



VISION DEVICE

VISION DEVICE is an industrial company that designs, manufactures, installs and supports systems, dedicated to the **Quality Control** and to the **Flexible Industrial Automation**. These are systems of high technological content and use the technologies of **artificial vision**, **robotics** and **data capture**.

VISION DEVICE was founded in 1988 from the application experience of the founding members. **Since 1982 they have been working in the realization of industrial applications with the use of artificial vision.**

In the realization of systems for Quality Control and for flexible automation, *VISION DEVICE* usually provides **complete machinery "turnkey"**, starting from the study of the problem up to the system installation, complete with **in-house expertise** for all the phases of application, *electrical, mechanical, software and plant design*.

With the direct realization of their own systems, with a full control over the application know-how and software development, *VISION DEVICE* may guarantee a complete assistance in order to achieve the maximum flexibility for the current solution and for a future extension, in line with the technological development and based on customer needs.

VISION DEVICE works in all phases of their work and in every part of its organization with the aim of offering the highest quality in their work, to improve human resources and the relationship with the Customer. Its quality system complies with the standards **ISO-9001 since 2000**.



MINISTERO DELL'ISTRUZIONE
DELL'UNIVERSITA' E RICERCA

VISION DEVICE is a company accredited by the Ministry of Universities and Scientific and Technological Research as a "**research laboratory highly qualified**", admitted in a specific register and authorized in accordance with article 4 of Law 46/82 (Funds on Applied Research), for research and technological transfer activities.



MACHINE VISION FOR INDUSTRY AUTOMATION

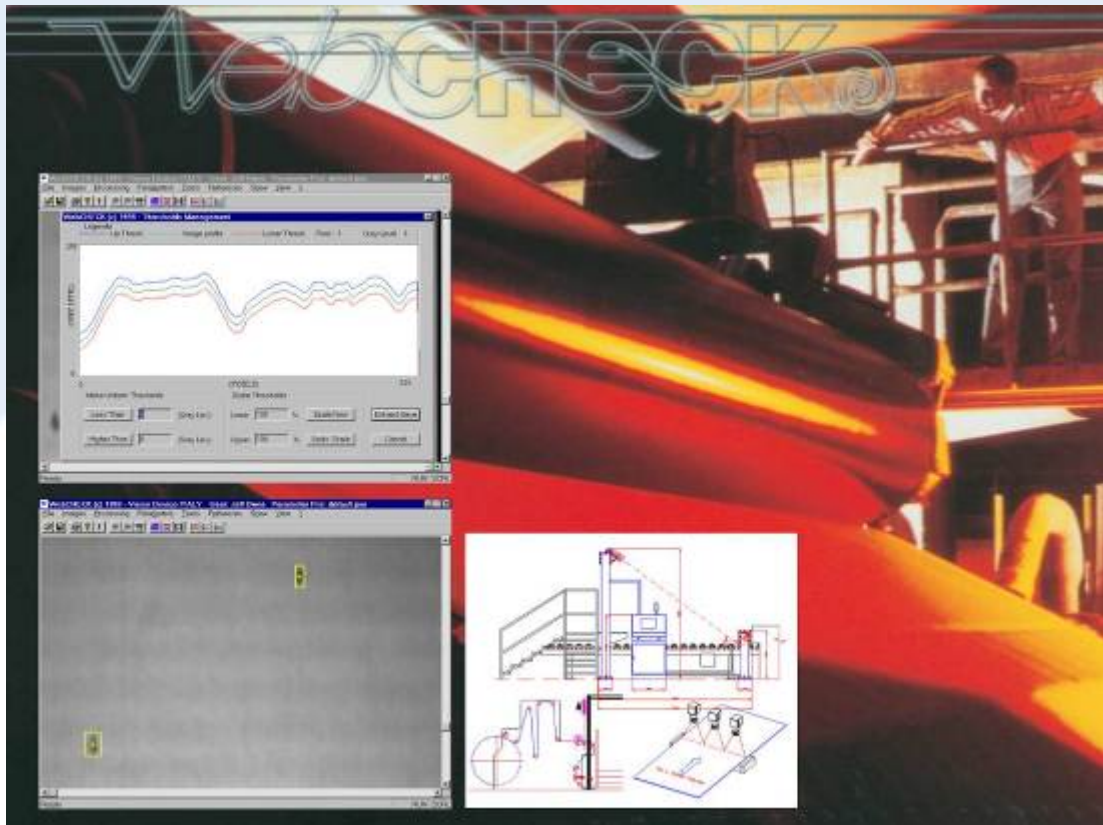
Machine Vision is a technology that allows you to automatically simulate the visual behavior of a human operator in order to perform actions not otherwise possible with a system of traditional industrial automation.

It is realized using a series of mechanical and electro-optical devices (cameras, optical systems, lighting systems, computers, data acquisition and processing etc..) to achieve generally the following phases:

- **Generation of information:** through the use of electromechanical automatic systems of handling, appropriate lighting, appropriate use of optical devices and anything else necessary to physically characterize in a visual way the control to be performed.
- **Acquisition of images:** the transfer of graphic information highlighted on the object with a series of digitized points (up to several million) that represent the brightness in the different areas of the object and of the background.
- **Image processing:** extraction of features affecting the control, through phases of exaltation of images and quantitative evaluation of the features themselves.



- **Automatic interpretation of results** through a series of criteria of selection and control (or tolerance thresholds), till the realization of a univocal result. Just this interpretation phase and automatic decision characterizes the artificial vision, unlike the classical image processing (e.g. used in medical applications or research) in which the decision is always delegated to a human expert in front of the monitor.
- **Action as a consequence of the result**, such as the standard deviation or declassification of the part examined, or the help of a robot connected to the vision system.



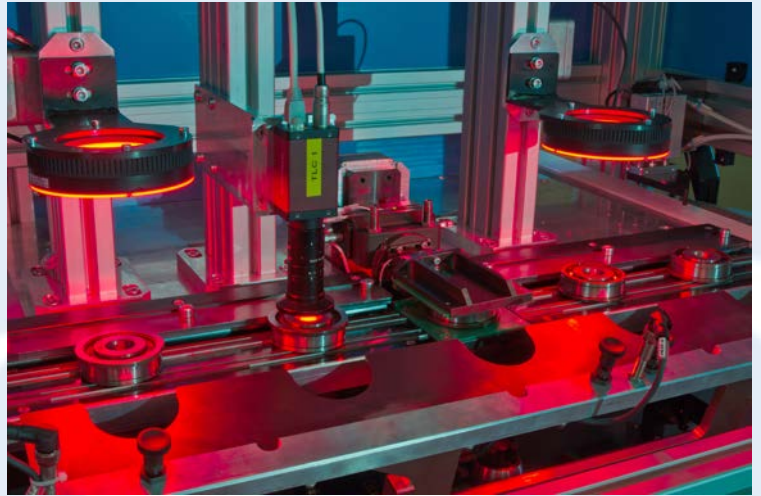
Typical applications of this technology in an industrial environment can be:

- Qualitative cosmetic inspection of pieces, components or assemblies;
- Dimensional control of geometry and form;
- Inspection to verify the correct productions or assemblies occurred;
- Identification of codes or direct of pieces;
- Guide for the implementation of automatic productions;
- Automatic control in feedback of the operation of processing equipment.

WE GREW UP WITH THEIR CONFIDENCE:

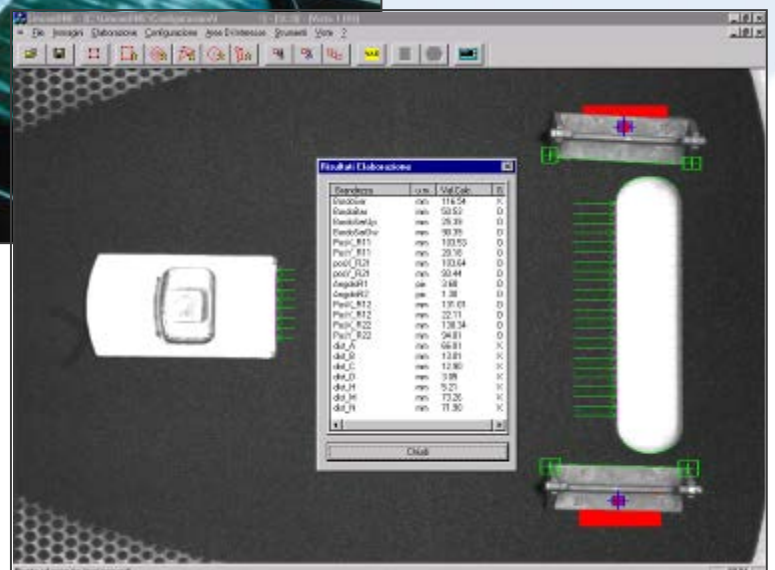
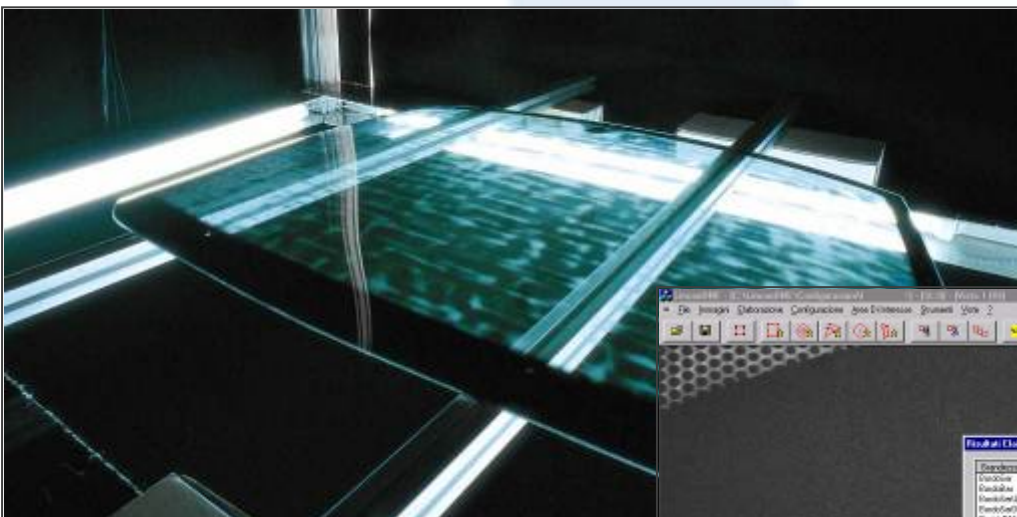
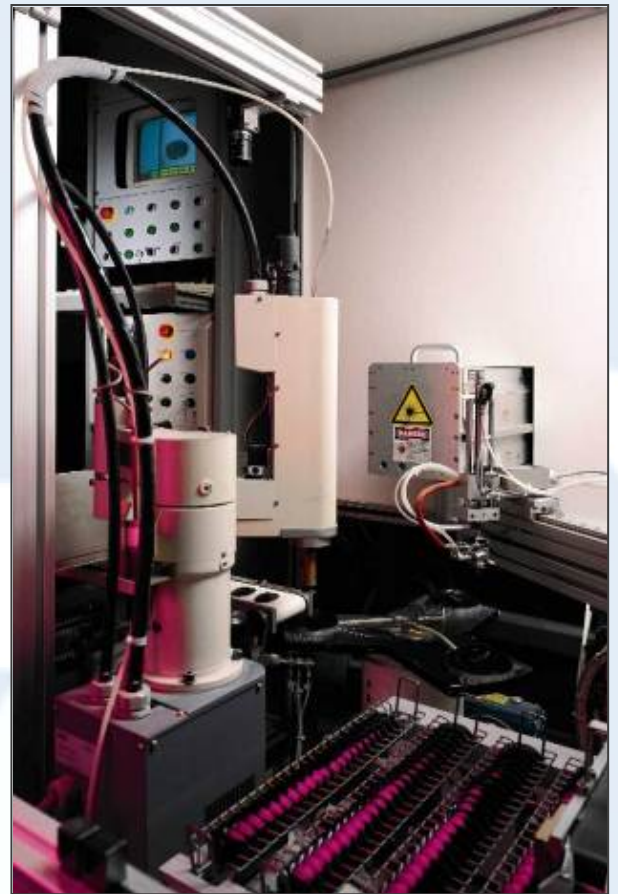
AUTOMOTIVE SECTOR

- ADLER-EVO
- BOSCH
- BROVEDANI
- DAYCO
- DENSO
- DUCATI Racing team
- FERRARI Racing team
- FIAT AVIO
- GIRSUD
- HONDA ITALIA
- HONEYWELL - GARRETT
- MAGNETI MARELLI
- PIERBURG
- RAICAM
- RFT
- SAPA
- SIEMENS
- SKF
- VECA



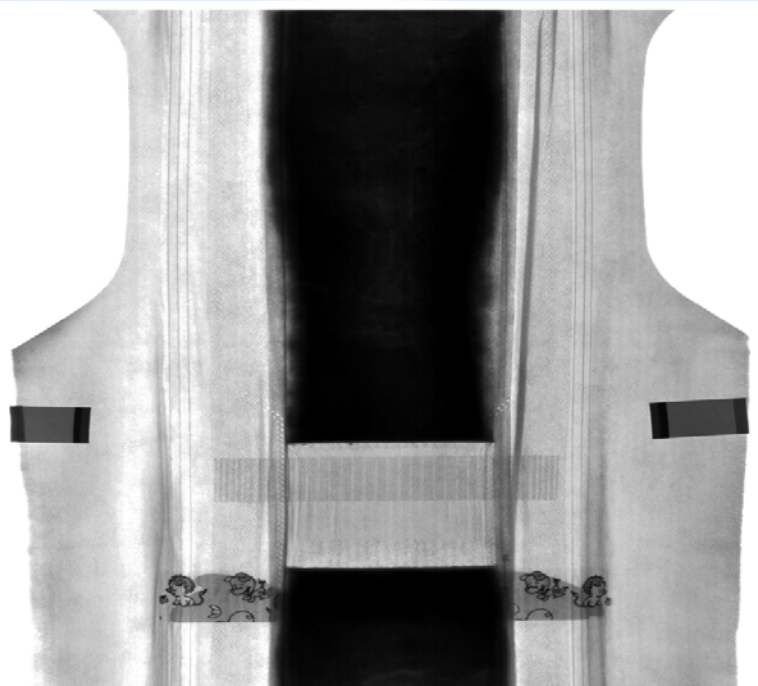
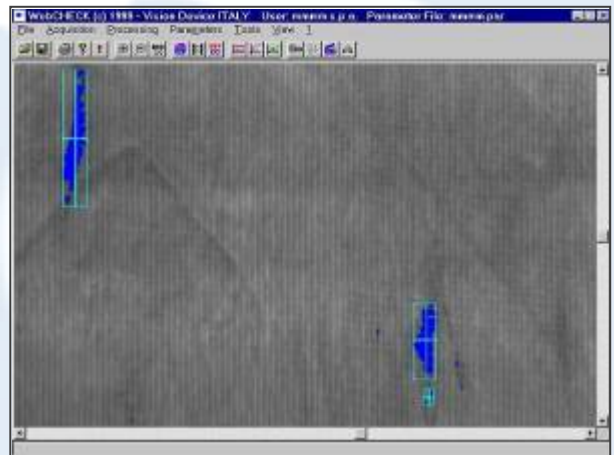
GLASS and OPTICS Industry

- BARBERINI
- GLAVERBEL - ASAI
- ILMET
- LUXOTTICA Group
- OVM Srl (Novellini Group)
- PILKINGTON
- PILKINGTON Automotive BRASIL
- PILKINGTON Automotive POLAND
- PILKINGTON Automotive Division Ltd



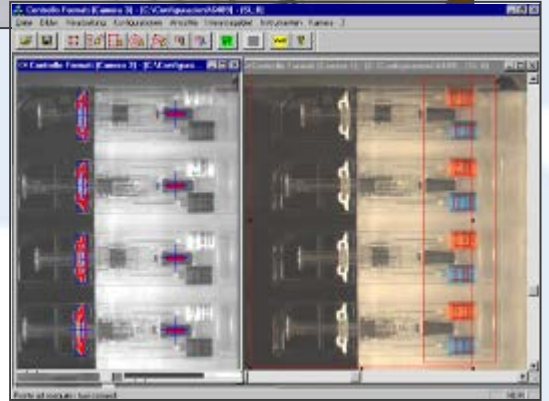
PAPER, PLASTIC FILM and NONWOVEN Industry

- AKERLUND & RAUSING
- CARTIERE MILIANI FABRIANO
- COLLITEX
- CORAPACK
- DUNA CORRADINI
- FEDRIGONI
- FILMET
- KORMA
- PERINI
- PERINI BRASIL
- PLASTIK
- PROMEA
- SPERIAN PROTECTION
- TENOTEX - FIBERWEB
- TEXOL
- TRIAPEX Co - South Korea
- TUMBA BRUK - Sweden
- VE.GE - Turkey
- BICMA - Germany
- C.C.S.
- DELTA
- DIATEC
- EUROFIL
- FAMECCANICA
- FAS
- FATER
- GFA
- ONTEX
- PARMON
- FUTURA
- FINE Hygienic
- KOROZO – Turkey
- ELIF - Turkey



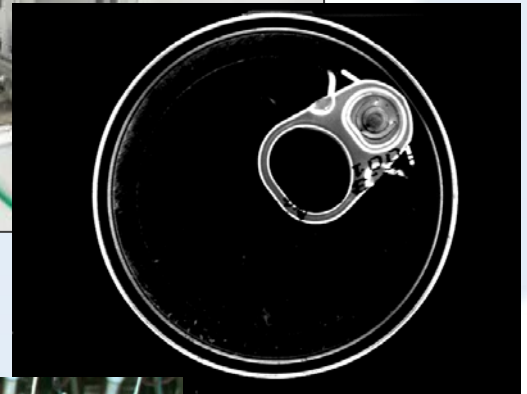
PHARMACEUTICAL Industry

- CHIRON
- GLAXO
- MALLINCKRODT DAR
- NYCOMED
- NOVARTIS
- PENTAFERTE
- PROCTER & GAMBLE
- SERONO
- UCB



FOOD INDUSTRY

- ARIANNA
- DE CECCO
- DI CARLO
- LA DORIA
- PELBO
- POMAGRO
- RIAS
- RUMMO
- SIMETEK
- LAZZARONI



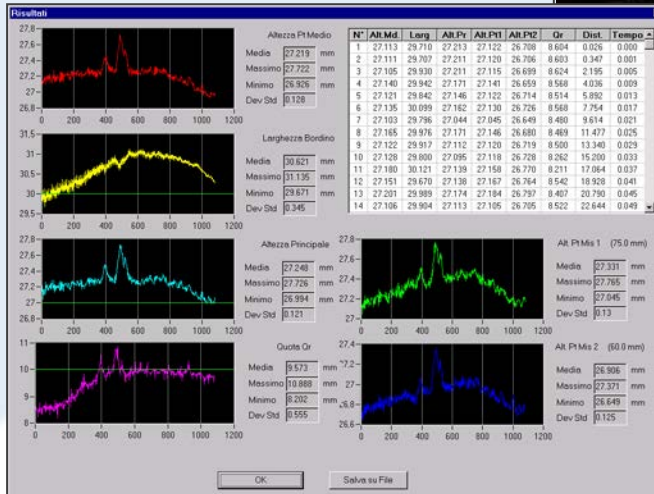
RESEARCH (directly commissioned)

- **TRAIN CONSORTIUM**

Consortium between FS, ENEA, ANSALDO, UNIONTRASPORTI and other Research Consortium for the development of innovative applications in the transport sector

- **ENEA**

National Research Agency



- **Tenuta del Monsignore**

Farm, viticulture

- **CRAM**

Consortium for Agricultural Research in the south, citrus farming



IRON and STEEL INDUSTRY

- ACCIAIERIE BERTOLI SAFAU
- ACCIAIERIE VENETE
- COGNE ACCIAI SPECIALI
- SGL CARBON Germany
- OCMA



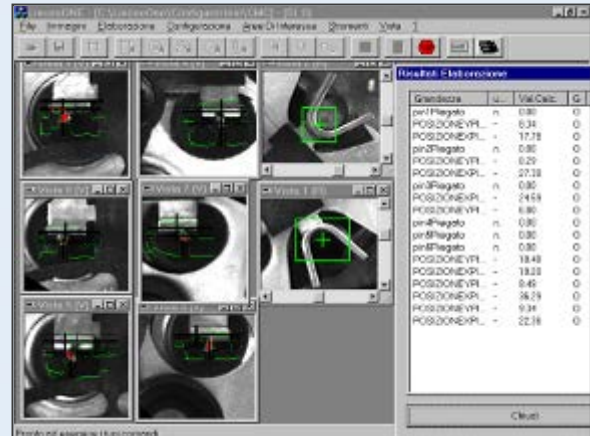
ENERGY

- AGIP SONATRAC
- BAKER OIL TOOLS
- COMER INDUSTRIES
- HALLIBURTON
- PRYSMIAN
- SOLAR DAY
- SUPSI - Switzerland



Other manufacturing sectors

- **COSMO**
Wood carving
- **ELETTROLITICA DEL BASSO NERA**
Carbon graphite manufacturing
- **FABER**
Production of components for household electrical appliances
- **FANTI**
Production of printed metal cans
- **GUERRINI**
Production of metal minutia
- **I.M.T. CISA**
Production of keys and security locks
- **LOESCHER Editore**
Publishing house
- **LUCCHESI TECHNOLOGY**
Production of plastic components for automotive sector
- **OSRAM**
Production of electronic components
- **PIRELLI Cavi**
Production of cables and signals for the energy sector
- **SILCA**
Production of keys and security locks
- **SAES Getters**
Production of electronic components
- **SAR - EMSAS**
Production of vaporizer micro-pumps
- **TEXAS INSTRUMENTS**
Production of electronic components
- **VIDEOCOLOR**
Production of television cathode-ray tube
- **ZANETTIN**
Working of marble pieces
- **WTS**
Production of tanks



MACHINES MANUFACTURERS

- **ACF**
Company of industrial automation
- **AEA**
Company of industrial automation
- **ARCOTRONIC**
Machines manufacturer, electronic sector
- **ASATEC-TECNOMATIC**
Company of industrial automation, mechanical sector
- **ASH**
Company of industrial automation
- **BONARDI**
Company of industrial automation, converting sector
- **CICRESPI**
Machines, control systems and identification
- **COMEC**
Machines manufactured, converting industry
- **CMS**
Company of industrial automation
- **FAE**
Systems of measurement and control
- **FARCON - MARCHESINI**
Company of industrial automation, pharmaceutical sector



WE INSTALL AND GIVE ASSISTANCE ON MACHINE ALL AROUND THE WORLD

