The benchmark for industrial printing applications, the Xaar 1003 U, is now even better with the addition of High Laydown Technology.

Choosing a digital inkjet printing press optimised with the Xaar 1003 U printhead and High Laydown Technology makes perfect business sense. Thanks to Xaar’s proven TF Technology ink recirculation, the Xaar 1003 U delivers a high standard of print quality and reliability in digital printing and is perfect for a wide range of industrial applications.

Benefits of digital printing
- Cost effective production with no limit on the run length
- Short print runs for limited editions or localised promotions
- No minimum order quantity
- No need to produce unwanted labels or overs due to minimum batch size
- Rapid order turnaround once the design is agreed
- Simple workflow with quick and easy job setup and changeover
- Avoids the complexities, cost and waste associated with flexo printing.

Applications
The Xaar 1003 U printheads are perfect for printing:

**Décor**
- Glass
- Laminates
- Wall paper

**Packaging**
- Direct-to-shape
- Folding cartons
- Labels
- Product printing
Key benefits

High print quality for industrial applications
Exceed customer expectations and secure repeat business with high quality prints delivered the next day. With a digital press enabled with Xaar 1003 U printheads you can print 360 dpi resolution for a wide range of industrial applications.
• 360 x 360 dpi at up to 50 m/min line speed, with 4 grey levels (6, 12, 18 pL).

Dimensional varnish effects with Xaar’s High Laydown (HL) Technology
Offer exciting new print possibilities using high build tactile effects that significantly enhance shelf appeal and ensure that products stand out when on display.
Xaar’s High Laydown (HL) Technology enables very high build of UV varnish – an 80 μm layer thickness at 25 m/min line speed is possible with the Xaar 1003 GS12U.

Peace of mind with continuous, reliable printing
Multiple technologies unique to Xaar ensure continuous and reliable printing in single-pass operation, maximising production output, minimising production interruptions and reducing the need for operator intervention.
• Xaar’s TF Technology ink recirculation – continuous ink flow at a high rate directly past the back of the nozzles; air bubbles and unwanted particles are carried away so the press does not have to be stopped for printhead maintenance
• Xaar Guard provides mechanical protection to the nozzle plate
• Xaar’s Tuned Actuator Manufacturing ensures that print quality is uniform across all printheads in a print bar, and at different greyscale levels.

Physical attributes

<table>
<thead>
<tr>
<th>Physical attribute</th>
<th>Xaar 1003 GS6U</th>
<th>Xaar 1003 GS12U</th>
<th>Xaar 1003 GS40U</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active nozzles</td>
<td>1000</td>
<td>1000</td>
<td>1000</td>
</tr>
<tr>
<td>Print swath width</td>
<td>70.5 mm</td>
<td>70.5 mm</td>
<td>70.5 mm</td>
</tr>
<tr>
<td>Nozzle density (nozzles per inch)</td>
<td>360 npi</td>
<td>360 npi</td>
<td>360 npi</td>
</tr>
<tr>
<td>Ink type</td>
<td>UV, oil, solvent</td>
<td>UV, oil, solvent</td>
<td>UV, oil, solvent</td>
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<tr>
<td>Drop volume*</td>
<td>6 to 42 pL</td>
<td>12 to 84 pL</td>
<td>40 to 160 pL</td>
</tr>
<tr>
<td>Firing frequency / grey levels*</td>
<td>27 kHz / binary</td>
<td>27 kHz / binary</td>
<td>6 kHz / 5 grey levels</td>
</tr>
<tr>
<td>Max line speed / grey levels*</td>
<td>50 m/min / 4 grey levels</td>
<td>50 m/min / 4 grey levels</td>
<td>25 m/min / 8 grey levels</td>
</tr>
<tr>
<td>High Laydown Technology – film thickness at 25 m/min line speed*</td>
<td>–</td>
<td>80 μm</td>
<td>–</td>
</tr>
<tr>
<td>High Laydown Technology – film thickness at 50 m/min line speed*</td>
<td>–</td>
<td>50 μm</td>
<td>–</td>
</tr>
<tr>
<td>Dimensions (WxDxH)</td>
<td>125x30x60 mm</td>
<td>125x30x60 mm</td>
<td>125x30x60 mm</td>
</tr>
</tbody>
</table>

*Dependent on ink used and system integration