**VisioRead
vision system, which reads the small print.**

VisioRead is a flexible and effective vision inspection system for the verification of variable and fixed print, code reading and assembly verification. VisioRead automatically inspects products fast and reliably.

VisioRead text characteristics
- Automatic detection of
  - incorrect print
  - missing print
  - incomplete print
  - illegible print
  - smeared print
- Detects when parts of characters are missing.
- Unrestricted formats and character sets.
- Works reliably with large tolerances in print position.
- Verifies text from alpha-numeric entry by operator or control system.
- Simple display of symbols on monitor for inspection results,
  green = ok, red = error.

VisioRead has many applications.
VisioRead has been designed to solve a number inspection tasks mostly in connection with variable printing of products. The applications are often found in packaging lines where every print is critical and where the product identity, quality and assembly must be verified for every product.
- Continuous inspection ensures automatic rejection of misprints and/or stops process.
- Typical variable prints:
  - Expiry date.
  - Production date.
  - Batch number.
  - Serial number.
  - Logo.
- Typical products and/or their packing
  - Drugs and dietary supplements.
  - Foods.
  - Chemicals.
  - Numbered documents.
  - Other products.

Inspection safety.
- 21 CFR Part 11 Compliant.
- User management, password and signature system. and audit trail.
- Inspects against alpha-numeric input, the system makes no assumptions.
- Detection of consecutive errors on multiple levels.
- Quality control through complete inspection.
- MES integration possibility.

System components.
A typical VisioRead system consists of the following items:
- VisioRead vision computer.
- CCD camera(s) with optics.
- TFT touch-screen monitor.
- Illumination components.
- Interconnecting cables.
- Documentation.

VisioRead is easy to integrate.
VisioRead is a vision system, which easily can adopt to different configurations.
- It can work as a stand-alone inspection system.
- It can be integrated with existing PC / PLC control systems.
- It can interface via network with a host-computer system.
- It can be remote controlled via network with a host-computer system.

VisioRead is user friendly.

All adjustments of VisioRead are easily made using the touch-screen menu system. In combination with the user management features this ensures that exactly the right amount of information is presented to the right person.

- Configurable menu system. Simple menus for the every day user, complete system menus for technician.
- Easy and efficient operation with touch-screen controlled interactive video/graphics/menu-interface.

VisioRead is fast!

Inspection speed depends on complexity of the actual task.

- Typical performance better than 1000 prints per minute.
- Speed depends on several factors, among these are:
  - Number of characters per print.
  - Size of inspection field and characters.
  - Used character set.
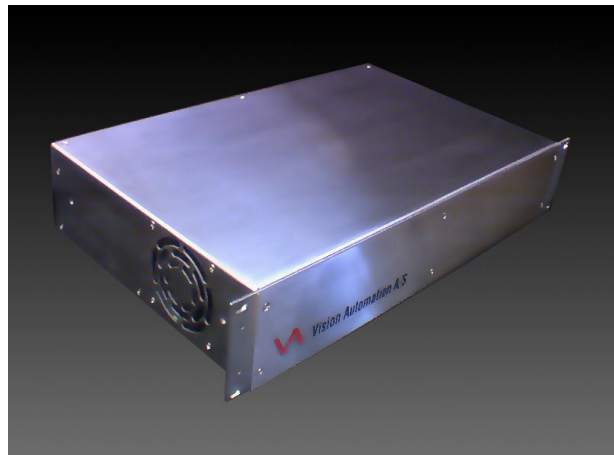- VisioRead informs about its own speed.

VisioRead is comprehensive.

- Several fonts can be used simultaneously, unrestricted font-definition.
- Unrestricted definition of logo inspection.
- Rotation of print with respect to camera allowed.
- Comprehensive production statistics.
- Real-time clock including date.
- Audit trail - Protocol of all settings and all produced measuring results (used for validation purposes).
- Diagnostic functions:
  - Display of inspection results.
  - Display of inspection speed.
  - Display of latest failed inspection
  - Run-time display of reject reason.

Advantages.

Among your advantages gained installing a VisioRead vision system are:

- 100% product inspection.
- Rise in product quality and productivity.
- Production statistics.
- Reduction in product handling and sorting, thus reducing costs.
- Minimal operator training time.

Technical data.

- VisioRead uses up to 6 high-resolution shuttered CCD cameras.

- Image resolutions from 650 x 490 pixels to 1300 x 1024 pixels standard

- Up to 1000 products per minute.

- Fully 21 CFR Part 11 compliant. Including user management and audit trail.

- Interactive TFT touch-screen interface.

- Network connection
  - PLC,PC
  - Audit trail

- Configurable Opto inputs (8) and outputs (24)
  - Trigger inputs.
  - Data-valid synchronization signals.
  - Result signals, system ready etc.

- Text verification 4 or more lines of variable text.
  - 32 characters per line

- 2-D code reading.

- Item number reading / Pharma code reading

- Assembly verification
  - Checkpoint finding.
  - Dimensional measures.