of technology to be put together to tackle the realisation of the goal :
 - ✓ High resolution laser imaging (Lüscher is offering as a standard 5080 dpi MultiDX systems)
 - ✓ High performance photo emulsions and the associated processes.
- This is to be associated with the knowledge and understanding of the physical limits of photo emulsion behaviour in order to compensate for artefacts during the imaging and development processes
- Based on these elements, The X!Tend software package is extending the imaging spectrum of photo emulsions of any type.



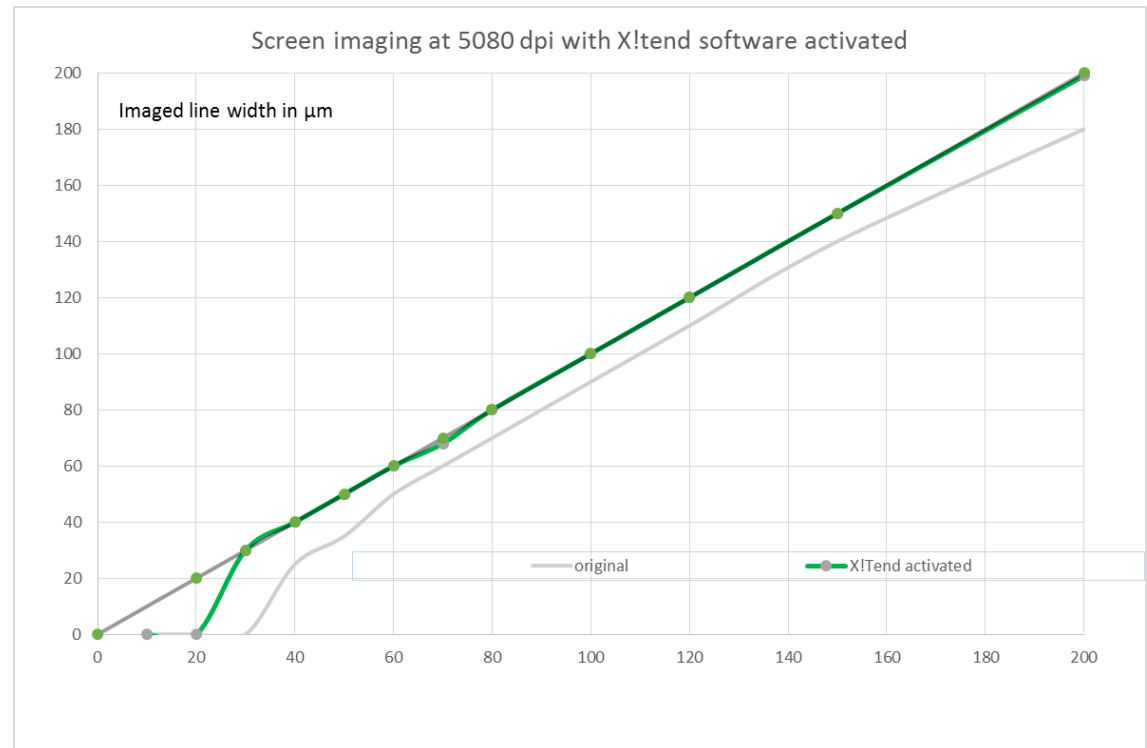
Selected example (1/2)

- Imaging results of negative lines of a high performance emulsion
- Real versus theoretical thickness from 10 to 200 microns



Selected example (2/2)

- Imaging results of negative lines of high performance emulsion with X!Tend software activated
- Real versus theoretical thickness from 10 to 200 microns



Concluding words

- X!Tend software is an exclusivity of Lüscher naturally associated with high resolution imaging devices.
- The benefits for end users can be summarized as follows :
 - ✓ Alignment of real imaging size of graphical elements with theoretical values asked for by designers.
 - ✓ Enabling of the imaging of finer graphical elements compared to the standard procedure by pushing the physical limits

X!Tend software for improving screen print forms imaging

