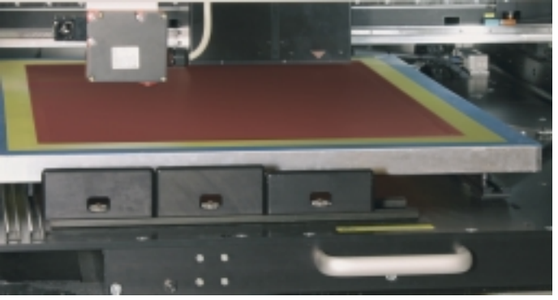
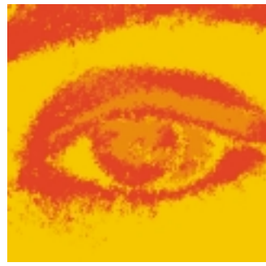


SCREENSETTER

Computer-To-Screen Imaging with Digital Direct Exposure



KIWO ScreenSetter™ Model

Model 7050	Exposure system with dual imaging heads. Resolution: 900 or 1500 dpi Max. 1350 x 1770 mm (53" x 70") frame OD, max. 1300 x 1700 mm (51" x 67") exposure area, maximum profile thickness 51mm (2"). Variable frame holder with single or dual 3-point register.
Model 4030	Exposure system with single or dual imaging heads. Resolution: 900 or 1500 dpi Variable frame holder max 1070 x 1250 mm (42.1" x 49") frame OD and a maximum profile thickness of 51 mm (2"), maximum 940 x 1100 mm (37" x 44.9") exposure area. Or, custom frame holder for multiple frames with a maximum frame profile thickness of 50.8 mm (2") and a maximum exposure area of 940 x 1100 mm (37" x 44.9").
Model 3030	Exposure system with single imaging head. Resolution: 900 or 1500 dpi Variable frame holder max 1000 x 950 mm (39.4" x 37.4") frame OD and a maximum profile thickness of 51 mm (2"), maximum 940 x 860 mm (37" x 33.8") exposure area.
Model 2820	Exposure system with single imaging head. Resolution: 900 or 1500 dpi Custom frame holder for multiple frames with a maximum frame profile thickness of 25.4 mm (1"), max. 900 x 800 mm (35.4" x 31.5") exposure area. Configuration CD-4 CTP/CTS: 4-up CD-frame holder and vacuum bed for exposure of 4 CD offset plates. Configuration CD-6: 6-up CD-frame holder.

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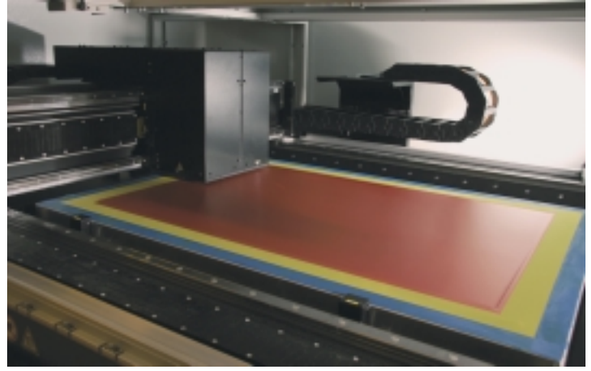
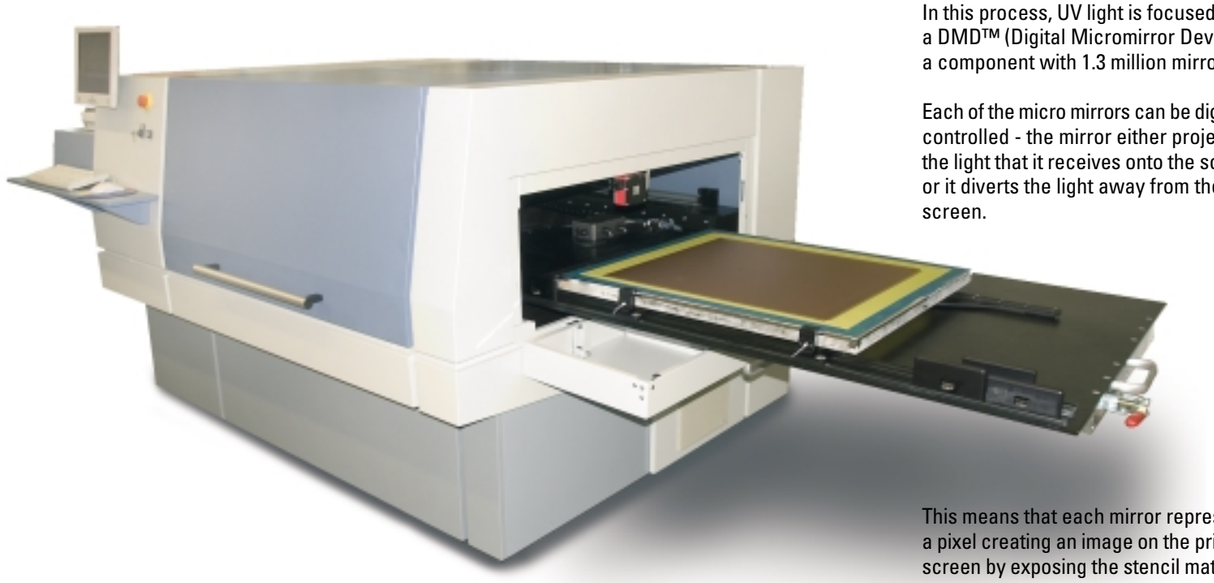
DIGITAL DIRECT EXPOSURE

a technological breakthrough in Computer-To-Screen Imaging



The KIWO ScreenSetter™ based on digital imaging and display technology is a synthesis of highest precision optical components, modern electronic sensory mechanisms, and the latest in drive technique and mechanical engineering.



CTS Advantages

The advantages of producing screens without litho films go far beyond the obvious material savings. Typically, CTS users see a dramatic quality improvement and experience a smoother, more reliable and more controllable production progress. The improvements reach from the image design where more detail can be incorporated all the way to the printing press where CTS enables shorter set-up times and better registration.

Some advantages are difficult to measure in monetary terms, but the elimination of 10 processing steps is certain to have an impact in any competitive environment.

CTS for any application

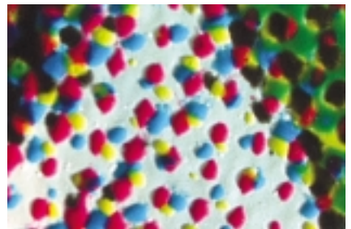
The KIWO ScreenSetter™ comes in various sizes and configurations to meet the quality and throughput requirements of most screen printing applications. Whether the task is 4-color process printing on CD's and DVD's, the production of ceramic decals or high density printed circuits, the ScreenSetter is capable of fulfilling the rigorous quality and workflow requirements of the most demanding screen print applications.

The KIWO ScreenSetter™ can also be equipped with a vacuum bed for dual purpose imaging of both screen printing screens and offset plates. A valuable feature in applications where both printing processes are utilized.

Unsurpassed Quality

By now word has spread that CTS improves the image quality. The KIWO ScreenSetter™ takes this to yet another level, exceeding the quality of 2500 dpi film. You will see improvements in tonal range, dimensional stability, registration between colours and you will be able to print finer detail than ever before.

The key to all this is the extremely focused light path of each pixel and an accuracy in image placement that is simply astonishing.



Digital Direct Exposure

The KIWO ScreenSetter™ eliminates film positives and images the screen digitally similar to other CTS systems. What makes the KIWO ScreenSetter™ unique is that it does not require a masking technique. Instead, it modulates the UV-light in such a way that it exposes the pre-coated screen only in the areas that need to receive light. Once the screen is imaged simply develop it as usual.

There are no liquids that need to be ejected through tiny orifices, no filters that can clog and there is no chemistry involved. In short: chemical-free imaging without consumables.

Proven Technology

The KIWO ScreenSetter™ utilizes Texas Instrument's patented DLP™ technology.

In this process, UV light is focused onto a DMD™ (Digital Micromirror Device), a component with 1.3 million mirrors.

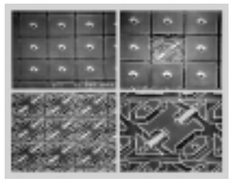
Each of the micro mirrors can be digitally controlled - the mirror either projects the light that it receives onto the screen or it diverts the light away from the screen.

This means that each mirror represents a pixel creating an image on the printing screen by exposing the stencil material.

During exposure, the entire imaging unit, including UV-light source, lens system and DLP™ chip moves across the screen to image the picture elements.

Due to the limited number of micro mirrors or pixels, only some sections of the image can be projected in one exposure step.

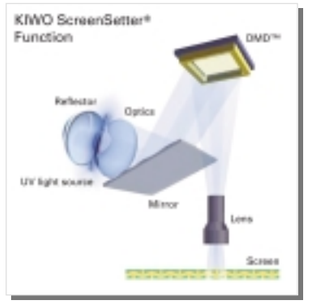
These picture segments are joined to form a composite picture by a rapid succession of exposure steps.



micro-photograph of MEMS chip

Seamless Integration

Whether you work in PC, MAC, CAD or BARCO environments, the KIWO ScreenSetter™ integrates seamlessly through a variety of RIP architectures. Using standard TIFF files as output format the same workflow as a film setter can be employed for easy transition to CTS.



Workflow Advantages

The KIWO ScreenSetter™ turns your production workflow into the shortest digital workflow possible in screen printing. And the positive impact of the KIWO ScreenSetter™ does not stop in the screen room. Most departments will see improvements starting with better control in the art department, easy file archiving procedures, elimination of handling procedures and transporting of films from one department to the other, all the way to easier and faster printing press setup.

In short, the KIWO ScreenSetter™ provides a dramatic quality improvement, reduces production time, eliminates errors, increases your productivity and ultimately provides significant competitive and economic advantages.

CTS	FILM
Design	Design
RIP file	RIP file
	Film output
	Film retouch
	Film transfer to screenroom
	Mount film on screen
	Place screen in vacuum table
	Draw vacuum
Expose	Expose
	Remove screen
	Remove film
	Archive film
Develop screen	Develop screen
	Retouch screen
Print	Print

4 steps 14 steps for printing