



Established in the market – valued by a wide range of customers

The DLE Smart is the new member in the existing portfolio of DLE (Digital Light Engraver) imaging systems. This unit uses a Digital Mirror Device (DMD), which modulates ultrahigh power UV laser light with image data, using up to 2.000.000 micro mirrors.

While the DMD moves across the screen surface in sweeps the data scrolls continuously and results in perfectly seamless image reproduction. The DLE screen imaging system exposes the data directly onto a conventional coated screen.

The new and efficient scrolling and digital light processing technology combined with strong UV laser light sets new standards in screen imaging.

The DLE Smart machinery is based on a vertical setup reflecting the concept designed in Germany by CST and manufactured in China at our high-tech partner with highest resolution for the industrial screen print application. It enables the imaging with optical resolutions of up to 2.400 dpi and a step resolution up to 25.400 dpi with a tilted DMD Chip.

Technical Specifications

MAX. SCREEN SIZE	up to 1.600 x 1.300 mm (Please contact us for your exact requirements)
MACHINE SPEED	up to 30 square meter/hour
EXPOSURE SYSTEM	DMD system with Laser light source
RESOLUTION	1.270/2.400 12.700/25.400 dpi

DIGITAL LIGHT IMAGING

Directly imaging and exposing coated screens eliminates screen masking by wax, ink or film. Consumables are no longer needed. A Digital Mirror Device (DMD) modulates an ultrahigh power UV light source with image data using up to 2.000.000 micro mirrors. While the DMD moves over the screen in sequence, the data scrolls continuously and results in perfectly seamless image reproduction. As each of the mirrors represents one pixel, high speeds are possible and the imaging quality is exceptionally high.

DMD is the best light modulator for this application presently available on the market. Texas Instrument, the world leader in micro-mechanical mirror modulators, provides the DMD for the DLE screen imaging system. With millions systems in operation since 1996, the DMD is a state of the art technology that's proven in resilience and dependability.

DLE PROCESS

This process totally eliminates ink, wax, film, darkroom and the associated chemical and film processing, masking, retouching and taping of films. The benefits are obvious: The screen is produced easier, faster, cheaper, at higher quality levels and with less production steps.

LIGHT SOURCE TECHNOLOGY

The new generation of DLE machines contains modern laser technology. These laser light sources are integrated.

ABOUT CST

CST GmbH has established an excellent reputation in the fields of colour scanners, film plotters and screen imaging systems, reflected by large market share and worldwide sales with more than 2.000 installations. Using the latest in mechanical and electronical technology, our engineering team develops the reliable and accurate lines of machines optimized for ease of operation, high productivity and quality.

PRODUCT RANGE

DLE AF · DLE Rotary /Rotary+ · DLE New Compact · DLE Eco/Eco+ · DLE Label · DLE Smart · DLE In-Line · CST Matrix/Easy

Special solutions for engraving and scanning

