The PremiumSetter S1700 SL is an innovative laser engraving system for direct lasering of elastomer and photopolymer sleeves as well as plates for Dry Offset, Letterpress, Flexography and varnishing applications.

The S1700 SL offers the following functions and benefits:

1. **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;
2. **the jobticket workflow**, which ensures maximum prepress efficiency with its intelligent production management and OneButton operation;
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.
The HELL PremiumSetter® S1700 SL

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 S1700 SL with simplified handling for imaging of elastomeric and photopolymer sleeves for flexographic printing. The PremiumSetter’s cantilever on one side makes it far easier to handle sleeves.

For imaging of elastomeric and photopolymer printing plates for Dry Offset, Letterpress and Flexography as well as for varnishing plates the S1700 SL is optionally equipped with a device which allows a simplified plate handling.

Using up to two lasers with a total output of 1200 W, the S1700 PL takes the existing performance in this market segment to a whole new level.

<table>
<thead>
<tr>
<th>Printing plates</th>
<th>PremiumSetter S1700 SL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plate types</td>
<td>- Elastomer sleeves</td>
</tr>
<tr>
<td></td>
<td>- Elastomer on steel-base plates</td>
</tr>
<tr>
<td></td>
<td>- Elastomer on polyester-base plates</td>
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<tr>
<td></td>
<td>- Digital photopolymer printing plates (LAMS)</td>
</tr>
<tr>
<td>Sleeve formats</td>
<td>Circumference: 320 up to 1350 mm</td>
</tr>
<tr>
<td></td>
<td>Length: up to 1700 mm</td>
</tr>
<tr>
<td></td>
<td>(250 - 320 mm circ. up to 1500 mm length)</td>
</tr>
<tr>
<td>Plate formats *</td>
<td>Sizes up to: 1350 x 1650 mm / 53 x 65 inch</td>
</tr>
<tr>
<td></td>
<td>Can be imaged up to: 1330 x 1650 mm</td>
</tr>
<tr>
<td>Plate thickness *</td>
<td>up to 6.35 mm</td>
</tr>
</tbody>
</table>

**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
- **On-button engraving * ** Extremely straightforward operation for engraving prepared job tickets
- **OnlineEngine** On-the-fly digital shaping of 3D engraving data on PremiumSetter
- **Sequential engraving * ** Engraving of several jobs in one operation with just one make-ready process
- **Platemaster * ** Automatic positioning of repeats based on presets, 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** Continuous
- **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 circuit
- **Extraction** Separate turbine and filter unit

**Dimensions**

- Basic unit (L x W x H) 2835 x 2025 x 1231 mm
- Weight Approx. 3250 kg

* Depends on system design

Subject to design modifications. Errors excepted.