PremiumSetter® S1000

The PremiumSetter S1000 from HELL is an innovative laser engraving system for direct lasering of elastomer printing plates for Dry Offset, Letterpress, Flexography and varnishing plates as well as for imaging digital photopolymer plates (LAMS).

The S1000 offers the following functions and benefits:

1. Simplified plate handling for user-friendly loading and unloading using the integrated loading table, vacuum cylinder with clamping bar function, and footswitch control;

2. 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;

3. OnlineEngine, which uses predefined parameters in the PremiumProfiler to convert 1-bit TIFF data into three-dimensional 8-bit TIFF direct engraving data on the fly, for a fully digital process without any analog processing steps.

HELL
Gravure Systems

The HELL PremiumSetter® S1000

PremiumSetter technology from HELL combines maximum resolution with the 3D shaping of print elements. All relief parameters like undercut, first step and shoulder profile are digitally controlled and precisely engraved – something that is impossible in other manufacturing processes.

HELL offers the S1000 with simplified handling for imaging of elastomeric and photopolymer printing plates for Dry Offset, Letterpress and Flexography as well as varnishing plates. An integrated loading table incorporating guide bars, a vacuum cylinder with clamping bar, and footswitch control results in extremely user-friendly loading and unlaoding.

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.

Printing plates	PremiumSetter S1000
Plate types	- Elastomer on steel-base plates - Elastomer on polyester-base plates - Digital photopolymer plates (LAMS)
Plate thickness	up to 6.35 mm
Plate size	Sizes up to 1350 x 1066 mm / 53 x 42 inches Can be imaged up to max. 1290 x 1066 mm
Functions	
PremiumProfiler	3D 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 3D 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 for cutting table	Digital stencil data provided
Mirroring	Mirroring engraving data in circumferential direction
Passive FastForward	Fast crossfeed for skipping large solid areas
Brushing	Cleaning of the printing form after lasering
Engraving status display	Display showing remaining engraving time
Laser and optics	
Laser principle	Fiber laser, diode-pumped
Laser power	1-beam, 600 W 2-beam, 2 x 600 W
Write resolution	2540 - 5080 dpi
Screen ruling	Continous
Relief depth	Up to 800 μm / singlepass Up to 3 mm / multipass
Input data	1-bit TIFF, screened 8-bit TIFF
Cooling	External cooling unit with closed water curcuit
Extraction	Separate turbine and filter unit
Dimensions	
Basic unit (L x W x H)	2835 x 2025 x 1231 mm
Weight	Approx. 3250 kg

Subject to design modifications. Errors excepted.

* Depends on system design