

adelco Laser V

A cutting-edge solution that enables direct **computer-to-screen** processing, offering exceptional **precision** and **productivity**. The straightforward procedure of this advanced **laser exposure system** guarantees **flawless** screen plates.

Linear Motor
Motion

DMD Exposure
System

Compatible
with
conventional
processes

High
resolution

No
Consumables
Needed

Adelco's **Laser V** system utilizes direct screen laser exposure technology to achieve **impeccable screen plate production**. It operates by directly reading data files through the computer to screen (CTS) system, converting them into images, and transmitting them onto screens using laser beams facilitated by the DMD and lens components.

By employing Digital Imaging Technology and **without the need for additional consumables**, this innovative system generates images utilizing the DMD (digital micro-mirror device), which boasts an impressive array of over 800 thousand or 2 million micrometer micro-mirrors. This advanced configuration ensures the production of **crisp and well-defined square dots**. As a result, this cutting-edge digital exposure system has swiftly emerged as the prevailing benchmark within the screen printing industry.

- **High Precision and Resolution**

Effortlessly and swiftly achieve a raster of 133LPI and obtain **high-quality screen dots** through the utilization of an optical resolution of 1270dpi. Alternatively, with an optical resolution of 2540dpi, attain impeccable FM screen dots and high-definition curved lines.

- **High Efficiency**

The exposure process for a screen size of 1000mm x 1000mm can now be completed in just **three minutes**. This remarkable reduction in time, coupled with precise exposure alignment and decreased labor requirements, has significantly enhanced the efficiency of stencil making.

- **Low Cost**

Elimination of film positives. Litho film is becoming increasingly 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**

Two laser powers are optional: **20W** and **25W**, the thickness EOM (emulsion over mesh) pf 120µm with solvent resistant emulsions and an EOM of 220µm with water resistant emulsion can be achieved for special screen making such as carbon oil and capillary.

- **Compatible processes with the conventional process**

The CTS directly reads data files and subsequently converts them into images. These images are then transmitted onto screens using **laser beams**, facilitated by the DMD and lens components.

Specifications

	Adelco Laser V	Adelco Laser V- XL
Application	Textile, Decals, Labels, Decorations, etc.	Textile, Decals, Labels, Decorations, etc.
Max Screen Size (mm)	1000 x 1000 mm	1200 x 1300 mm
Min Screen Size (mm)	400 x 400 mm	400 x 250 mm
Max exposure Size (mm)	900 x 900 mm	1100 x 1200 mm
Screen frame thickness	25 - 40 mm	20 - 50 mm
Imaging System	DMD DLP Technology	DMD DLP Technology
Emulsion thickness (EOM)	Solvent resistant emulsion 3µm - 150µm Water resistant emulsion 3µm - 350µm	Solvent resistant emulsion 3µm - 150µm Water resistant emulsion 3µm - 350µm
Exposure time	120 - 240s / m ² , 350 mesh yellow screen	120 - 240s / m ² , 350 mesh yellow screen
Resolution	1270dpi	1270dpi / 2540dpi (Optional)
Raster	100LPI	133LPI
File Format	1_ bit tiff	1_ bit tiff
Focus system	UVLD laser, wavelength 405 5±nm	UVLD laser, wavelength 405 5±nm
Laser Power	20W/25W/ 30W (Optional)	20W/25W (Optional)
Machine size mm	1750 x 1080 x 1965 mm	2000 x 1157 x 2247 mm
Equipment net weight	1150 KG	1450 KG
Equipment Conditions	Yellow light room with cleanliness class, temperature 22±2°C. 40 - 70% relative humidity (no condensation)	Yellow light room with cleanliness class, temperature 22±2°C. 40 - 70% relative humidity (no condensation)
Connections	Single Phase 220V, 50/60HZ 4KW, Compressor air 0.5 mpa	Single Phase 110V/ 220V, 50/60HZ 4KW, Compressor air 0.5 mpa