SCREEN

PlateRite Ultima Series

Multi-Format Thermal Plate Recorders

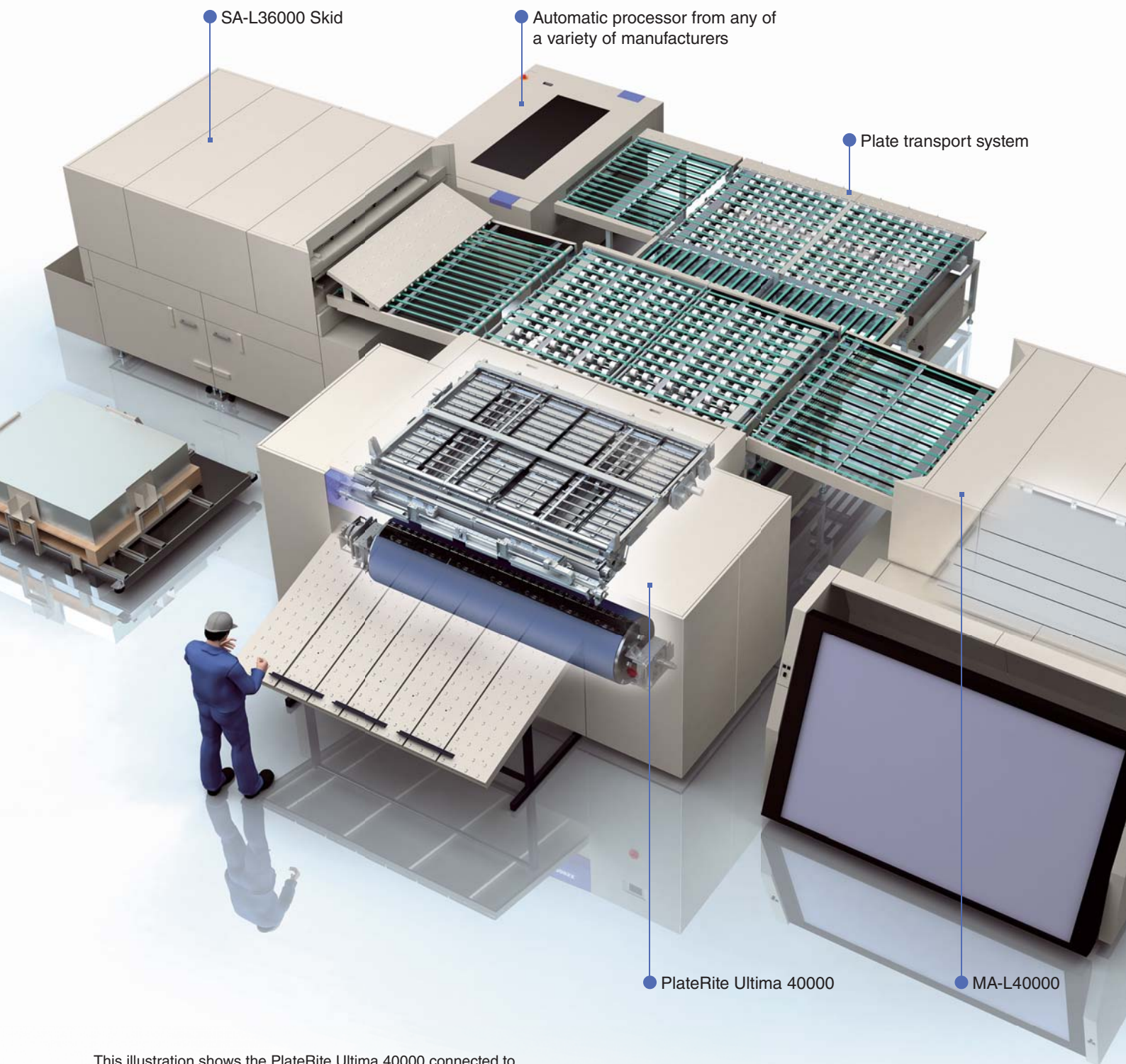Creating a Future in Print

High-end CtP that maximizes the performance of large-format offset presses

PlateRite Ultima Series

SA-L36000 Skid

Automatic processor from any of a variety of manufacturers

Plate transport system

PlateRite Ultima 40000

MA-L40000

This illustration shows the PlateRite Ultima 40000 connected to the MA-L40000 and the SA-L36000 Skid.

PlateRite Ultima 48000

An advanced thermal CtP unit that can output plates up to 48 A4 pages in size, and maximizes the productivity of large-format web offset presses.

Supported plate sizes:

Maximum: 2,900 x 1,350 mm; Minimum: 650 x 550 mm

PlateRite Ultima 40000

A space-saving thermal CtP unit that can output plates up to 40 A4 pages in size.

Supported plate sizes:

Maximum: 2,280 x 1,600 mm; Minimum: 650 x 550 mm*

* 500 x 550 mm (factory option)

PlateRite Ultima 36000

A thermal CtP unit that can output plates up to 36 A4 pages in size and features twin imaging heads for even higher productivity (ZX and Z models).

Supported plate sizes:

Maximum: 2,100 x 1,600 mm; Minimum: 650 x 550 mm*

* 500 x 550 mm (factory option)

PlateRite Ultima 24000

The same features as the PlateRite Ultima 36000 in a thermal CtP unit that can output plates up to 24 A4 pages in size.

Supported plate sizes:

Maximum: 1,750 x 1,400 mm; Minimum: 650 x 550 mm*

* 500 x 550 mm (factory option)

PlateRite Ultima 16000 II

A thermal CtP unit that can output plates for large-size media, including plates up to 16 A4 pages in size.

Supported plate sizes:

Maximum: 1,470 x 1,165 mm; Minimum: 650 x 550 mm*

* 450 x 370 mm (factory option)

SIZE UPGRADE

PRODUCTIVITY UPGRADE

Realizing a remarkable level of productivity

A multi-channel imaging head made possible by unique GLV™ technology

GLV™ (Grating Light Valve™) technology employs production techniques used in semiconductor manufacturing. A GLV™ array consists of thousands of microscopic reflective ribbons placed over a silicon chip. These ribbons can be moved up or down to reflect or diffract an imaging laser targeted at the array, simultaneously turning on and off a high number of optical channels.

The PlateRite Ultima series units feature an advanced imaging head in which Dainippon Screen's tried-and-true laser control technology is used to precisely target a high-power laser at the GLV™ array, making it possible to simultaneously control 1,024 channels of light. This dramatically increases the width of the area that can be imaged with each rotation of the drum and contributes to significantly higher productivity.

2,900 × 1,350

2,280 × 1,276

2,032 × 1,270

1,448 × 1,143

1,030 × 800
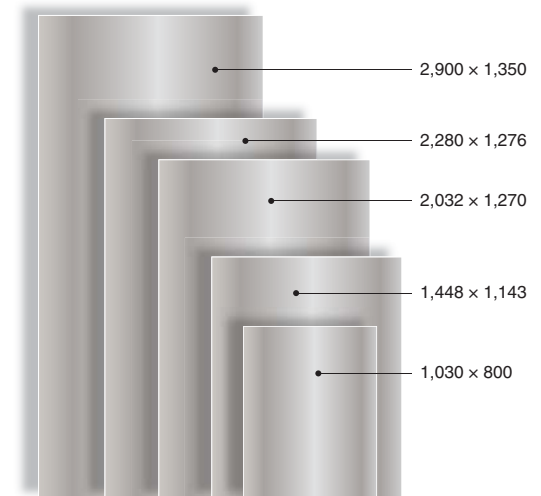
PlateRite Ultima series productivity

Model			2,900 x 1,350 mm	2,280 x 1,276 mm	2,032 x 1,270 mm	1,448 x 1,143 mm	1,030 x 800 mm
PlateRite Ultima 48000SX	1024 Channel	Dual Loading	17	20	22	34	42
PlateRite Ultima 48000S	512 Channel	Dual Loading	14	17	18	28	34
PlateRite Ultima 40000SX	1024 Channel	Dual Loading	—	22	24	30	44
PlateRite Ultima 40000S	512 Channel	Dual Loading	—	17	19	24	36
PlateRite Ultima 36000ZX	1024 Channel x2	Dual Loading	—	—	35 (24)	41 (30)	70
PlateRite Ultima 36000Z	512 Channel x2	Dual Loading	—	—	29 (19)	34 (24)	58
PlateRite Ultima 36000SX	1024 Channel	Dual Loading	—	—	24	30	44
PlateRite Ultima 36000S	512 Channel	Dual Loading	—	—	19	24	36
	512 Channel	Single Loading	—	—	19	24	29
PlateRite Ultima 24000ZX	1024 Channel x2	Dual Loading	—	—	—	41 (30)	70
PlateRite Ultima 24000Z	512 Channel x2	Dual Loading	—	—	—	34 (24)	58
PlateRite Ultima 24000SX	1024 Channel	Dual Loading	—	—	—	30	44
PlateRite Ultima 24000S	512 Channel	Dual Loading	—	—	—	24	36
	512 Channel	Single Loading	—	—	—	24	29
PlateRite Ultima 16000 II Z	512 Channel	Dual Loading	—	—	—	31	39
PlateRite Ultima 16000 II S	512 Channel	Dual Loading	—	—	—	25	32
PlateRite Ultima 16000 II E	512 Channel	Dual Loading	—	—	—	17	20

- Productivity may vary depending on the sensitivity of the plates used.
- Productivity was measured during output at 2,400 dpi, with the unit connected to an MA-L multi-cassette plate autoloader.
- Numbers in parentheses indicate productivity when only one imaging head is used.
- Productivity may vary slightly by model when a Skid autoloader is used.

Smooth and easy handling of even large-size plates

Automated plate loading/unloading system

Mounting heavy large-size plates not only taxes the operator but also has the potential to reduce the overall efficiency of the CtP production line, since the use of large plates increases the risk of damage to the plates when they are loaded into the cassettes, and more time is required for loading operations.

The PlateRite Ultima series units can be incorporated into an automated production line with the addition of any of a variety of plate handling equipment options, including the Skid and MA-L plate autoloaders, which feature Screen's renowned plate transport technology.

Increased efficiency supplying the press

Automatic inline plate punching eliminates the need to adjust registration at the press

The PlateRite Ultima series automatic inline punching system punches holes in plates immediately before they are loaded onto the drum. The punch holes ensure consistent plate placement on the drum, when used in conjunction with registration pins. This helps eliminate imaging variations caused by improper plate placement, and results in superior registration accuracy.

When optional press punch blocks are used (up to 10 punch blocks can be installed and selected according to plate size and press type), the imaged plates can be loaded directly onto the press after output to ensure registration accuracy is maintained. The use of press punch blocks during plate output not only removes the need for manual punching later on in the workflow, but also practically eliminates the need to adjust register at the press. The result is shorter press make-ready time and improved press operating ratios, for even better overall productivity.

• *The PlateRite 16000IIE offers punchless plate handling.*

Higher productivity with dual plate loading models

Consecutive imaging of pairs of plates

Not only can the advanced PlateRite Ultima large-format platesetters load a single large-size plate onto the drum, they can also load pairs of smaller plates together. Imaging pairs of plates increases productivity, since plates need to be loaded and unloaded fewer times. The PlateRite 36000 and PlateRite 24000's ZX and Z series models also feature twin imaging heads that enable simultaneous imaging of two plates, for even higher productivity.
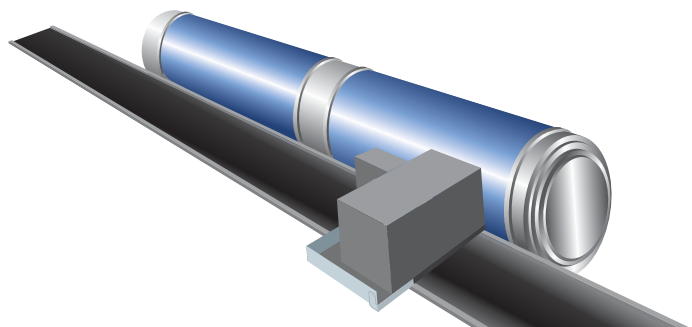

	Plate size during dual plate loading
PlateRite Ultima 48000	16 A4-size pages
PlateRite Ultima 40000	8 A4-size pages
PlateRite Ultima 36000	
PlateRite Ultima 24000	

• *This is a factory option for the PlateRite Ultima 36000S/24000S.*
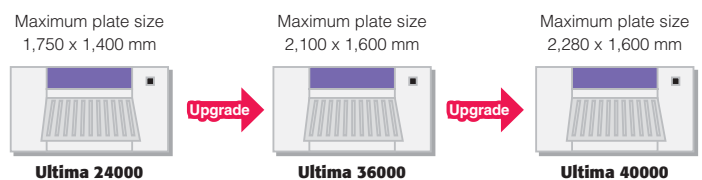• *The PlateRite Ultima 16000II does not support dual plate loading.*

The flexibility to upgrade in the future

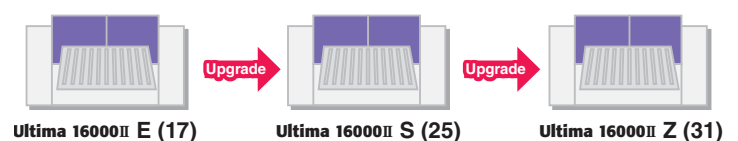## Upgrade to larger size plate output when you get a larger press

The PlateRite Ultima 24000 and PlateRite Ultima 36000 can be upgraded to handle the same size of plates as the PlateRite Ultima 40000. In other words, the PlateRite Ultima 24000 and PlateRite Ultima 36000 not only provide high-end CtP, they also offer the flexibility to support larger plates if you get a large-format press in the future.

• *Not all models can be upgraded.*

Upgrade to higher productivity and support greater work volume

The PlateRite Ultima 16000II can be upgraded for higher productivity even after installation, with the replacement of a few key parts. Equipment like the PlateRite Ultima 16000II helps you schedule and minimize your equipment investment costs.

• **Upgrading to support larger plate sizes**

Maximum plate size 1,750 x 1,400 mm
Ultima 24000

Upgrade →

Maximum plate size 2,100 x 1,600 mm
Ultima 36000

Upgrade →

Maximum plate size 2,280 x 1,600 mm
Ultima 40000

• **PlateRite Ultima 16000II productivity upgrade**

Ultima 16000II E (17)

Upgrade →

Ultima 16000II S (25)

Upgrade →

Ultima 16000II Z (31)

Numbers in parentheses indicate productivity.
• *Values as determined under Screen's operating conditions*

Main unit specifications

Product name	PlateRite Ultima 48000		PlateRite Ultima 40000		PlateRite Ultima 36000			
	48000SX	48000S	40000SX	40000S	36000ZX	40000SX	36000SX	36000S
Recording system	External drum		External drum		External drum			
Light source	1,024 channel laser diode x 1	512 channel laser diode x 1	1,024 channel laser diode x 1	512 channel laser diode x 1	1,024 channel laser diode x 2	512 channel laser diode x 2	1,024 channel laser diode x 1	512 channel laser diode x 1
Plate size	Maximum 2,900 x 1,350 mm [114.1" x 53.1"]; Minimum 650 x 550 mm [25.6" x 21.7"]		Maximum 2,280 x 1,600 mm [89.7" x 62.9"]; Minimum 650 x 550 mm [25.6" x 21.7"]*1		Maximum 2,100 x 1,600 mm [82.6" x 62.9"]; Minimum 650 x 550 mm [25.6" x 21.7"]*1			
Dual plate support	Support for two plates, maximum 1,450 x 1,350 mm [57.0" x 53.1"] each		Support for two plates, maximum 1,060 x 1,600 mm [41.7" x 62.9"] each		Support for two plates, maximum 1,060 x 1,600 mm [41.7" x 62.9"] each			Factory option
Imaging size	Maximum 2,900 x 1,335 mm [114.1" x 52.5"]*2 (Leading edge gripper margin: 8 mm [0.32"]; Trailing edge gripper margin: 7 mm [0.28"])		Maximum 2,280 x 1,585 mm [89.7" x 62.4"]*2 (Leading edge gripper margin: 8 mm [0.32"]; Trailing edge gripper margin: 7 mm [0.28"])		Maximum 2,100 x 1,585 mm [82.6" x 62.4"]*2 (Leading edge gripper margin: 8 mm [0.32"]; Trailing edge gripper margin: 7 mm [0.28"])			
Plate thickness	0.3 to 0.4 mm [11.9 to 15.7 mil]*3		0.2 to 0.4 mm [7.9 to 15.7 mil]*3		0.2 to 0.4 mm [7.9 to 15.7 mil]*3			
Plate type	Thermal plates		Thermal plates		Thermal plates			
Resolutions	1,200*4, 2,400, 2,438, 2,540 dpi		1,200*4, 2,400, 2,438, 2,540 dpi		1,200*4, 2,400, 2,438, 2,540 dpi			
Productivity	See productivity chart in this brochure		See productivity chart in this brochure		See productivity chart in this brochure			
Press punch systems	Registration punch		Registration punch		Registration punch			
Interface	S-PIF		S-PIF		S-PIF			
Dimensions*5 (W x D x H)	Main unit: 4,600 x 2,100 x 1,795 mm [181.2" x 82.7" x 70.7"]		Main unit: 3,840 x 2,100 x 1,795 mm [151.2" x 82.7" x 70.7"]		Main unit: 3,840 x 2,100 x 1,795 mm [151.2" x 82.7" x 70.7"]			
Weight	Main unit: 4,000 kg [8,800 lb] (maximum)		Main unit: 3,720 kg [8,184 lb] (maximum)		Main unit: 3,720 kg [8,184 lb] (maximum)			
Power requirements	Main unit : Single phase 200 to 240 V, 5.2 kW, 32 A Chiller unit : Single phase 200 to 240 V, 2 kW, 8 A Blower unit : Single phase 200 to 240 V, 1 kW, 10 A		Main unit : Single phase 200 to 240 V, 5.2 kW, 35 A Chiller unit : Single phase 200 to 240 V, 2 kW, 8 A Blower unit : Single phase 200 to 240 V, 1 kW, 10 A		Main unit : Single phase 200 to 240 V, 5.2 kW, 35 A Chiller unit: Single phase 200 to 240 V, 2 kW, 8 A (Z and ZX models require two chiller units) Blower unit: Single phase 200 to 240 V, 3 kW, 10 A			
Environment	Recommended: Temperature 21 to 25°C (69.8 to 77°F); Relative humidity: 50 to 70% Required : Temperature 18 to 26°C (64.4 to 78.7°F); Relative humidity: 40 to 70%		Recommended: Temperature 21 to 25°C (69.8 to 77°F); Relative humidity: 50 to 70% Required : Temperature 18 to 26°C (64.4 to 78.7°F); Relative humidity: 40 to 70%		Recommended: Temperature 21 to 25°C (69.8 to 77°F); Relative humidity: 50 to 70% Required : Temperature 18 to 26°C (64.4 to 78.7°F); Relative humidity: 40 to 70%			
Standard accessories	Manual plate loading table, chiller unit, blower unit, signal tower		Manual plate loading table, chiller unit, blower unit, signal tower		Manual plate loading table, chiller unit, blower unit, signal tower			
Optional accessories	Punch systems (various printing press punches), punchless plate handling option, 0.5 mm plate thickness support		Punch systems (various printing press punches), punchless plate handling option, 0.5 mm plate thickness support		Punch systems (various printing press punches), punchless plate handling option, dual plate loading support (S model only), 0.5 mm plate thickness support			
	SA-L48000 Skid, MA-L40000*6, AT-M		MA-L40000, SA-L48000 Skid*6, SA-L36000 Skid*6, AT-M		MA-L40000, SA-L48000 Skid*6, SA-L36000 Skid*6, AT-M			

*1. A minimum size of 650 x 550 mm is offered as a factory option.
*2. When the punchless plate handling option is used, the leading edge gripper margin is 5 mm and the trailing edge gripper margin is 7 mm.
*3. When the factory option for support of 0.5 mm thick plates is selected, the supported plate thickness is 0.3 to 0.5 mm.　*4 1,200 dpi uses doubled 2,400 dpi dots.
*5. For information on system dimensions, please consult your Screen representative.　*6 There are limits to the sizes of plate this unit can handle.

Significantly increasing CtP productivity and press operating ratios Multi-autoloader

The multi-autoloader system automates everything from plate loading to imaging, transport, developing and unloading in a single ongoing set of operations. It makes it possible to continuously output CtP plates for long periods of time, and significantly increases both productivity and press operating ratios.

Handling a large volume of single-size plates at once
Skid autoloader

The Skid autoloader makes it possible to set an entire pallet's worth of large-size plates directly onto a unique skid base. Since a large number of plates of the same size can be set in place at once, the strain involved in plate loading is greatly reduced. The Skid autoloader is an extremely useful component for creating a fully automated CtP line.

• Up to a maximum of 600 plates (for plates 0.3 mm thick; depends on the plate size).
• Not compatible with the PlateRite Ultima 16000II.

Choose the right media for the job
MA-L (multi-cassette autoloader)

The MA-L is an autoloader that can supply media as needed from any of its multiple cassettes, each of which can be loaded with a different size or type of media. The MA-L40000 features four cassettes, and can supply up to 300 large-size plates automatically (plate thickness: 0.3 mm). The MA-L16000 can be equipped with cassettes that hold up to 100 plates*, and can supply a maximum of 450 plates automatically. Units can be equipped with two, three, four, or six independent cassettes. Even after installation, the two-cassette type can be upgraded to support four cassettes, and the three-cassette type can be upgraded to support six cassettes.

* Cassettes for the three- and six-cassette type autoloaders hold a maximum of 75 plates per cassette.

Product name	PlateRite Ultima 24000				PlateRite Ultima 16000II		
	24000ZX	24000Z	24000SX	24000S	16000IIZ	1600IIS	16000IIE
Recording system	External drum				External drum		
Light source	1,024 channel laser diode x 2	512 channel laser diode x 2	1,024 channel laser diode x 1	512 channel laser diode x 1	512 channel laser diode x 1		
Plate size	Maximum 1,750 x 1,400 mm [68.8" x 55.1"]; Minimum 650 x 550 mm [25.6" x 21.7"]*1				Maximum 1,470 x 1,165 mm [57.8" x 45.8"]; Minimum 650 x 550 mm [25.6" x 21.7"]*7		
Dual plate support	Support for two plates, maximum 1,060 x 1,600 mm [41.7" x 62.9"] each			Factory option	Not supported		
Imaging size	Maximum 1,750 x 1,385 mm [68.8" x 54.5"]*2 (Leading edge gripper margin: 8 mm [0.32"]; Trailing edge gripper margin: 7 mm [0.28"])				Maximum 1,470 x 1,154 mm [57.8" x 45.4"]*8 (Leading edge gripper margin: 6 mm [0.24"]; Trailing edge gripper margin: 5 mm [0.20"])		Maximum 1,470 x 1,157 mm [57.8" x 45.5"] (Leading edge gripper margin: 3 mm [0.12"]; Trailing edge gripper margin: 5 mm [0.20"])
Plate thickness	0.2 to 0.4 mm [7.9 to 15.7 mil]*3				0.15 to 0.4 mm [5.9 to 15.7 mil]		
Plate type	Thermal plates				Thermal plates		
Resolutions	1,200*4, 2,400, 2,438, 2,540 dpi				1,200*4, 2,400, 2,438, 2,540 dpi		
Productivity	See productivity chart in this brochure				See productivity chart in this brochure		
Press punch systems	Registration punch				Registration punch		Punchless plate handling
Interface	S-PIF				S-PIF		
Dimensions*5 (W x D x H)	Main unit: 3,840 x 2,100 x 1,795 mm [151.2" x 82.7" x 70.7"]				Main unit: 1,775 x 2,740 x 1,515 mm [69.9" x 107.9" x 59.7")]		
Weight	Main unit: 3,710 kg [8,162 lb] (maximum)				Main unit: 1,640 kg [3,608 lb] (maximum)		
Power requirements	Main unit : Single phase 200 to 240 V, 5.2 kW, 35 A Chiller unit: Single phase 200 to 240 V, 2 kW, 8 A (Z and ZX models require two chiller units) Blower unit: Single phase 200 to 240 V, 1 kW, 10 A				Main unit : Single phase 200 to 240 V, 5 kW, 25 A Chiller unit : Single phase 200 to 240 V, 2 kW, 8 A Blower unit : Single phase 200 to 240 V, 1 kW, 10 A		
Environment	Recommended: Temperature 21 to 25°C (69.8 to 77°F); Relative humidity: 50 to 70% Required : Temperature 18 to 26°C (64.4 to 78.7°F); Relative humidity: 40 to 70%				Recommended: Temperature 21 to 25°C (69.8 to 77°F); Relative humidity: 50 to 70% Required : Temperature 18 to 26°C (64.4 to 78.7°F); Relative humidity: 40 to 70%		
Standard accessories	Manual plate loading table, chiller unit, blower unit, signal tower				Chiller unit, blower unit		
Optional accessories	Punch systems (various printing press punches), punchless plate handling option, dual plate loading support (S model only), 0.5 mm plate thickness support				Punch systems (various printing press punches), punchless plate handling option		
	MA-L40000, SA-L48000 Skid*4, SA-L36000 Skid AT-M				Manual plate loading table, MA-L16000, AT-M		

*7. A minimum size of 450 x 370 mm is offered as a factory option.
*8. When the punchless plate handling option is used, the leading edge gripper margin is 3 mm and the trailing edge gripper margin is 5 mm.

Mix and match up to two autoloaders

• Connect two Skid autoloaders
Load up to 1,200 plates of the same type. If you need to output high volumes of the same type of media, this setup enables continuous operation for a surprisingly long time.

• Connect two MA-L autoloaders
Automatically supply up to eight different types of media. This setup is strongly recommended for companies that handle many different types of plates.
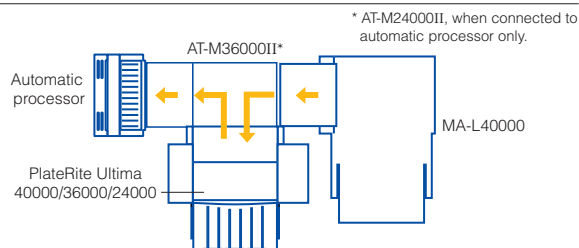
• Connect one Skid autoloader and one MA-L autoloader
Load the Skid autoloader with the media you use most often, and load the MA-L with lower volume media for a more flexible plate supply environment.
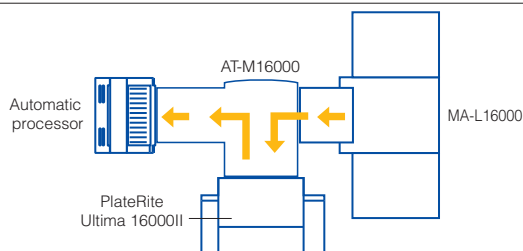
• *Not compatible with the PlateRite Ultima 16000II.*

Standard layout for main unit and autoloader
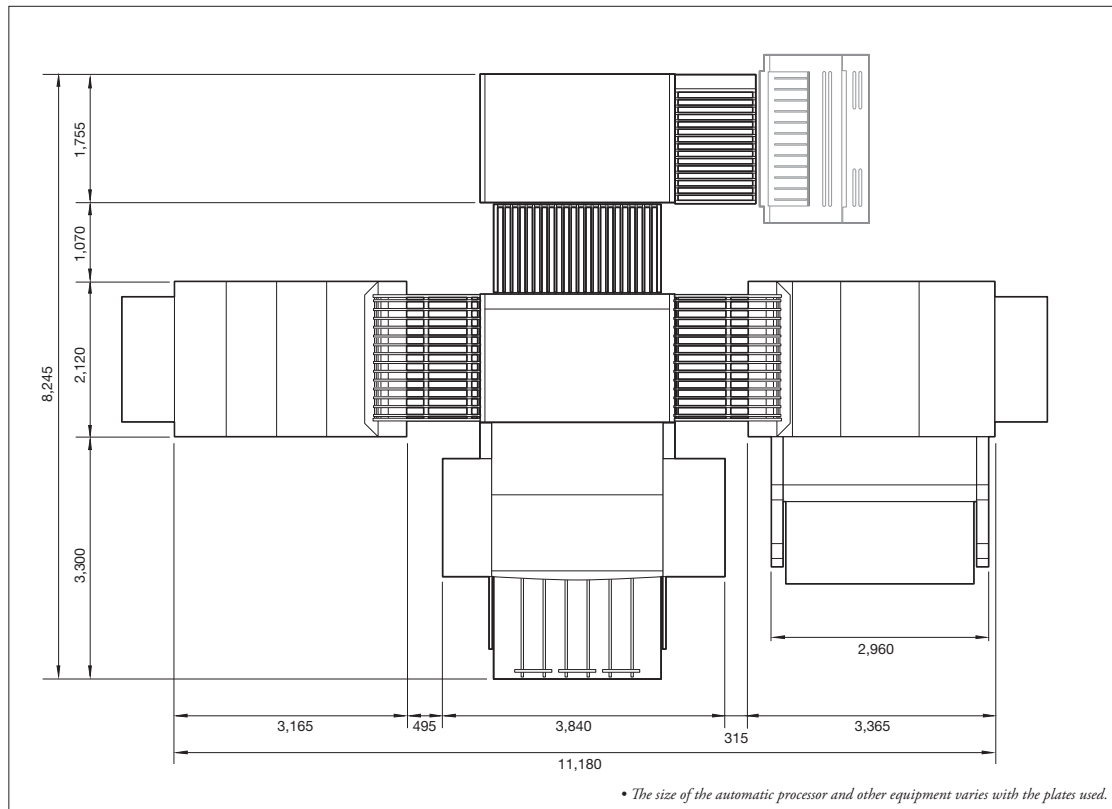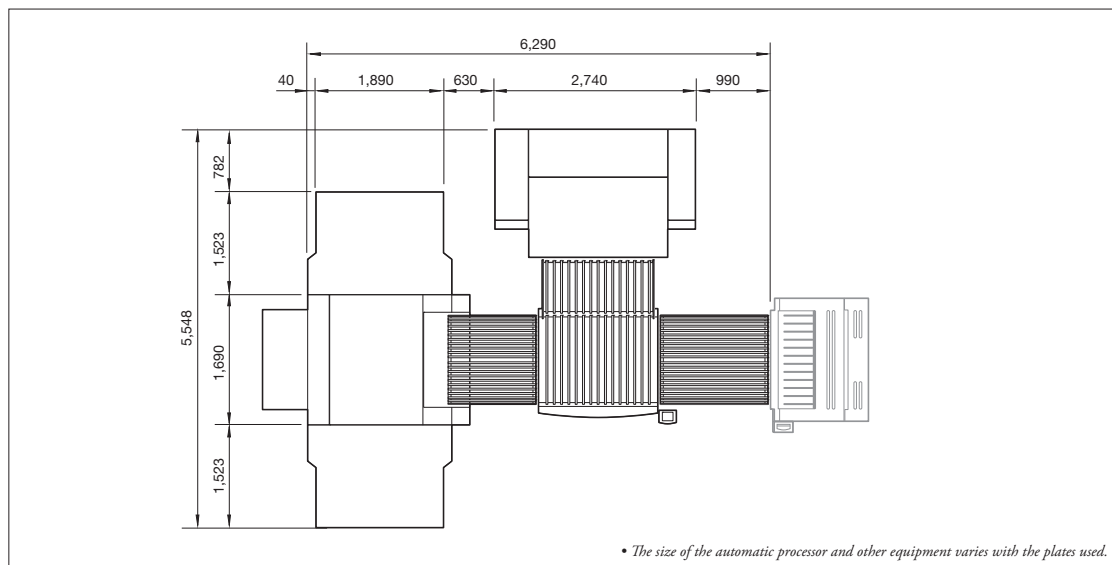
• PlateRite Ultima 40000/36000/24000

* AT-M24000II, when connected to automatic processor only.

AT-M36000II*
Automatic processor
PlateRite Ultima 40000/36000/24000
MA-L40000

• PlateRite Ultima 16000II

AT-M16000
Automatic processor
PlateRite Ultima 16000II
MA-L16000

■ Layout for PlateRite Ultima 40000 with SA-L36000 Skid and MA-L40000 [units: mm]

• The size of the automatic processor and other equipment varies with the plates used.

■ Layout for PlateRite Ultima 16000II with MA-L16000 (six-cassette autoloader type) [units: mm]

• The size of the automatic processor and other equipment varies with the plates used.

DAINIPPON SCREEN MFG. CO., LTD.

• This brochure was made using SPEKTA 2 screening.

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