

# PremiumSetter 1000



***The most versatile Laser Engraving System available!***

- ◆ Elastomer metal back plates
- ◆ Elastomer Mylar back plates

The *PremiumSetter* S1000 from HELL is the most innovative laser engraving system for direct imaging of Elastomer metal back printing plates and Elastomer Mylar back printing plates.

**The S1000 offers the following functions and benefits:**

- Simplified plate handling for extremely user-friendly loading and unloading using the integrated loading table, vacuum cylinder with clamping bar function, and footswitch control.
- High power laser that optimizes beam quality and spot size in combination with the innovative HELL optical head, for reproduction of ultrafine elements and screens.
- OnlineEngine, which uses predefined parameters in the PremiumProfiler to convert 1 bit TIFF data into three dimensional 8-bit TIFF engraving data on the fly, for a fully digital process without any analog processing steps.

# PremiumSetter 1000

For the first time ever, the benefits of high-resolution direct engraving are now available in dry offset printing thanks to the PremiumSetter S1000. A fully digital, precision-controlled process gives directly engraved elastomer printing forms a recognized advantage over their traditional photopolymer equivalents. Using a high-resolution fiber laser in the S1000 also enables ultrafine elements to be engraved. This is impossible using a CO<sub>2</sub> laser because of its design. Cups, cans, and tubes can now be printed with an unprecedented level of quality.

The S1000 simplifies plate handling, too. An integrated loading table incorporating stops, a vacuum cylinder with clamping bar, and footswitch control results in extremely user-friendly loading and unloading.

Using up to two lasers with a total output of 1200 W, the S1000 takes the existing performance in this market segment to a whole new level.

| Laser and optics | PremiumSetter S1000                             |
|------------------|---|
| Laser principle  | Fiber laser, diode-pumped                       |
| Laser power      | 1-beam, 600 W<br>2-beam, 2 x 600 W              |
| Write resolution | 2540 - 5080 dpi                                 |
| Screen ruling    | Continuous                                      |
| Relief depth     | Bis 800 µm (depends on material)                |
| Input data       | 1-bit TIFF, screened<br>8-bit TIFF              |
| Cooling          | External cooling unit with closed water circuit |
| Extraction       | Separate turbine and filter unit                |

| Printing plates          | PremiumSetter S1000   |
|--------------------------|---|
| Plate types              | - Elastomer metal back plates<br>- Elastomer Mylar back plates<br>- Digital Rotary Screen Mesh<br>- Digital Photopolymer Plates           |
| Plate thickness          | up to 3 mm  |
| Plate size               | Sizes up to 1350 x 1066 mm / 53 x 42 inches<br>Can be used up to max. 1290 x 1066 mm  |
| Functions                |   |
| PremiumProfiler          | Definition of screen dot profiles   |
| Job ticket workflow *    | Preparation of production jobs outside PremiumSetter for convenient and reliable job preparation and reduced setup times on PremiumSetter |
| One-button engraving *   | Extremely straightforward operation for engraving prepared job tickets  |
| OnlineEngine             | On-the-fly digital shaping of engraving data on PremiumSetter   |
| Platemaster              | Automatic positioning of repeats based on presettings, optimized arrangement, and guillotine cutting                                      |
| PlateOptimizer *         | Manual positioning of repeats under visual control  |
| Export Beschnittmasken   | Digital trimming mask data provided   |
| Mirroring                | Mirroring engraving data in circumferential direction   |
| Passive FastForward      | Fast crossfeed for skipping large solid areas   |
| Brushing                 | Pre-cleaning of the printing form   |
| Engraving status display | Display showing remaining engraving time  |
| Dimensions               |   |
| Basic unit (L x W x H)   | 2835 x 2025 x 1231 mm   |
| Weight                   | Approx. 3250 kg   |

## HELL DIRECT LASER

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