

SCORPION VISION SOFTWARE®

3D ROBOT VISION

The Scorpion Vision Software® 3D Robot Vision system is ideal for volume measurement and Robot Vision in three dimensions.

When measuring volume you get a 3D image in x,y and z-coordinates of your item as result.

Combine the system with a robot, and the robot can see! You can now pick products from a pallet in three dimensions.

LASER SCANNER

The Cargoscan laser scanner is a complete dimensioning instrument; no other equipment is required.

The size of the measuring plane, can be set to match the installation background.

Self explanatory setup, calibration and sizing the field of view is done from the PC web browser through the embedded web server.

The laser scanner is ideally suited to statically measure dimensions of a wide variety of items.

Easy to operate

The laser scanner is controlled through commands from Scorpion Vision Software®.

Overhead dimensioning

Unrestricted movement of items under the laser scanner and no item positioning required. This increases handling speeds significantly.

Even surface

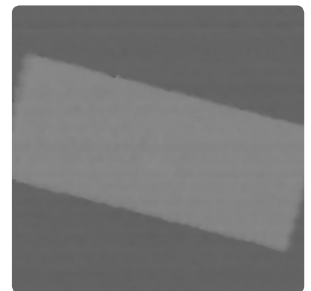
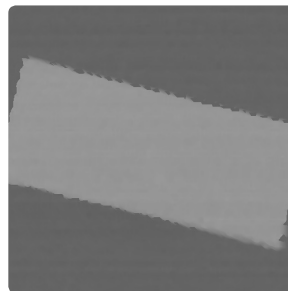
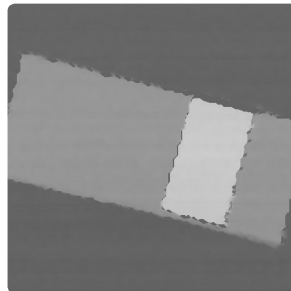
Roller tables, flat tables and existing scales can be used as the measuring background.

Well proven technology

The technology is based on approved laser rangefinder technology. Hundred of thousands of measurement points assures the reliability of every measurement.

EQUIPMENT

Personal Computer
Scorpion Vision Software®
Laser scanner - Cargoscan CNS810



3D images of a stable of wood pieces. The grey scale intensity reflects the height of the stable, and is used to segment the pieces. The topmost piece (lightest) is seen to the left.



Laser scanner - Cargoscan CNS810
Cargoscan is a METTLER TOLEDO company.

NO EXTERNAL ILLUMINATION NEEDED

The laser scanner uses the laser lines to build up the 3D image. There is no need for an external light source.

SUPPORT FOR ABB, MOTOMAN AND REXROTH BOSCH ROBOTS

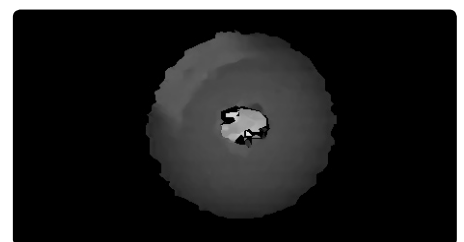
With Scorpion it is easy to implement reliable communication with robots from any vendor. Scorpion has been used with robots from ABB, Motoman and Rexroth Bosch.

CONFIGURABLE INTERFACE

Data Input and custom HTML pages make it fast and easy to implement application specific configuration tailored to each application.

FLEXIBILITY

Add a 2D camera to the solution and more vision tasks can be added.



Gas bottle and the corresponding 3D image used to locate the handle.



SCORPION
VISION SOFTWARE™

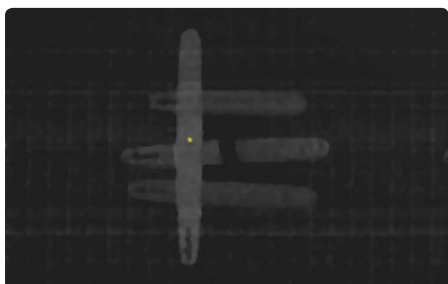
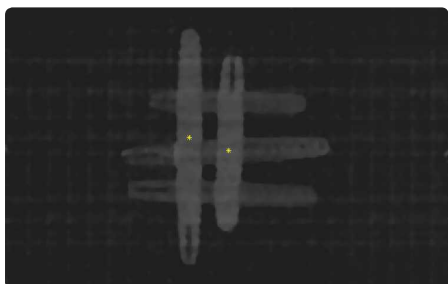
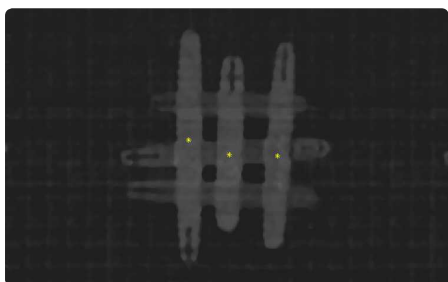
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TYPICAL APPLICATION

Below the system is used to pick chainsaw swords from a pallet. The robot always picks the uppermost sword.

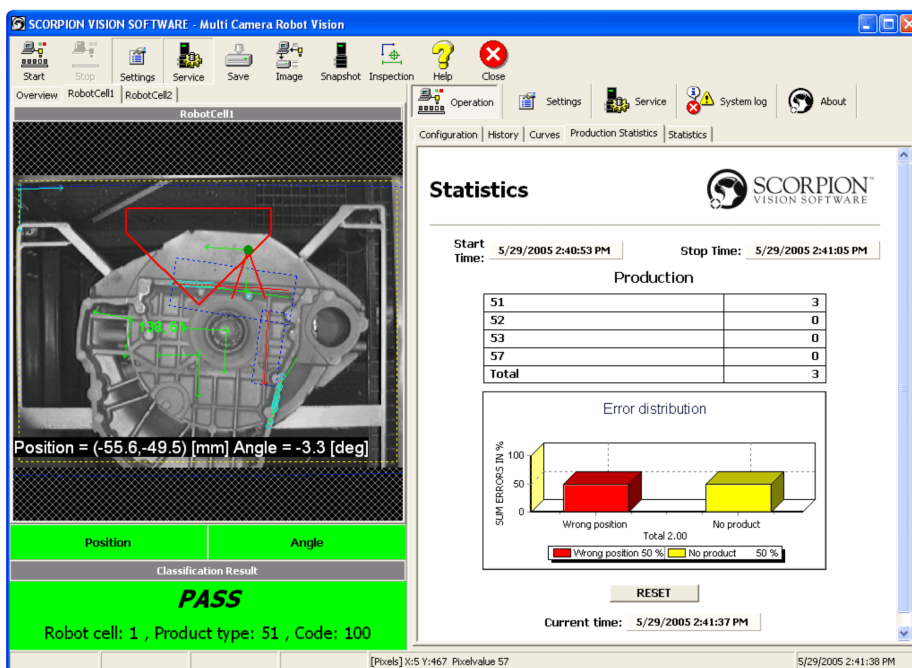
The pallet is of size 120 x 80 cm and the picking height is 60 cm.

The swords are 4 mm thick and approximately 60 cm long.



USER INTERFACE

Scorpion Vision Software® has a feature rich, functional and configurable man machine interface with image display, data input pages, web pages, .Net plugins, ActiveX containment, result panels, image history list, real time trends, logging, event log and quality alarms.



Scorpion Vision Software® robot vision application user interface

TECHNICAL DATA

Operating System

- Windows 2000 / Windows XP
- DirectX 8.1 or higher

Minimum Requirements

- Intel Pentium IV
- 512 MB of RAM
- 100 MB free hard drive space

Language Support

- English and Norwegian

Laser Scanner

- Measuring distance max 140 cm
- Measuring area: 120 x 80 cm
- Coverage 0.5 m³
- Resolution 2.0 mm in all dimensions
- Time to take image 3.5 s
- Simple mounting with 4 screws
- No accessible moving parts

For more information:

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For more information on the
Cargoscan laser scanner see
www.cargoscan.com

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Specifications might change without any notification.