High-speed printing performance of 210m²/hour!

- Equipped with new high speed multi-nozzle inkjet printheads
- High printing speed: maximum 210m² per hour with a maximum fabric width of 1,850mm
- Integral nozzle check function
- Accurate production of subtle tints, tones and colour gradients
- High capacity 10L ink tanks

The Nassenger VII includes a scanning print unit and a precision fabric transport unit. A separate un-winder and drier etc. will be needed to complete the print system.
New Printhead

Equipped with high speed multi-nozzle inkjet prinheads

The 512 nozzle high-speed printhead has been developed specifically for use in Nassenger VII. Printing only when required, the piezo printheads use ink extremely efficiently. This makes the Nassenger VII very economic to use. The shared mode design of the printhead requires only low drive voltages, and has a long service life, making the heads environmentally friendly when compared to other piezo systems.

Print Speed

<table>
<thead>
<tr>
<th>Resolution</th>
<th>Print Speed (m²/h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>540 x 360 dpi</td>
<td>210</td>
</tr>
<tr>
<td>540 x 540 dpi</td>
<td>145</td>
</tr>
<tr>
<td>540 x 720 dpi</td>
<td>115</td>
</tr>
<tr>
<td>720 x 720 dpi</td>
<td>85</td>
</tr>
<tr>
<td>720 x 900 dpi</td>
<td>70</td>
</tr>
<tr>
<td>900 x 900 dpi</td>
<td>55</td>
</tr>
</tbody>
</table>

*single drop / Inter Leave off

Productivity

High printing speed: maximum 210m² per hour

The new Nassenger VII uses 24 inkjet printheads and provides significantly increased production rates – up to 3.6 time more than the Nassenger V. The Nassenger VII is ideal for low volume production with very fast delivery times.

Fabric Variety

Maximum fabric width of 1,850mm

Capable of handling fabric widths up to 1,850mm, the unit is ideal for interior fabric applications including curtains and bedding. Nassenger VII makes a diverse range of fabric printing applications possible.

Reliability

Equipped with a nozzle check function

A nozzle-check function is equipped to ensure stable jets from all nozzles. A new head nozzle-check function has been adopted to achieve major improvement in printing reliability.

Dye-Affinity Chart

<table>
<thead>
<tr>
<th>Ink type</th>
<th>Cotton</th>
<th>Rayon</th>
<th>Hemp</th>
<th>Silk</th>
<th>Wool</th>
<th>Nylon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reactive dye ink</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
</tr>
<tr>
<td>Acid dye ink</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
</tr>
</tbody>
</table>

Technology for backing up reliability Ink jet sensor (via temperature feedback)

The jet characteristics of each nozzle are detected by an Laser sensor. This information is fed back for nozzle monitoring and to set stable jetting condition.

Carriage scanning direction

Sensor receptor

Blow off

Sensing emitter
Environmentally Friendly Injet printing

Greatly reduces environmental load over conventional processes. Inkjet dyes are plateless on-demand inks. They contribute greatly to energy reduction efforts in manufacturing processes.

- **Reduce power consumption**: Screen printing - 57%, Inkjet printing - 97%
- **Reduce adhesive paste consumption**: Screen printing - 97%, Inkjet printing - 62%
- **Reduce water consumption**: Screen printing - 85%, Inkjet printing - 95%
- **Reduce waste materials**: Screen printing - 85%, Inkjet printing - 95%
- **Reduce elimination of carbon dioxide**: Screen printing - 95%, Inkjet printing - 95%

*Results taken from in-house comparison*

Quality

Accurate production of subtle tints, tones and colour gradients

The new high-speed printhead has multi-drop print functionality that produces richer colours and smoother transitions from light to dark tones. Effects that can only be printed using inkjet are enhanced by the use of multi-drop technology.

Capacity

High capacity 10L ink tanks

The 10L ink tanks built into Nassenger VII make long print runs possible and improve productivity. Inks are supplied in 5L bottles and in-line degassing units ensure that print quality remains constant and printhead reliability is optimised.

Green

Comparison of enviroment load "Screen printing vs Inkjet printing"

The digital plateless system of the Nassenger VII greatly reduces the process from planning and design to sample creation, and further delivers high productivity on through mass-production.
# Specifications

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Nassenger VII</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology</td>
<td>Drop on-demand Piezo inkjet technology</td>
</tr>
<tr>
<td>Printhead</td>
<td>512 Nozzle Water-Based Inkjet Printhead x 24pcs</td>
</tr>
</tbody>
</table>
| Ink Types     | Reactive Dye Ink, Yellow, Cyan, Black, Pink, Gray, Extra Magenta, Blue, Orange, Sky  
                | Acid Dye Ink, Yellow, Magenta, Cyan, Black, Light Magenta, Light Cyan, Light Black, Blue, Red |
| Max. Printing Width | 1,850mm |
| Min. Printing Width | 100mm |
| Print Modes   | Main Scanning  
                | Resolution [dpi] 540, 720, 900  
                | DPD  
                | Single Drop, Multi-Drop, 2-Drop  
                | Direction  
                | Unidirectional printing, Bidirectional printing  
                | I/L  
                | User-selectable  
                | Sub-Scanning  
                | Resolution [dpi] 360, 540, 720, 900, 1080 |
| Operating Environment | Mechanical Operation  
                          | 15~30°C 40~70%RH  
                          | Inkjet Correction Control  
                          | 20~28°C 40~70%RH  
| Ink Supply System | Mechanism  
                    | Supplied by Motor-Driven Pump  
                    | Tank Capacity  
                    | 10L/each color  
                    | Ink Bottle  
                    | Dedicated Bottle (SL/each color)  
| Maintenance of Printhead | Printhead Cleaning  
                          | Wet Cleaning  
                          | Nozzle Detection  
                          | Faulty nozzle detected by laser beam  
                          | Capping  
                          | Wet Capping  
                          | Maintenance  
                          | Auto/Manual Maintenance  
| Dimensions    | Scanning Unit  
                | W 4,446 x D 815 x H 1,450 (mm)  
                | Fabric Transport Unit  
                | W 2,419 x D 1,411 x H 917 (mm)  
                | Ink Supply Unit  
                | W 1,230 x D 880 x H 1,250 (mm) |
| Weight        | Scanning Unit  
                | approx. 240 kg  
                | Fabric Transport Unit  
                | approx. 300 kg  
                | Ink Supply Unit  
                | approx. 145 kg (without ink) |
| RIP Supported | RIP software of Wasatch Computer Technology recommended |
| Transport Method | Endless Belt  
| Power Supply  | Scanning Unit  
                | AC200 V Single Phase 50/60Hz Common (Japan)  
                | Fabric Transport Unit  
                | AC230 V Single Phase 50Hz Common (EU)  
| Ink Supply Unit | |

Details set out are current as of January 2009. The product specification is subject to change without prior notice.  
**The Nassenger VII includes a scanning print unit and a precision fabric transport unit. A separate un-winder and drier etc. will be needed to complete the print system.**

## Set up ground plan

![Set up ground plan diagram](image)

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