

The logo for dlpic, consisting of the lowercase letters 'dlpic' in white inside a yellow circle.

The patented DLP™ Direct-To-Screen imaging system from CST radically changes the way you will produce your best image. Costly consumables such as wax or ink and concerns with print head performance are all replaced with digital light.

WE OFFER TRUE PROGRESS

- 500 – 1,800 dpi output resolution
- 40 – 150 lpi screen ruling
- 150 – 500 sq. ft/hr imaging speed
- 30" x 30" up to 13' x 26' machine sizes
- Automatic calibration system included

dlp imaging corp. introduces the latest DLP™ screen imaging system from CST Germany. The first digital output device that automatically calibrates and self-diagnoses itself! U.V. lamp replacement or any other adjustments no longer need time-consuming and challenging resetting procedures.

PRODUCE YOUR BEST IMAGE

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**CONSUMABLES ARE OUT.
LIGHT IS IN.**

ENLIGHTEN YOUR IMAGE

TECHNOLOGICAL BREAKTHROUGHS AT CST

CST, Color Scanner Technology GmbH, Krefeld, Germany created quite a furor in the worldwide screenprinting markets when they introduced their patented DLP screen imaging process in 2003. It was the well-earned reward for the young and dynamic engineering staff of this German pre-press equipment manufacturer after more than 4 years of intense technological developments. CST successfully completed the interface of Texas Instrument's patented DLP technology into their filmless screen imaging process. Utilizing TI's optical semiconductor called Digital Micromirror Device (DMD), CST engineered and perfected the continuous and scrolling imaging of emulsified screens by means of digital U.V. light, a unique process that received immediate patent protection.

The first successful installation of CST's new DLE machine occurred in the early part of 2004 and over 50 machines have been sold in the meantime. Initial technical hurdles and challenges were met and successfully solved within a short period of time. These valuable field experiences from their initial installations have allowed CST to obtain in-depth knowledge of the elaborate interaction of TI's DMD technology and the usage of U.V. light. This has allowed them to gradually introduce new features and control systems.

New CST machines of the DLE product series will be equipped with the following new equipment features:

CST AUTOMATIC AUTOFOCUS

Provides real-time and continual distance adjustments between optic and stencil surface that compensate for tension or screen frame imperfections eliminating unwanted tonal changes and other color interference.

CST AUTOMATIC CALIBRATION SYSTEM

A combination of special optical and electronic monitoring devices virtually guarantee a perfect imaging performance of Texas Instrument's DMD semiconductor based on available U.V. light intensity. The operator-controlled self-calibration procedure is fast and simple and is recommended once a week or after a U.V. bulb replacement. This unique self-diagnostic and self-calibrating process monitoring control produces high-quality screens every time – consistently and uniformly.

CST DIFFERENT OUTPUT RESOLUTIONS

Optics and lenses for 500, 740, 1,270, 1,500 and 1,800dpi resolution capabilities are available for special screenprinting applications. Screenprinting companies can choose the appropriate optic/lens combination to meet their exact and specific requirement without price differences. Line counts from 40 - 150 lpi are possible at their respective operational imaging speed ranges.

CST SPECIAL TELECENTRIC LENSES

CST's in-house engineering team designed a lens combination that guarantees the exact sharp dot geometry of each pixel to be reproduced identically over the complete image area. Telecentric lenses assure that the U.V. exposure light always hits the light-sensitive emulsion in a straight perpendicular angle. Poorly defined dots or undercutting are eliminated.

CST IN-LINE SCREENMAKING PROCESS

The simplified and automated digital U.V. light screen imaging technology from CST that eliminates reoccurring consumable expenses lends itself naturally for automatic in-line processing of screens. More than a dozen CST in-line process configurations that include in and out feed frame magazines, DLE, developing and drying processing units are fully operational in multi-shift production environments worldwide producing high volume, consistent and uniform screens - predictably and profitably.

In the 130 year-old manufacturing business of one of the CST founding owners, CST, since its formation in 1989, has successfully designed and manufactured pre-press equipment such as drum color scanners, very large format flatbed scanners and drum plotters, 3D scanners, laser-engraving systems for rotary screens and other digital imaging processing equipment.