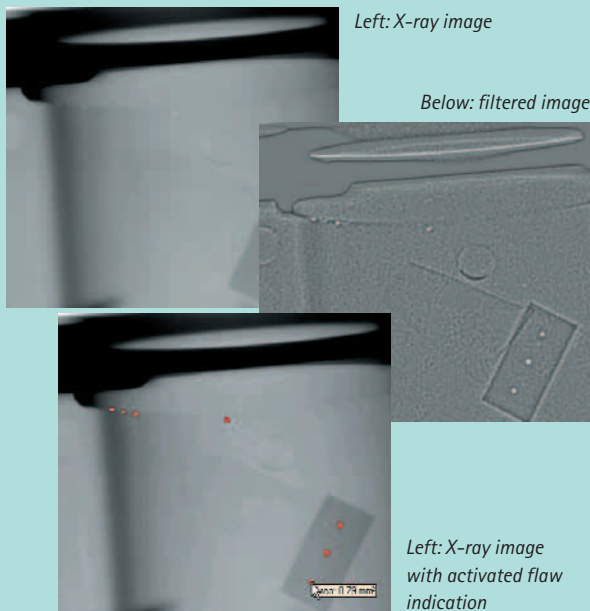


# Y.IMAGE 4500

## Image enhancement and analysis system with flaw indication



Y.IMAGE 4500, especially designed as a semi-automated application for the radioscopic inspection of castings and weld seams, supports the inspection detection of gas voids, cracks and porosities.

Inspection speed will be dramatically increased and simplified because the image generated by a special algorithm lets you identify potential flaws at first glance. With Y.IMAGE 4500, the time-consuming "teaching" of the system necessary for fully automatic defect recognition (ADR) no longer applies.

Inspection itself becomes more repeatable since the size of the potential flaws is indicated, and the decision does not depend solely on the operator's subjective impression. To recognize regular structures indicated as potential flaws, just toggle between the filtered image and the radioscopic image.

*YXLON. The reason why.*

- increase inspection speed by identifying potential flaws at first glance
- maximize accuracy by indicating all potential flaws
- inspections have greater repeatability because information is gained about the size of a flaw
- user friendly with a simple graphical user interface (GUI)

## Features

- Supports analog video signals in compliance with CCIR (50 Hz) or EIA (60 Hz).
- Large variety of parts. Information about the part, e.g. a reference image, is not necessary due to the algorithm used.
- Adjust minimum and maximum size of indicated objects to avoid regular structures like edges shown as "pseudos".
- Immediate information about approximate flaw size through "tip" given by software tool.
- Password-protected "Supervisor Level" for image processing settings and "Operator Level" for inspection process.
- Fast and convenient recall of settings per each inspection position. Just record the settings with the macro-recorder and recall them via function key.
- Operation without keyboard possible (optional). Control via YXLON numeric control for inspection process using operator control panel, e.g. with MU 2000 and PXV 2500.
- Store digitized images on hard disk or CD/DVD in different formats, such as Tagged Image File Format (TIFF) or Windows Bitmap (BMP), with configurable file name syntax to avoid mistakes in writing.
- Automatic documentation of inspection decision, e.g. by accepted / rejected statement on the image or in the file name. In addition, different directories can be selected to store the images according to the decision.
- Export of images, e.g. to text processing application, via clipboard for further documentation and correspondence.
- 8-bit filter; 25 predefined filters for all types of image processing; convenient filter designer.

## Display functions

- Noise reduction by integration (specification in frames or seconds), max. 300 seconds.
- Additional window for reference image with interlinked functions (all functions marked with \*R will operate in the reference image, too).
- Automatic scaling of live image to defined gray values during change of dose.
- "One mouse click" zoom function, movable magnifying glass and "YXLON optimized zoom" with subpixel interpolation for smooth representation at high magnifications (\*R).

## Measurement functions

- Calibration for length and area measurement (unit freely definable and selectable measurements; floating point).
- Length and area measurement.
- "One mouse click" area measurement using magic wand.

## Scope of delivery

### Y.IMAGE 4500 high-speed PC kit

- Midi tower or rack-mounted PC with
  - Intel® Pentium® 4 CPU  $\geq$  3.4 GHz
  - Memory  $\geq$  1024 MB
  - High-speed frame grabber for standard analog video signal
  - Hard disk (HDD)  $\geq$  160 GB
  - 3.5 " disk drive (1.44 MB)
  - EMC accessories
  - DVD writer with burning software
  - Mouse, keyboard
  - Y.IMAGE 4500 software package
  - Windows® XP, English edition
- User manual

## Options

- High-speed analog modem including modem service software
- Y.DISPLAY T20: TFT display with 1600 x 1200 pixel and very high brightness (700 cd/sqm)
- Y.DISPLAY T17-D: 17" (43 cm) TFT monitor, max. resolution 1280 x 1024, low radiation acc. to TCO'98 or better

