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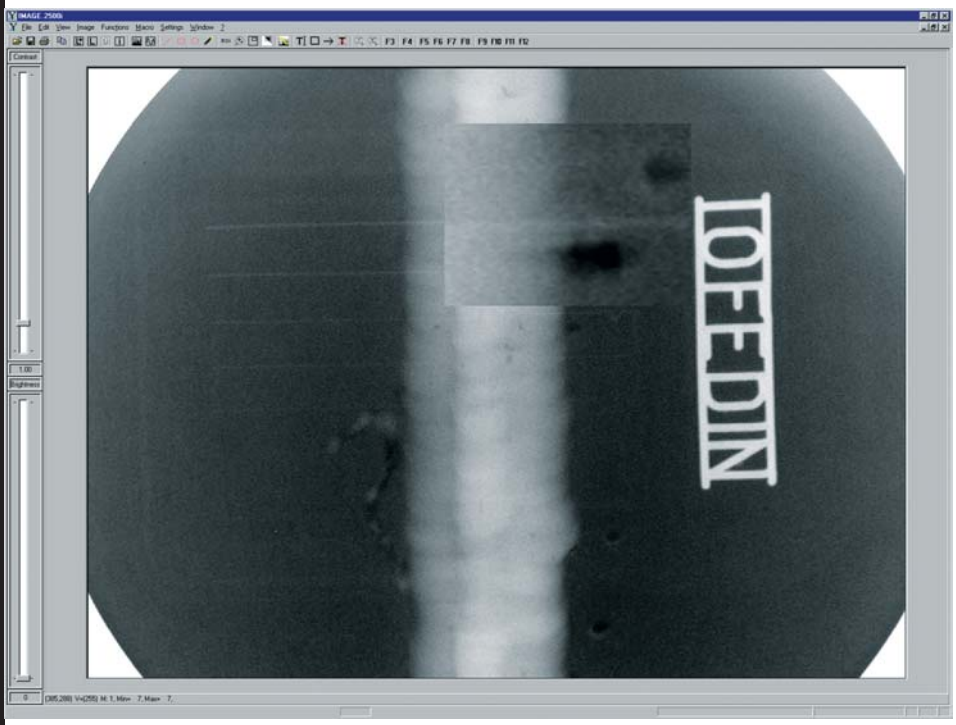
Technical Data

Y.IM/2500i

YXLON.IMAGE/2500i
Image Enhancement and Storage System



Moveable magnifying glass for quick detail information

YXLON.IMAGE/2500i is tailored especially for the demands of radioscopic images generated by Image Intensifiers with standard video signal (RS170 or CCIR). It comprises a wide range of image processing functions which can be easily applied to the entire image or a region of interest (ROI) only. Image enhancement can be comfortably performed via a Normalization and a set of predefined filters. All image processing steps can be makro recorded. Easy to use calibration and measurement tools offer further possibilities of evaluating the image. YXLON.IMAGE/2500i is suited for the shop floor as well as for inspection and development laboratories.

- Easy to use
- Noise reduction through integration
- Gray value scaling via mouse click
- Makro recording
- Quick detail information

Y.IM/2500i

YXLON. The reason why

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Display

- MDI (Multiple Document Interface) display, one for live image default
- Contrast and brightness spreading of the input signal to optimize the unprocessed image (Input-LUT)
- Contrast and brightness spreading of the output signal to optimize the image for individual operator requirements (Output-LUT)
- Inverted gray value image for negative display with one mouse click
- Full screen mode – just the image on the display in maximized size
- Zoom function with one mouse click
- YXLON Optimized Zoom Function with sub-pixel interpolation (YOZ) for smooth representation at high magnifications
- "Moveable magnifying glass"
- Gray value scaling with rectangle (i.e. by drawing a retangle with the mouse, the brightness of the image is optimized to the gray values in the rectangle)
- Local gray value scaling within an ROI

Image Processing Functions

- Noise reduction through integration (up to 2000 images; typical applications require approximate 15-200 images)
- Filtering functions including UNDO function (filter settings as well as filter kernels may be changed by the operator; four filters can be linked for direct access with keyboard Function keys)
- 25 predefined filters for all types of image processing
- "Shift and Sub" function for identification of small defects/porosities
- Arithmetic linking of two images including min/max values
- Image improvement by Normalization
- Threshold binarization

Measurement and Marking

- Length and area measurement
- Area measurement with magic wand
- Calibration for length and area measurement (unit free definable and selectable measures, floating point)
- Store and recall calibrations by names
- Graphic marking of error regions
- Text overlay (storage of last remark text for next use)

Other Tools

- Histogram (gray value distribution) for the complete image or an ROI
- Line profile (gray value profile along a line)
- Makro recording of most image processing functions with "Pause" function and "Key-clock"
- Four macros can be linked for direct access with keyboard Function keys
- Digitized image storage on hard disk or 3.5" disk as Tagged Image File Format (TIF) or Windows Bitmap (bmp); either Window title or last file name can be prompted

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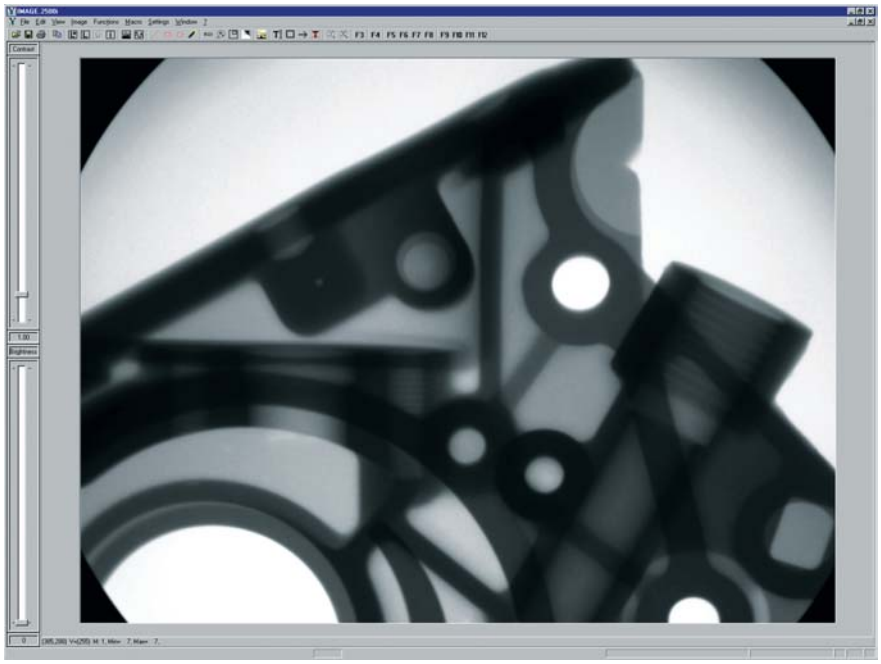

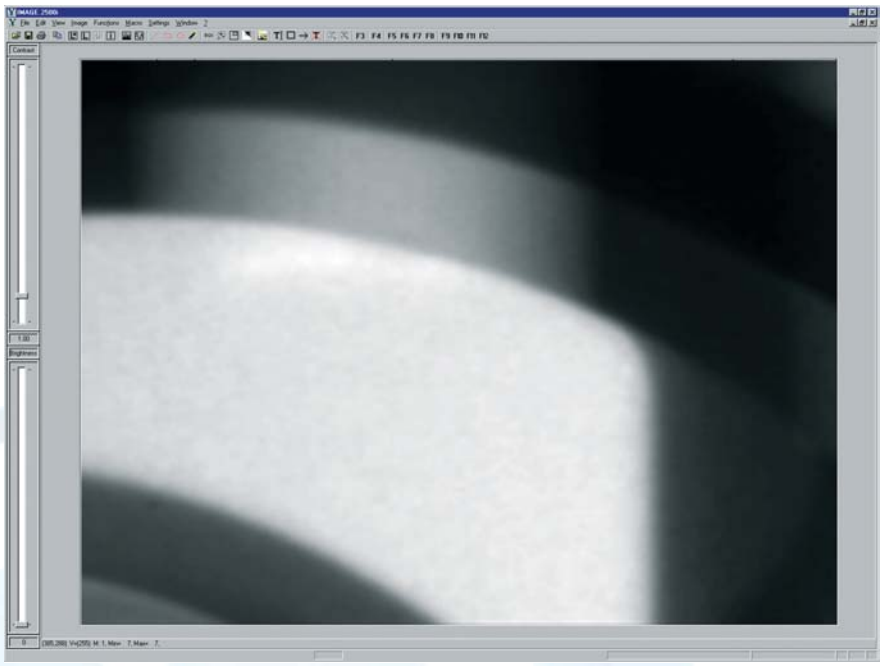

With the function “Detail“ or “YXLON Optimized Zoom“(YOZ), a special zoom mode is activated, ensuring a smooth representation of gray values even with high magnification factors. Additional pixels can be added in a “soft“ way between two existing pixels. This avoids the troublesome stairs and gives advantages to the following filter functions. However, with YOZ no new information will be “invented“, but existing information will be presented in a more comfortable way.

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- Export of radioscopic image (processed or unprocessed) to text processing software via clipboard
- Print of entire image or ROI with HP DeskJet or LaserJet printers; print-preview possible
- Region of Interest (ROI) function (Local operations: Filtering, Store, Print, Histogram, Normalization, Clipboard)
- Selection of language for all dialogs
- Control through YXLON NC-Controller possible
- Archive images on CD with separate program

Scope of delivery

IMAGE.2500i Standard PC-Kit

- Midi tower or rack-mount PC with
  - Intel Pentium® IV Processor, Memory ≥ 256MB
  - "High-Speed" Frame grabber for Standard analog Video Signal
  - Hard disk (HDD) ≥ 40GB
  - 3.5" Disk drive (1.44MB)
  - CD-RW drive with CD burning SW
  - EMV accessories
  - Mouse, Keyboard
  - Software package IMAGE.2500i
  - Windows® 2000 English edition
- User manual
- High resolution 17" (43cm) VGA Monitor, max. resolution 1280 x 1024, low radiation acc. TCO'98

Options

- "High-Speed" analog Modem including service software for the modem
- DISPLAY.T20 TFT display with 1600 x 1200 pixel and very high brightness (700cd/sqm)

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