

## PremiumSetter® S3000



**The PremiumSetter S3000 is an innovative engraving system for direct laser engraving of elastomer flexographic printing sleeves.**

The S3000 offers the following functions and benefits:

- 1 The **high-power laser** in combination with the innovative HELL optical head enables optimum beam quality and spot size for reproduction of ultrafine elements and screens.
- 2 The **job ticket workflow** ensures maximum prepress efficiency with its intelligent production management and one-button operation.
- 3 The **OnlineEngine** uses predefined parameters to convert 1-bit TIFF data into three-dimensional 8-bit TIFF engraving data on the fly – a fully digital process without any analog process steps.

## HELL PremiumSetter® S3000

For the first time ever, the benefits of high-resolution direct engraving can now be achieved with printing widths of up to 3 m thanks to the PremiumSetter S3000. By using a fiber laser instead of a CO<sub>2</sub> laser, it is now also possible to print toiletries, tissues, rulings, etc. in a quality that is currently winning over the small- and medium-format label and packaging segment. High-resolution direct laser engraving on elastomer forms is a tried-and-tested method that has been utilized hundreds of times in this segment.

Using up to four lasers with a total output of 2400 W, the S3000 takes the existing performance in this market segment to a whole new level. In conjunction with the innovative HELL optical head, the high-performance fiber lasers deliver top reproduction and product quality. The dream of engraving ultra-fine elements – which is impossible using CO<sub>2</sub> lasers because of their design – is now a reality.

The output of the S3000 is configurable. The 3D engraving data is calculated on the fly during the engraving process. Equipped with all HELL's top features, the S3000 ensures extremely fast, top-quality engraving results. The mechanical engineering and service quality are of the high level you would expect from HELL.

Laser and optics		PremiumSetter S3000	
Laser principle	Fiber laser, diode-pumped		
Laser power	1-beam, 600 W 2-beam, 2 x 600 W 4-beam, 4 x 600 W		
Laser carriage	1 / 2*		
Hell mandrel			
Face width (up to)	650 - 3000 mm		
Circumference	300 - 1400 mm		
Weight	Approx. 800 kg		
Mounting	Pivots		
Shaft cylinder			
Length incl. shafts	600 - 3290 mm		
Face width	Up to 211 - 2841 mm		
Circumference	300 - 1400 mm		
Weight	Approx. 1500 kg		
Mounting	Three-jaw chuck		
Dimensions			
Basic unit (L x W x H)	5772 x 1971 x 1708 mm		
Weight	Approx. 10,000 kg		

Subject to design modifications. Errors excepted.

Version: D7

Features	PremiumSetter S3000
Input data	1-bit TIFF, screened 8-bit TIFF
Write resolution	2540 - 5080 dpi
Screen ruling	Continuous
Lasered relief depth	Up to 1800 µm (depends on material)
ActiveFastForward relief depth	Up to 2 mm (depends on material)
Equipment	
Sleeves	Outside of sleeves prepared for air cylinder or optionally for HELL mandrel (with internal cone) / shaft cylinder
Air cylinder mounting	Outside of air cylinder prepared for mounting using pivots or three-jaw chuck
Bearing system	Two bearing blocks that can move along a central axis of symmetry
Hood	Automatic
Operation	Touchscreen
Cooling	External cooling unit with closed water circuit
Extraction	Separate turbine and filter unit
Functions	
PremiumProfiler	Definition of screen dot profiles to be used
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
Sequential engraving *	Engraving of several jobs / sleeves with just one makeready process
Laser pointer	Specifying of start position for engraving via a sight check
Text in edge area	Engraving of specific details in edge area of sleeves for e.g. identification
TIFF in edge area	Engraving of image data such as register marks for press in edge area of sleeves
Mirroring	Mirroring engraving data in circumferential direction
Centric engraving	Automatic centering of engravings on sleeve
Active FastForward	Mechanical removal of large non-printing sleeve areas
Passive FastForward	Fast crossfeed for skipping large solid areas
Brushing	Pre-cleaning of printing form in PremiumSetter
Engraving status display	Display showing remaining engraving time
Status display	High-visibility traffic-light signals display machine status

\* Depends on system design

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