

# Presstek Dimension® Pro

Thermal CTP Systems

- Four-page and eight-page models
- Versatile range of plate sizes
- Fewest steps to press-ready plates
- Easy to use, low-cost operation
- Superior image control
- Images Presstek thermal plates and other 830nm media



# Presstek Dimension® Pro

Increase Your Productivity and Profitability

Presstek Dimension Pro CTP systems provide high performance, ease of use, and low cost of operation to make your business more capable, profitable and competitive. Combined with Presstek's thermal CTP plate choices, a Dimension Pro offers your business multiple advantages over other platemaking systems. The amount of time, labor and materials for platemaking are significantly reduced, while accuracy, consistency and pressroom performance improve.

A Dimension Pro is a cost-effective and reliable choice for printers looking to:

- Streamline platemaking operations
- Better respond to customers' needs
- Lower the costs of platemaking
- Operate in a more environmentally sustainable manner
- Fully capitalize on the efficiency of CTP workflow



Dimension Pro CTP systems offer maximum efficiency, outstanding image quality, and ease of use. A full range of choices is available to meet your requirements.

## Be More Capable

The easy operation of a Dimension Pro and fast turnaround of plates enable you to process more jobs more quickly, and respond to short lead times and last minute changes. Presstek's thermal plates provide outstanding image quality and on-press performance while reducing total cost.

With high accuracy and throughput, a Dimension Pro platesetter enables your prepress and pressroom to accommodate the frequent job changeovers that result from today's shorter run lengths and faster turnaround times.



## Be More Profitable

The Dimension Pro's wide range of plate sizes covers all your platemaking needs. The accurate, consistent output of the Dimension Pro significantly reduces remakes, imaging quality issues, and subsequent downtime in your pressroom. Its easy-to-use features eliminate the need for a dedicated operator. The autoloader option allows for unattended operation.

## Be More Competitive

Fast response times and lower prepress costs enable you to better capitalize on your digital workflow, moving jobs to the pressroom faster. The Dimension Pro provides a fast and efficient way to produce the high quality, high resolution plates you need.

## Presstek Chemistry-free Plates

Use Presstek's chemistry-free CTP plates to eliminate all the costs associated with the chemical processing of plates. You will remove time consuming steps, reduce labor, and conserve valuable floor space. Expensive remakes caused by variables in chemistry, exposure and human error will be eliminated. With the fewest steps to press-ready plates, your prepress and pressroom personnel can perform more tasks every shift. You also minimize the environmental costs of platemaking.



## Dimension Pro Features:

**Easy, Streamlined CTP:** A Dimension Pro fits any existing prepress environment. Using Presstek thermal CTP, you will produce high quality press-ready plates in the fewest steps.

When using Presstek chemistry-free plates only a water wash is required after imaging and the plates are ready to print. No chemical processing, gumming or baking is required. The need to purchase, store, handle and dispose of platemaking chemistry is eliminated. Because the labor, space, equipment and materials required are minimized, you save time, money and resources.

**Reliable and Proven Performance:** The imaging head employs multiple-laser technology. In the unlikely event that one or several emitters should fail, power is automatically increased to the others to ensure continuous operation without any change in resolution or image quality.

A Dimension Pro is a robust and reliable system, engineered for easy maintenance and maximum uptime.



**Superior Image Control:** Using a combination of pin mounts and optical sensing, registration is automatic, eliminating operator intervention and error. Dynamic autofocus reproduces subtle tonal variations and eliminates hot spots. Automatic clamping adjusts to fit any size plate (see specifications).

Dimension Pro offers resolution up to 2400 dpi with a 25 micron spot size. The Dimension Pro 420 and 815 support screen ruling up to 250 lpi. Featuring enhanced accuracy, the Dimension Pro 443 and 815 Plus support screen ruling up to 450 lpi.

## Connectivity

Through the use of 1-bit TIFF files, Dimension Pro systems are compatible with a wide-range of industry standard workflows. Presstek's integrated digital solutions include workflow solutions that optimize the performance of your Presstek equipment and increase the productivity of your prepress department.

## Productivity to Fit Your Needs

### Dimension Pro 420

A semiautomatic platesetter, the Dimension Pro 420 images up to 20 Presstek or other 830nm thermal plates per hour. Dimension Pro 400 series models offer 39" (990mm) maximum plate sizes so six-page press operators do not have to purchase a larger platesetter than they need.

### Dimension Pro 443

This high-productivity model images up to 43 plates an hour, automatically adjusts image size to compensate for thermal plate expansion and contraction, and offers finer line screen ruling with enhanced accuracy.

### Dimension Pro 815

A semiautomatic platesetter, Dimension Pro 815 models image up to 15 Presstek or other 830 nm thermal plates per hour in sizes up to 45" x 33" (1143mm x 838mm).

### Dimension Pro 815 Plus

With all the features of the 815 model, the 815 Plus offers finer line screen ruling with enhanced accuracy by automatically adjusting image size to compensate for thermal plate expansion and contraction.

## Autoloading and Unloading Options

Dimension Pro 443, 815 and 815 Plus models can be configured with factory-installed automatic loading and unloading options. The Autoloader features both loading and unloading functions. Plates are automatically loaded from a stack when needed. Unloading delivers plates to a washer, processor or stacker.

For the 815 and 815 Plus, an alternative factory-installed Auto-unload option is available for those who want to manually load with automatic unloading.



## Performance Specifications by Model

### Dimension Pro 420 and 443

Media Size	Around Drum: 33" maximum; 10.5" minimum (838 mm maximum; 267 mm minimum) Along Drum: 39" maximum; 8.5" minimum (990 mm maximum; 215 mm minimum)
Image Area	Maximum Image: 32.7" x 39" (830 mm x 990 mm)
Throughput <sup>1</sup>	Dimension Pro 420: Up to 20 plates per hour Dimension Pro 443: Up to 43 plates per hour
Screen Ruling	Dimension Pro 420: 250 line screen maximum Dimension Pro 443: 450 line screen maximum

### Dimension Pro 443 with Autoloader

Plate Stack	40–60 plates (depending on thickness) of one size
Media Size	<i>In Autoloading Mode:</i> Around Drum: 33" maximum; 15.7" minimum (838 mm maximum; 398 mm minimum) Along Drum: 39" maximum; 10.6" minimum (990 mm maximum; 270 mm minimum) <i>In Manual Loading Mode:</i> Around Drum: 33" maximum; 12" minimum (838 mm maximum; 305 mm minimum) Along Drum: 39" maximum; 8.5" minimum (990 mm maximum; 215 mm minimum)
Image Area	Maximum Image: 32.7" x 39" (830 mm x 990 mm)
Throughput <sup>1</sup>	Up to 50 plates per hour
Screen Ruling	450 line screen maximum

### Dimension Pro 815 and 815 Plus

Media Size	Around Drum: 33" maximum; 10.5" minimum (838 mm maximum; 267 mm minimum) Along Drum: 45" maximum; 8.5" minimum (1143 mm maximum; 215 mm minimum)
Image Area	Maximum Image: 32.7" x 45" (830 mm x 1143 mm)
Throughput <sup>2</sup>	Both models: Up to 15 plates per hour
Screen Ruling	Dimension Pro 815: 250 line screen maximum Dimension Pro 815 Plus: 450 line screen maximum

### Dimension Pro 815 and 815 Plus with Autoloader

Plate Stack	40–60 plates (depending on thickness) of one size
Media Size	<i>In Autoloading Mode:</i> Around Drum: 33" maximum; 15.7" minimum (838 mm maximum; 389 mm minimum) Along Drum: 44" maximum; 10.6" minimum (1118 mm maximum; 270 mm minimum) <i>In Manual Loading Mode:</i> Around Drum: 33" maximum; 12" minimum (838 mm maximum; 305 mm minimum) Along Drum: 44" maximum; 8.5" minimum (1118 mm maximum; 215 mm minimum)
Image Area	Maximum Image: 32.7" x 44" (830 mm x 1118 mm)
Throughput <sup>2</sup>	Up to 16 plates per hour
Screen Ruling	Dimension Pro 815: 250 line screen maximum Dimension Pro 815 Plus: 450 line screen maximum

## General Specifications – All Models

Media Type	<ul style="list-style-type: none"> <li>• Presstek chemistry-free Anthem Pro or Aurora Pro for runs up to 100,000<sup>1</sup></li> <li>• Presstek Aeon plates for runs up to 1,000,000<sup>1</sup></li> <li>• Presstek PearlDry for waterless printing</li> <li>• Other Thermal IR-sensitive aluminum plate and film, 830 nm</li> </ul>
Plate Thickness <sup>2</sup>	0.005" to 0.012" (0.140 mm to 0.305 mm) <i>With media thickness range extender option:</i> 0.005" to 0.016" (0.140 mm to 0.400 mm)
Resolution	2400 dpi or 1200 dpi
Repeatability <sup>2</sup>	±5 microns (±0.2 mil) between two consecutive exposures on the same plate (at largest plate size)
Automation	Semiautomatic plate loading (Autoloading optional) Automatic Registration: <ul style="list-style-type: none"> <li>• Media Edge—Registered horizontally to pins mounted on drum</li> <li>• Vertical edge located with precise optical sensing</li> <li>• Automatic clamping; adjusts to any plate within specified size range</li> </ul>
Registration <sup>2</sup>	±25 microns (±1.0 mil) between image and plate edge (at largest plate size at constant temperature)
<b>Physical Specifications</b>	
Power Requirements	200–240 VAC (+6/-10%), 50/60 Hz, 8A
Dimensions (LxWxH)	Platesetter: 79" x 48" x 63" (2000 mm x 1200 mm x 1600 mm) With Autoloader: 79" x 48" x 83" (2000 mm x 1200 mm x 2100 mm)
Weight (Approximate)	Platesetter: 1433 lb. (650 kg); 1653 lb. (750 kg) with Autoloader Debris removal unit: 106 lb. (48 kg)
Operating Conditions	63°–86°F (17° to 30°C) and 20–70% relative humidity, non-condensing Site requires compressed air at the model's specific requirements

<sup>1</sup> Run length is subject to paper, ink and press conditions

<sup>2</sup> Specifications are for metal media only

Specifications are subject to change.

For more information about  
Presstek Products:

**Presstek, Inc.**

55 Executive Drive  
Hudson, NH 03051 USA  
Tel: 603-595-7000  
www.presstek.com

4/38 Dacre Street  
Mitchell ACT 2911  
Australia

Ph +61 2 6242 4427  
Fax +61 2 6242 5986

www.grafikalinks.com.au



<sup>1</sup> Maximum productivity for continuous operation using 28.5" (724 mm) plate with qualified sensitivity

<sup>2</sup> Maximum productivity for continuous operation using 40.5" (1030 mm) plate with qualified sensitivity