adelco CTS

An advanced Computer to Screen solution. High precision, High productivity, a truly simple process. This direct screen laser exposure system produces perfect screen plates.

No Consumables needed

Fast - High Efficiency

High resolution.

Compatible with conventional processes.

Excellent laser piercing power

Adelco's CTS machine, is a direct screen laser exposure machine to produce perfect screen plates. Data files are directly read by the computer to screen (CTS) and then converted into images which will be transmitted through laser beams onto screens by DMD and lens.

With no added consumables, and using Digital Imaging Technology, images are produced by DMD (digital micro-mirror device) which has over 800 thousand or 2 million micrometer micro-mirrors, enabling clear and sharp square dots. This latest digital exposure system has now become the new standard for the screen printing industry.

- High Precision and Resolution.
  Easy and fast to achieve raster 133LPI and high quality screen dots by the optical 1270dpi, while with the optical 2540dpi, high definition curved lines and perfect FM screen dots can be realised.

- High Efficiency
  Three minutes to finish the exposure on screen size 1000mm x 10000mm. Stencil making efficiency has been greatly improved due to a lot of time saved by the acurate exposure alignment and labour reduction.

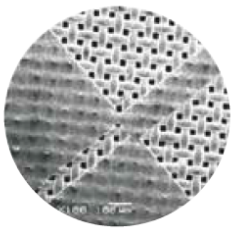
- Low Cost
  Elimination of film positives. Litho film is becoming inceasingly expensive, and the suppliers on the market are decreasing. One procedure of CTS digital screen making, replaces five procedures of using the conventional process.

- Excellent laser piercing power.
  15W, 20W and 25W three laser powers are optional, and the thickness EOM μm with solvent resistant emulsions and EOM 220μm with water resistant emulsion can be achieved for some special screen making such as carbon oil and capillary.

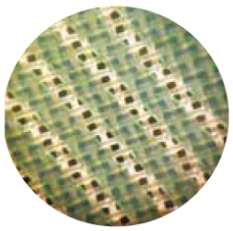
- Compatible processes with the conventional process.
  Data files are directly read by the CTS and then converted into images which will be transmitted through laser beams onto screens by DMD and lens.

Specification	Adelco CTS 100	Adelco CTS 200
Application	Textile, decals, labels, decrations, etc.	
Max Screen Size (mm)	900 x 1000	1080 x 1200
Min Screen Size (mm)	400 x 400	
Max exposure Size (mm)	800 x 900	900 x 1000
Screen frame thickness	25 - 40 mm	25 - 45 mm
Imaging System	DMD DLP Technology	
Emulsion thickness (EOM)	Solvent resistant emulsion 3μm - 120μm	
	Water resistant emulsion 3μm - 220μm	
Exposure time	120 - 240s /M 2, 350 mesh yellow screen	
Resolution	1270dpi	
Raster	133LPI	
File Format	1_ bit tiff	
Focus system	UVLD laser, wavelength 405 5±nm	
Laser Power	15W/20W/25W (optional)	
Machine size mm	1600 x 1350 x 1550	2700 x 1550 x 1600
Equipment net weight	1200 KG	2200KG
Equipment Conditions	Yellow light room with cleanliness class 10000, temperature 22±2°C. 40 - 70% relative humidity (no condensation)	
Connections	Single Phase 220V, 50/60HZ, 4KW, Gas 1L/min	

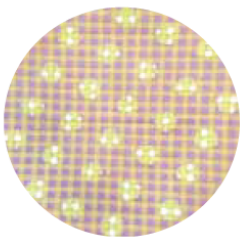
High Resolution



2540dpi



50-micron positve line on 120pw34(300/in)



5% halftone dots at 120lpi on 150pw31(380/in)

Four-colour picture