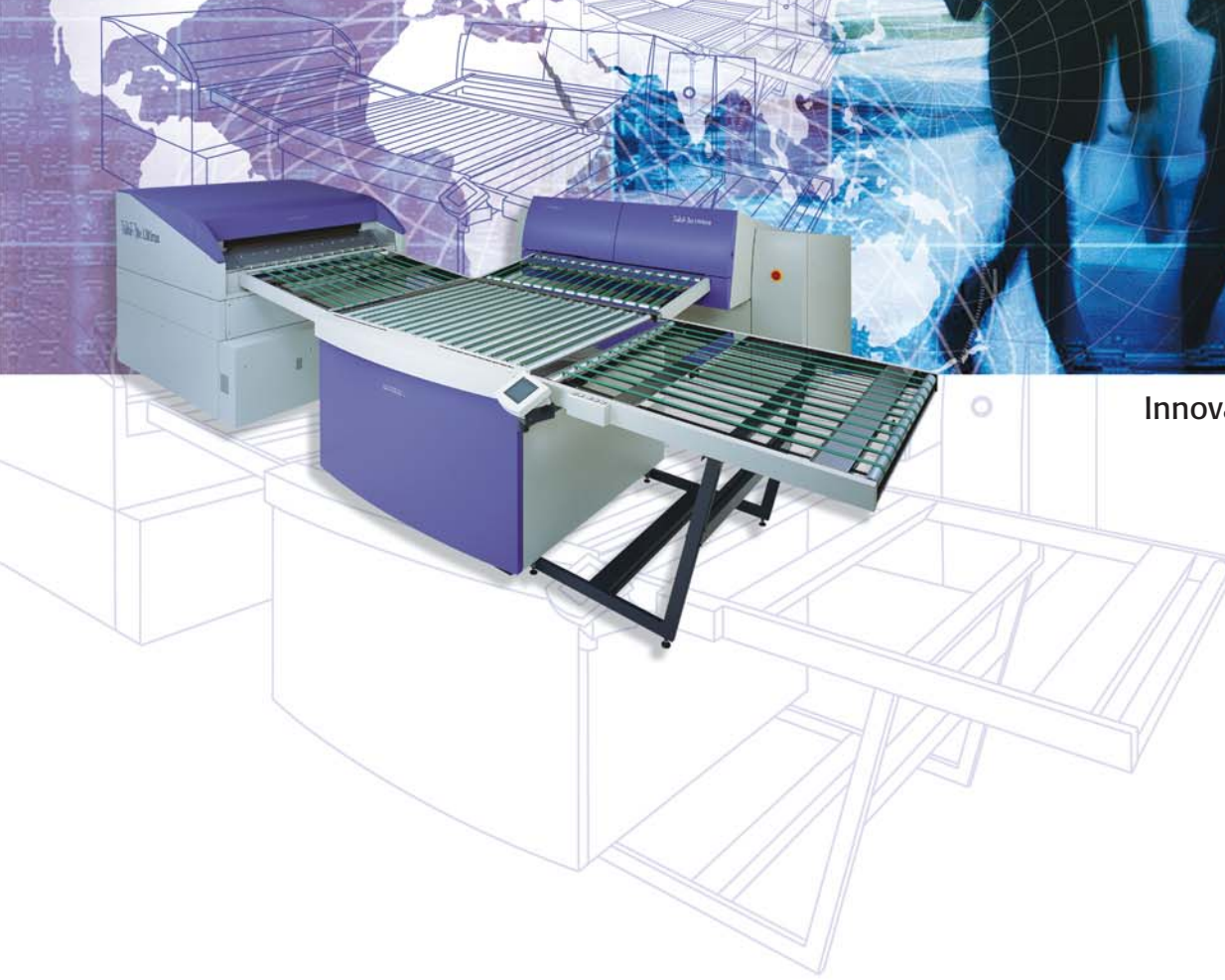# PlateRite Ultima 16000
Thermal Plate Recorder

Innovation & Reliability

Unprecedented speed and quality in a large, multi-format platesetter

Dainippon Screen's PlateRite Ultima 16000 is a large, multi-format thermal platesetter that can output 16-page plates, as well as every other plate size down to 4-page format. Thanks to its advanced 512-channel imaging head, which uses GLV™ (grating light valve™) technology, it outputs all these plates at a speed and quality that is sure to amaze you and your customers.

In addition to the very high productivity model PlateRite Ultima 16000, the standard productivity model PlateRite Ultima 16000S now becomes available. The productivity of PlateRite Ultima 16000 is 23 plates per hour, whereas the same of PlateRite Ultima 16000S is 14 plates per hour.

Ultra high quality and fast imaging
For 4-page to 16-page plates

### Large, multi-format output—from 4-page to 16-page
The PlateRite Ultima 16000 can output large-format plates up to 1,470 x 1,165 mm (57.9"x 45.9") in size. It can also output plates as small as 650 x 550 mm (25.6"x 21.6"). The PlateRite Ultima 16000 is in a class of its own—a true multi-format platesetter.

Advanced 512-channel imaging head
Screen has used GLV™ technology to develop a revolutionary multi-channel imaging head that enables remarkably high-speed and high-quality exposure. This cutting-edge imaging head features 512 individual laser beams that expose plates in wide swathes, enabling the PlateRite Ultima 16000 to deliver unbeatable throughput without sacrificing quality.

Imaging head with GLVTM and high-power laser
GLV stands for "grating light valve" and employs the same production process as that used in semiconductors. A GLV is made up of thousands of microscopic reflective ribbons placed over a silicon chip. These ribbons can be moved up or down to either reflect or diffract the imaging laser that is targeted upon them and thus simultaneously turn ON and OFF an extremely high number of optical channels.
Dainippon Screen utilizes the laser control technology that it has cultivated over the years to apply a high-power laser on the GLV with extremely high precision, making it possible to simultaneously control 512 channels of light. As a result, the width of the area that can be imaged with each rotation of the drum is dramatically increased and high productivity is attained. This combination of a high-power laser and GLV delivers sharp clear halftones and is the core technology built into the PlateRite Ultima 16000, a thermal platesetter that answers the growing demands of our clients.
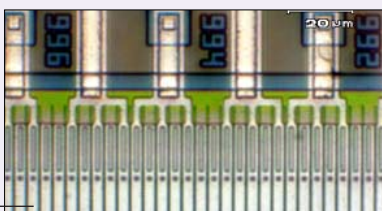
Reflective ribbon (4µm)

High speed imaging
PlateRite Ultima 16000 can output 23 plate (1,448 x 1,143 mm) per hour at 2,400 dpi, making it the worlds fastest platesetter in its class. PlateRite Ultima 16000S outputs 14 plate (1,448 x 1,143 mm) per hour at 2,400 dpi.

Automatic inline punching
With inline punching, plates are punched immediately before being mounted on the drum. Inline punching provides greater registration accuracy than either manual or off-line punching. It also helps eliminate human error and supports faster press make-ready. Up to ten punch blocks can be mounted in the platesetter and then selected during output according to the plate size and press type required for the job.
There are two kinds of punches in automatic inline punching. The one is registration punch system and the other is punch systems for printing press / bending machine. The registration punch is standard component of PlateRite Ultima 16000 while it is an optional accessory in case of PlateRite Ultima 16000S. The punch systems for printing press and bending machine are optional accessories for both PlateRite Ultima 16000 and PlateRite Ultima 16000S.

Reliable automatic plate loading
Automation is a key element in the handling of large format plates. Screen's renowned and reliable plate handling systems are integrated into the design of the PlateRite Ultima 16000 AND 16000S, and a range of scalable automation solutions are available. No contact is made with the sensitive emulsion side of the plate at any stage during transport, eliminating the risk of damage to the plate. the optional automatic plate loaders are available in two types, namely two cassette type and four cassette types, Each cassette can hold 100 sheets of 16 page 0.3mm (11.8 mil) plate. So maximum number of plate can be held is 400. Interleaf paper is removed automatically before plate are loaded.
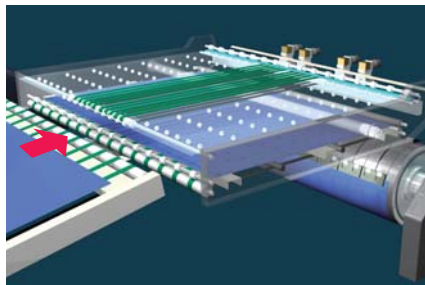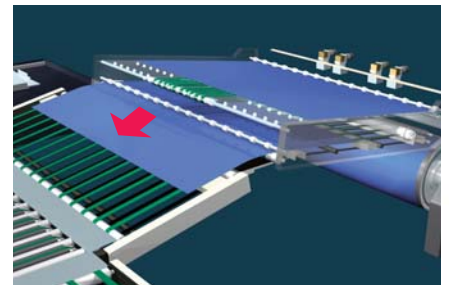
Cutting-edge media handling
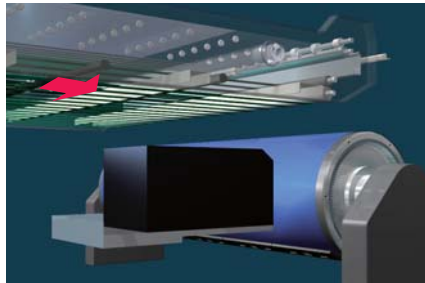
1 While the current plate is being exposed, the plate scheduled to be exposed next is punched and then moved to the standby cassette's upper tray.
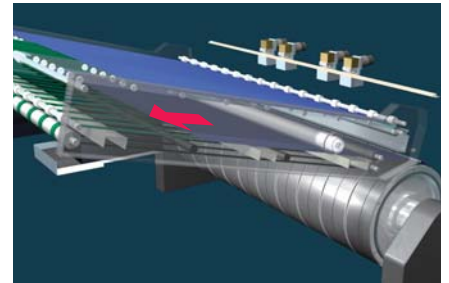
2 The plate that was just exposed is transferred to the standby cassette's lower tray.


3 The plate that was in the standby cassette's upper tray is wrapped around the drum, and the next plate is transferred to the standby cassette's upper tray.

4 While the plate is being exposed, the plate scheduled to be exposed next is punched and then moved to the standby cassette's upper tray.
The plate that was just exposed is transferred from the standby cassette's lower tray to the automatic inline developer.
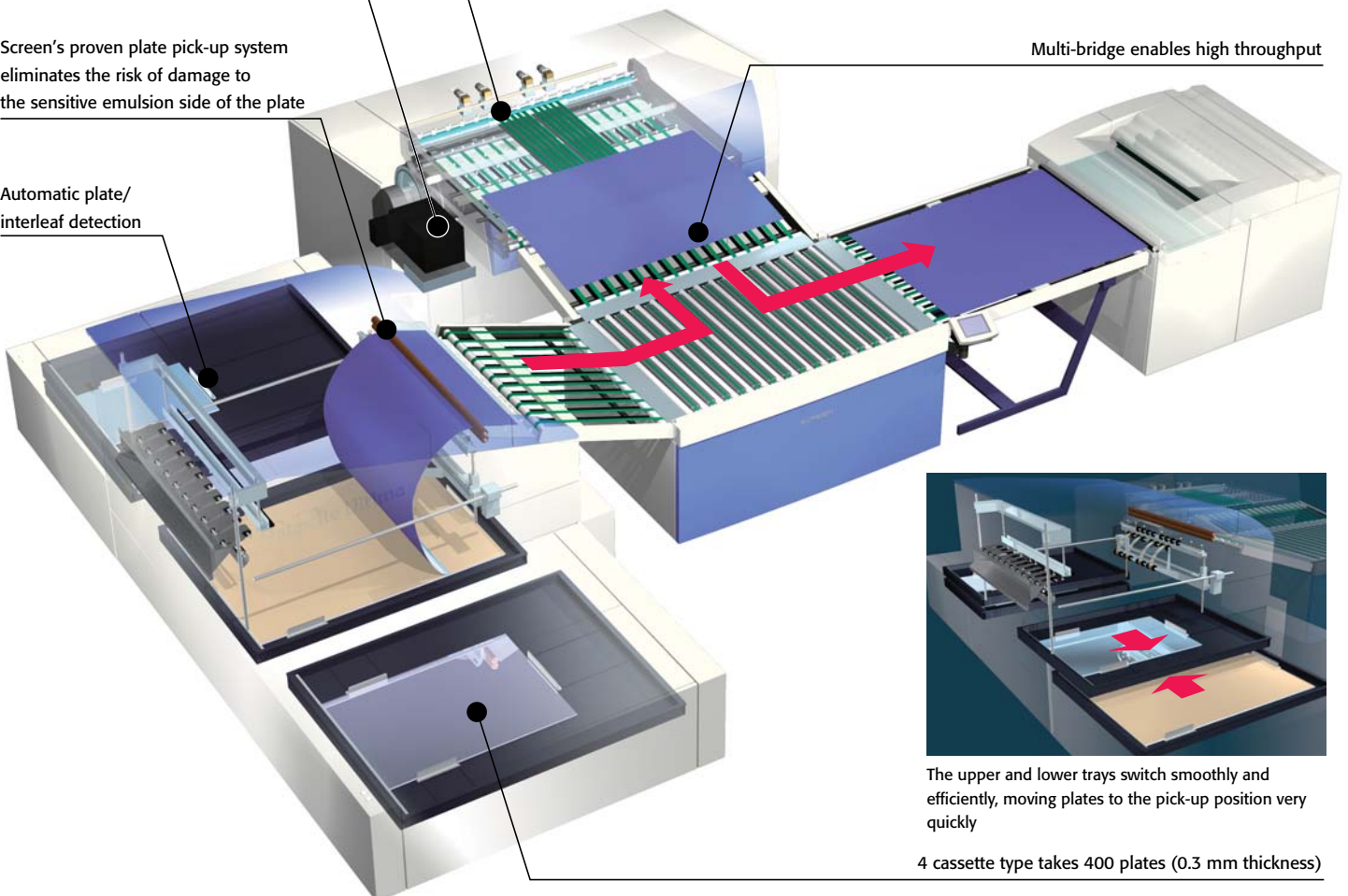
Automatic inline press punching system

Advanced GLV™ imaging head for large-format imaging

Screen's proven plate pick-up system eliminates the risk of damage to the sensitive emulsion side of the plate
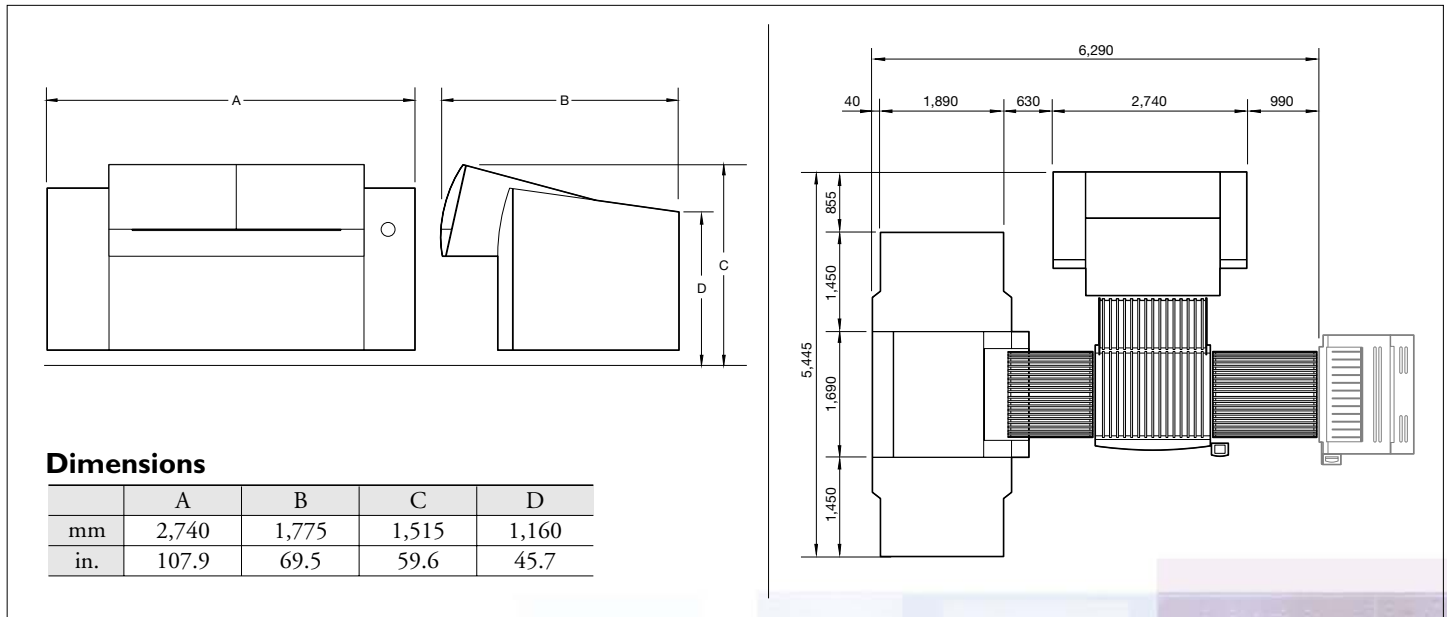
Automatic plate/ interleaf detection

Multi-bridge enables high throughput
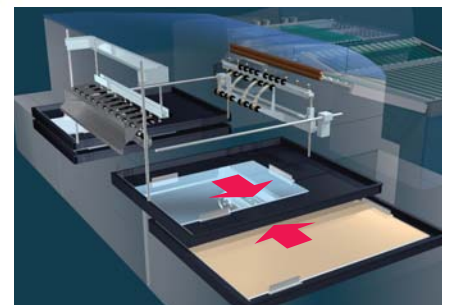
The upper and lower trays switch smoothly and efficiently, moving plates to the pick-up position very quickly

4 cassette type takes 400 plates (0.3 mm thickness)

Space requirements

Dimensions

	A	B	C	D
mm	2,740	1,775	1,515	1,160
in.	107.9	69.5	59.6	45.7

Specifications

Model	PlateRite Ultima 16000	PlateRite Ultima 16000S
Recording system	External drum	
Light source	Infrared laser diodes	
Light system	Multi-channel thermal imaging head (with GLV™ technology)	
Plate size	Maximum 1,470 x 1,165 mm (57.8" x 45.8")	
	Minimum 650 x 550 mm (25.6" x 21.7")	
Exposure size	Maximum 1,470 x 1,154 mm (57.8" x 45.4")	Maximum 1,470 x 1,157 mm (57.8" x 45.5")
	(6-mm leading edge and 5-mm trailing edge clamps)	(3-mm leading edge and 5-mm trailing edge)
Media	Thermal (infrared sensitive plates)	
Media thickness	0.2 mm to 0.4 mm (7.8 mil to 15.7 mil)	
Resolution	1200/2400/2438/2540 dpi	
Repeatability	±5 microns*	
Productivity	MAX. 23 plates/hr at 2,400dpi	MAX. 14 plates/hr at 2,400dpi
	(1,448 x 1,143 mm / 57" x 45" plates)**	(1,448 x 1,143 mm / 57" x 45" plates)**
Interface	Fast PIF	
Plate transport	Automated with optional multi cassette autoloaders	
	Semi-automated with optional plate set convyor	
Punch systems (optional)	SCREEN, Heidelberg, Protocol, Komori, Stoessor, and others	
Weight	Main body: 1,640 kg (3,608 lb.);	
	2 cassette : 1,005 kg (2,211 lb.) / 4 cassette : 1,395 kg (3,069 lb.)	
Environment	23°C ±2°C (73.4°F ±3.6°F), 50% to 70% relative humidity (non-condensing)	
Power requirements	Main body : Single phase 200V to 240V (+6% to -10%), Max 25A, Max 5.0kW***	

  * Over four consecutive exposures on one plate at 23°C (73.4°F) and 60% relative humidity.

  ** Output speed may vary depending on the sensitivity of the media.

*** Includes power requirements of chiller, MA-L, & AT-M.

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DAINIPPON SCREEN MFG. CO., LTD.

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• Printed on recycled paper.

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