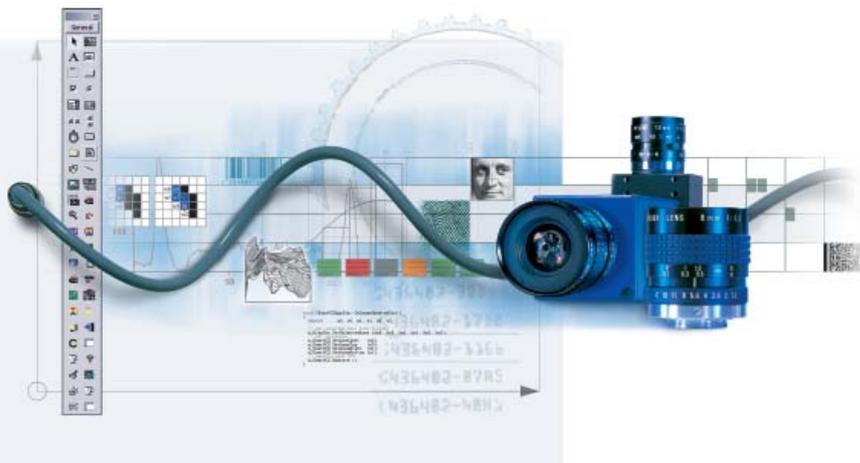




THE MACHINE VISION OPERATING SYSTEM

PROGRAMMING LIBRARIES FOR  
IMAGING PROFESSIONALS



**STEMMER**<sup>®</sup>  
IMAGING



Smarter Quicker More Robust Invaluable

*At the heart of many industrial systems you will find a machine vision system working tirelessly to ensure 100% accuracy 100% of the time.*

*Common Vision Blox powers around 20,000 industrial and scientific installations worldwide in a huge variety of different applications.*

## WHAT IS COMMON VISION BLOX?



**Common Vision Blox is a machine vision library:** Here at STEMMER IMAGING, we call it 'THE Machine Vision Operating System' and that's pretty much what it is. With other machine vision software suites, you are tied-in to a proprietary system. You have to use the tools that are provided and that's it!

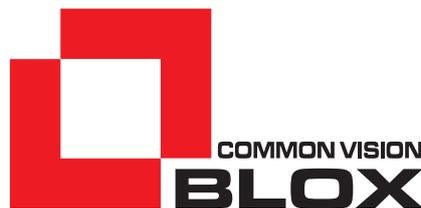
**The Best Tools For The Job:** With Common Vision Blox you can use the comprehensive set of available tools, you are free to use third

party tools or even write your own in a wide variety of different programming languages. Common Vision Blox is all about the freedom to develop your application your way.

**Hardware Independence:** Common Vision Blox is also hardware independent, which means that you are free to use a huge range of cameras, frame grabbers, interfaces and systems, so you will never be tied to a particular manufacturer.

*At its core, Common Vision Blox is all about letting you get on with the important business - creating your application.*

More possibilities



Analog



GEN<i>i</i>CAM



FireWire

## THE FREEDOM TO CHOOSE



*Common Vision Blox can work with just about any machine vision hardware, so it is easy to change tracks if the application does - without re-writing a line of code!*

Any Camera Any Frame Grabber Any Interface Any Protocol

Freedom to choose, that's what Common Vision Blox gives you. Built on top of this simple idea STEMMER IMAGING delivers the world's leading machine vision software package.

**Hardware Independence:** Common Vision Blox can be used with the world's leading product manufacturers, from cameras to frame grabbers, and supports all the new interfacing protocols such as Gigabit Ethernet, IEEE-1394, USB and CameraLink™.

**Language Independence:** Common Vision Blox can be used with a wide variety of programming languages such as Microsoft Visual Basic, Microsoft .NET, Microsoft Visual C++, Borland Delphi, Borland Delphi .NET, and Borland C++

**Code Independence:** Common Vision Blox is an open environment, and users can use their own compiled code alongside existing tools that form part of the package.

**Image Independence:** Applications created with Common Vision Blox can acquire images from almost any source! As well as using almost any camera and frame grabber, images can be accessed directly in memory, allowing the user complete freedom to use any image source they choose!

When we say Common Vision Blox is independent, we mean just that!

*Common Vision Blox is designed to work with you, not against you. When other software gives up, CVB just keeps going, giving you the service you deserve.*

## SPEED & RELIABILITY



Common Vision Blox has been designed with performance in mind to keep pace with the fastest applications. Thankfully, this does not mean that the accuracy suffers one bit!

**Each Frame, Every Frame!** CVB captures every frame, unlike some other software packages. When they begin to drop frames as the speed of your application increases, CVB keeps capturing every single frame, so you don't miss a single pixel!

**Multi-threading, Multi-processors!** CVB is designed to work with the latest PC technology, like multi-threading, so different bits

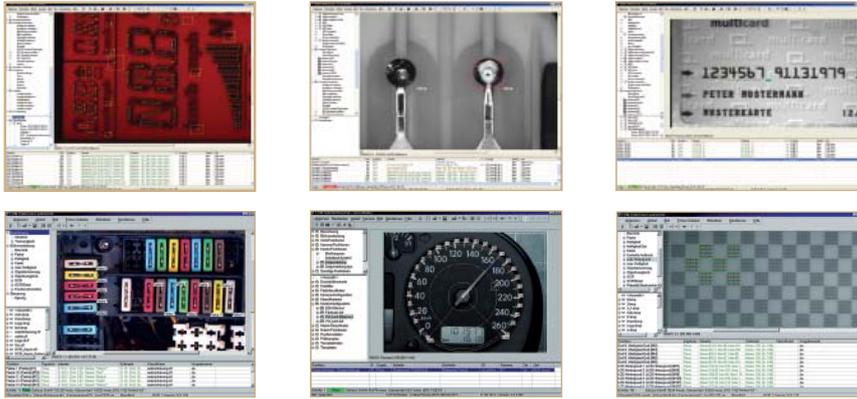
of code can execute simultaneously, utilising all the available processing power. CVB is also designed to work with the latest generation of multi-core and multi-processor machines, so that when you specify that new powerful PC, you can be sure that CVB will use it to full advantage!

**Multiple-cameras, Multiple-interfaces!** CVB can handle just about anything you can throw at it. With CVB it is possible to display live images from multiple cameras using a combination of interfaces including GigE, IEEE-1394 A & B, USB and CameraLink™ simultaneously! That's what we call an industrial product!

Image courtesy of VMT Vision Machine Technic Bildverarbeitungssysteme GmbH - a company of the Pepperl + Fuchs group



# WHAT'S INSIDE COMMON VISION BLOX?



Images courtesy of GÖPEL Electronic GmbH

*With Common Vision Blox, you get the tools you need, when you need them.*

Common Vision Blox is probably the most flexible machine vision software package available.

**Your Choice:** At the heart of CVB is the Image Manager, which can be purchased separately if required. This handles the display functionality which all the other elements connect to.

**Foundation Package:** Most users will choose to begin with the Foundation Package. This includes the Image Manager plus a set of tools and algorithms that allow the user to create a huge range of machine vision applications. Foundation Package includes tools for statistical analysis of images, blob and segmentation searches, edge detection, image arithmetic and logic functions, image

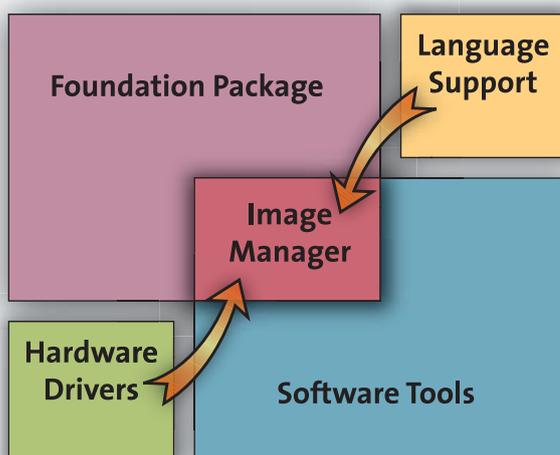
binarization and thresholding, image filters, 2D calibration, colour space conversion and more! Also included is iTuition, a rapid application prototyping tool.

**Premium Tools:** Also available separately is a large array of high-level software tools for users who need the ultimate flexibility and power. Among these are 5 special tools for object recognition, such as Minos and ShapeFinder - two high performance search tools and Manto, a support vector machines based search tool.

**Buy Only The Tools You Need:** The unique way Common Vision Blox can be purchased means that it is possible to buy only the tools you will actually use, unlike most other software packages.

The right tool for the job, every time

## THE STRUCTURE OF COMMON VISION BLOX



*The power and flexibility of Common Vision Blox lies in its structure. With the Image Manager at the core, and its unrivalled hardware and language independence, this is the ultimate machine vision tool for all your needs.*

# THE POWER BEHIND COMMON VISION BLOX



Common Vision Blox is a STEMMER IMAGING product and benefits from the huge store of knowledge gained over many years of hands-on experience with real-world vision tasks. It is continually being tested and updated with the most up-to-date equipment, whether that is a new camera, frame grabber or new technology such as Gigabit Ethernet

**A Practical Solution:** Common Vision Blox has been created from the start to be a practical, problem solving software package. Other machine vision software had their origins in the scientific community, making them more theoretical than industrial. Common Vision Blox is written and supported by people who work in the machine vision industry and know the problems faced by users who need software to work.

**A Safe Solution:** Common Vision Blox offers functions to protect your application and intellectual property. Using the same protection functionality as Common Vision Blox itself, you can protect your own software

**Support and Service:** When you purchase Common Vision Blox, you get life long support. Whichever version you started with, you need never worry that you will only be able to get answers for a limited period. Experienced engineers will always be on-hand to assist you and get you up and running fast! A worldwide network of distributors offers you local service and support.

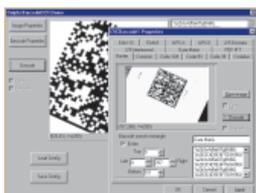
## The Common Vision Blox Advantage:

- Free downloads
- Free lifetime support
- Free software upgrades
- Free evaluation software

Plus hundreds of application examples and program 'recipes' to help get you started.

**STEMMER**<sup>®</sup>  
IMAGING

## WIDE RANGE OF APPLICATION AREAS:



Packaging



Gauging



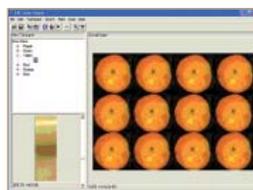
DVR & Image Sequence Recording



Security Applications



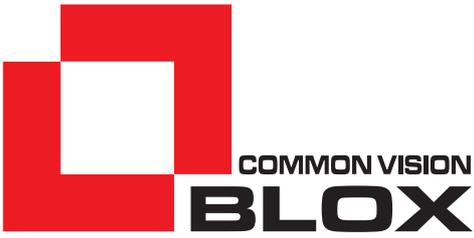
Traffic Applications



Food & Organic Inspection

*Common Vision Blox can provide solutions for a huge range of different application areas. More than anything else, this broad spectrum of applications shows the power of Common Vision Blox.*

*Get inspired by many more application examples and order your personal 'Inspiration' disk!*



## THE MACHINE VISION OPERATING SYSTEM

**DOWNLOAD YOUR FULL PERSONAL 14 DAY VERSION TODAY**  
**WWW.COMMONVISIONBLOX.COM**

Your local Common Vision Blox distributor

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