SUPER HANDYScan 4100
High-performance technology for precise web viewing
Web viewing that sets standards: SUPER HANDYScan 4100 stands for quality control with the SUPER factor. The PC-based system with high-resolution digital camera impresses with:

- State-of-the-art technology,
- Space-saving single-monitor concept,
- High-resolution images,
- Numerous web viewing options and
- Extensive equipment.

With the high-performance quality management concept of the SUPER HANDYScan 4100 System, you profit in multiple ways, namely:

- Less time and money expenditure,
- Reduced waste,
- Quick system set-up,
- Increased productivity due to automated print monitoring and
- Increased customer satisfaction due to high-quality printed products.

IMPRESSIVE PERFORMANCE FOR FIRST-CLASS RESULTS

- **State-of-the-art technology**
  – 100 percent digital concept for precise data processing, high degree of system stability and more storage options

- **Outstanding image replication**
  – Digital camera for precise web viewing with fine image quality, sharp contrasts and natural colors
  – Available with 125 mm x 95 mm (5 x 4") and 225 mm x 169 mm (9 x 7") field of view

- **Multiple functions**
  – Comprehensive equipment, even in the standard product
  – Multiple functions such as split screen overviews, position memory with gallery function and numerous zoom options

- **Intelligent system concept**
  – Single-monitor solution: Image display and simple operation on one touch screen
  – Web viewing and central system operation, even when space is limited

- **Convenient operation**
  – Fast job set-up
  – Intuitive, multi-lingual user navigation
  – Clear menus

- **Individual configuration**
  – Modular design for flexible integration of hardware and software options, such as a second camera or repeat overview function

- **Including remote maintenance**
  – If required, access by our product experts and service technicians via internet
FUNCTIONS FOR PRINT QUALITY IN PERFECTION

1. Position Memory with Gallery Function
   - Fast split-storage, convenient recall and easy management of up to 16 camera positions (including the settings for zoom, iris and strobe selection)
   - Display in clearly laid-out position gallery

2. Multi Function Split Screen
   - Split-screen function for effective web viewing
   - Simultaneous display and direct comparison of reference image (golden sample) and live image
   - Screen display can be split horizontally and vertically

3. Pincushion Compensation
   - Innovative components minimize pincushion and barrel effects (unwanted cushion or barrel-type distortion of the displayed image)
   - Long-lasting effective improvement of the image validation

4. Quick Zoom
   - Time-saving and cost-reducing recall of frequently used zoom values at the push of a button
INNOVATIVE FUNCTIONS FOR PRINT QUALITY IN PERFECTION

3 Auto Constant Scan (ACS)
- Automatic scan function to sample the repeat both in machine direction and across the web
- Simplified monitoring of the print repeat
- Time, cost and material savings
- Zoom-sensitive “Scan 100%” function with automatic step width adjustment for 100% coverage of the repeat
- Step Scan samples the repeat with adjustable step width in the X and Y directions

6 Programmable Positions
- Scan function for automatic repeat monitoring based on saved positions
- Continuous scanning of the saved positions and display with split screen, zoom and other settings

7 Combi Scan
- Combination of “Programmable Positions” and “ACS” scan options in a continuous loop
- Quick and easy set-up of individual inspection routines
- Efficient monitoring of every job
- Inspection of all relevant quality criteria (monitoring of larger web sections, checking of critical print features and complete sampling of the entire repeat)

8 180° Image Rotation
- Electronic 180° rotation of the image for simple image fitting to the web running direction
EXCELLENT EQUIPMENT.  
HIGH FLEXIBILITY.

Two fields of view are available:

• 125 mm x 95 mm (5" x 4") with 10x zoom lens for standard web inspection routines (standard)
• 225 mm x 169 mm (9" x 7") with 14x zoom lens for inspection of three times more web area with each picture (option).

Single-Monitor Solution with Touch Screen User Interface

• Graphic image display and simple operation on one touch screen
• Efficient web viewing, even when space is restricted at the machine
• Central control of all functions
• Intuitive and hundredfold proven Graphic User Interface (GUI)

GUI Characteristics:

• Easy switching between operator interface and full size view
• Frequently used functions can be called at the touch of a button
• Time savings thanks to intuitive operating icons
• Instant response to operator commands
• Multi-language OSD (on-screen display) menu

High-Resolution Camera Technology

• complete digital basis concept
• High-resolution, digital 1-chip camera with Ethernet interface
• First-class parameters of data transfer speed, image quality, realistic colors and accuracy to smallest details
• Outstanding connection options
• Numerous strobe options (such as UV or lacquer strobes) for optimal customisation to your specific production requirements
SIMPLY FLEXIBLE I: CUSTOMISED SOFTWARE OPTIONS

Adapt SUPER HANDYScan 4100 effectively to your personal production requirements with our versatile software options.

Virtual Repeat
Using the Virtual Repeat function, you can easily navigate the camera. With just the touch of a button – the BST eltromat system creates an overview of the complete repeat.

Job Save
The Job Save memories up to 100 jobs with all their settings, such as split-screen and zoom settings.

Color Monitoring
The “Color Monitoring” software option continually and automatically compares the color values of the current printing process to user-defined positions with saved reference values. For perfect results and the maximum in customer satisfaction.

Smart Register:
Software for setting the register on CI flexo printing machines without register marks. Register setting is controlled by the print image captured by the camera.

Electronic Loupe:
Electronic „magnifying glass“ over the live image which can be used as a virtual loupe.

USB Image Export
Everyday production makes it necessary to save camera images for subsequent use. The optional USB storage function makes it easy to export these images via a USB flash drive.

90° Camera Rotation
The SUPER HANDYScan 4100 can optionally be rotated by 90 degrees. The system’s internal algorithms calculate all necessary settings and automatically adjust the system (not available in combination with the “Virtual Repeat” option).
SIMPLY FLEXIBLE II: CUSTOMISED SOFTWARE OPTIONS

You can also flexibly design the SUPER HANDY Scan 4100’s hardware to fit the demands of your production.

Back Strobe
This hardware option is an additional strobe to visually check the front-to-back print register of translucent materials. To do this, the web is illuminated by a strobe on the opposite side.

Additional Strobe Units
Different applications require different special lighting. Additional strobe options expand the possible uses of your SUPERHANDYScan 4100, e.g. UV strobes for viewing UV fluorescent materials or reflective strobes to view lacquer or coatings.

Two-Camera System
With an optional second camera, the SUPER HANDYScan 4100 becomes an even more effective tool for inspecting front, back and front-to-back print in a variety of ways. Both camera images can be displayed on the screen in an alternating or simultaneous way (split screen mode).

Additional Monitors
At many printing presses, the operating personnel have to move frequently between work areas during the course of the day. The system expansion to include an additional monitor minimises these reasons to alternate.
SUPER HANDYSCAN 4100
AT A GLANCE

Technical Data

| Camera | • Type: 1 Chip digital
• Resolution: 1,280 x 1,024
• Field of view: 125 mm x 95 mm (5" x 4")
• Optional: 225 mm x 169 mm (9" x 7")
• Lens: 10:1 (for field of view 125 mm x 95 mm)
14:1 (for field of view 225 mm x 169 mm) |
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<tbody>
<tr>
<td>Power supply</td>
<td>100 V to 240 V, 50/60 Hz, 400 VA</td>
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| Ambient temperature | min. 0 °C (32 °F)
max. 40 °C (104 °F)
Humidity: 20% to 80%, non-condensing |
| Storage temperature | -10 °C to +55 °C (14 °F to 131 °F)
Monitor: see separate technical details |
| Web width | max. 2,500 mm |
| Standard features | • Position memory for 16 positions and gallery function
• Scan function (based on positions, complete repeat and combined)
• Multi-function split screen
• Electronic 180° image rotation
• Pincushion compensation (avoidance of pincushion or barrel distortion)
• 180° image rotation for matching to the web running direction
• Quick Zoom function with storage options
• Including remote maintenance via internet |
| System options Hardware | • Second camera
• Second monitor (touch screen with full operating functionality or for web monitoring)
• Back strobe
• UV strobe, lacquer strobe
• 90° camera rotation (for use in label production) |
| System options Software | • Extension of programmable positions to 28
• Color Monitoring (software for color comparison)
• Smart Register
• USB image export |

Local contact person