



# Vision Control Systems

For continuous control of printing machines

Immediate  
operational control

Zoom function with  
enhanced resolution

Reduce  
programming time



# Operator's best friend ...

**Vision control systems** from RHEINTACHO Vision Systems are an operator's best friend when it comes to controlling print quality and reducing waste.

The **Newscan family** of vision control systems is ideal for controlling register marks, monitoring colors and locating defects at any press speed.

As a leader in web viewers, RHEINTACHO Vision Systems can boast a large installed base of reliable systems and satisfied customers, from narrow web label to wide web packaging printers.

Thanks to this experience the **Newscan 4000** provides high level ergonomics and focuses on key functionalities.

- ♦ The touch screen allows the operator to visualize the print while executing the numerous control functions.
- ♦ The user friendly interface allows the operator to concentrate on the print job itself.
- ♦ The max. zoom factor of 18x allows high precision registration.
- ♦ The optional pivoting arm allows the operator to visualize the screen from anywhere on the press.

The versatile Newscan 4000 series is available in a number of configurations:

- ♦ Newscan 4021 - manual version
- ♦ Newscan 4031 - motorized, entry level version
- ♦ Newscan 4041 - advanced functionality

All systems are available with a variety of options including

- ♦ UV coating inspection,
- ♦ „Hybrid“ UV inspection,
- ♦ recto-verso cameras and
- ♦ fully pivoting touch screen supports.

In addition to web viewers, RHEINTACHO sells a full range of portable and stationary stroboscopic systems.

## Camera casing

The camera casing is mounted on shock absorbers to attenuate vibrations and ensure longevity of components.

The connector for the camera connection cable is encased.

It is fixed on the side of the camera casing.



## Motorized camera (optional)

The motorized camera is driven along a tracking rail which incorporates gear teeth. In the narrow and medium web versions (<700 mm of camera track length), the motorized motion is facilitated by a belt system. On larger systems, the motorized camera runs directly along the toothed track via a stepped motor. This toothed track offers several advantages over pure belt-driven systems:

- ♦ Facilitates manual access to the camera box for maintenance purposes; assembly and disassembly of the camera casing is easier.
- ♦ Tooth rack is less subject to wear, does not break nor expand even on long camera track length.
- ♦ Track length adjustments can be done by simple cutting.

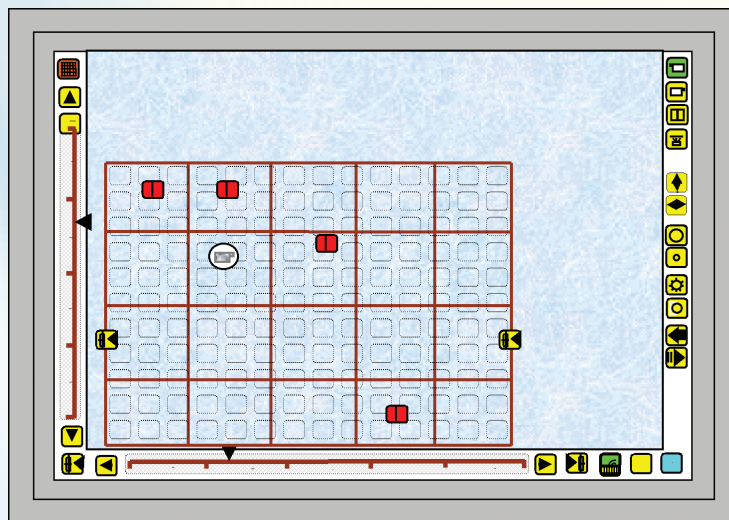
## NewsScan 4000 vision control systems users exploit 100 % of the machine's capacities.

### Nothing is easier to use than the vision control systems

- ♦ Two CONTROL RULERS, HORIZONTAL and VERTICAL, represent the number of steps according to print format
- ♦ One cursor pinpoints the position of the camera
- ♦ The CONTROL GRID depicts print format

#### Advantages:

- ♦ The machine operator immediately locates the position of the defects on the web
- ♦ Setting register marks positions and watching areas becomes child's play



#### Main functions settings:

- ♦ Synchronization
- ♦ Number of steps in X (width) and Y (repeat)
- ♦ Language choice
- ♦ Manual motion speed
- ♦ Direction of the arrows
- ♦ Direction of the rulers
- ♦ Scanning motion speed
- ♦ Images refresh rate

### Camera cable

A moulded flexible and shielded cable specifically designed for RHEINTACHO Vision Systems

- ♦ It unreels in a cable path. The U supports fixed on straps prevent alterations.
- ♦ The connectors for the connection cable are mounted vertically behind the electronic case. They are less fragile than those mounted horizontally.

### Touch screen control monitor

A touch screen control monitor mounted on a foot support and integrating :

- ♦ 17" LCD SCREEN
- ♦ Touch commands
- ♦ Horizontal and vertical numbered rulers corresponding to print repeats
- ♦ Intuitive visual icons
- ♦ A setting window superimposed over the video images
- ♦ Help button



## Memories

The Newscan 4000 touch screen control monitors are equipped with simple functions without complicated programming tools.

- ♦ **Position memories**
- ♦ **Image memories**
- ♦ **Memories for register marks**



## Synchronization

To get a fixed image on screen, a synchronization signal is required.

### ♦ Single sensor synchronization

A magnetic sensor is placed on a gear. Programming of the tooth number is required for each change of format.

### ♦ Double sensor synchronization

A second sensor relays a pulse for each print repeat making synchronization automatic. The onscreen image is always stable no matter the format.

## Flash verso

In order to control the superimposition of recto/verso printing the flash verso of the Newscan 4000 console is placed on the VERSO side facing the recto camera casing. Power is adjusted according to the opacity of the printed support.



## Technical data

Hardware	Newscan 4021	Newscan 4031	Newscan 4041
Adjustable 17" Touch screen control panel	Full package	Full package	Full package
PC unit	Full package	Full package	Full package
Motorized motion on X (width)	manual	yes	yes
Swivelling arm support for display	optional	optional	optional
Dedicated UV viewing function	optional	optional	optional
„Hybrid“ UV function	-	-	optional
Recto-Verso	optional	optional	optional
Reverse web flash	yes	yes	yes

Software			
Setting windows overlay	yes	yes	yes
Electronic motion on Y (print length):	yes	yes	yes
- X, Y or „S“ scanning with programmable speed	Y only	yes	yes
- X, Y or „Z“ step-and-repeat scanning	Y only	yes	yes
Electronic stops on recordable X and Y locations allowing:	Y only	X + Y	X + Y
- to adjust the scanning between registers or both sides of the printing			
- to position quickly the camera on registers			
Vertical ruler symbolizing the print length of the substrate with numbered step-and-repeats:	yes	yes	yes
- View the location of the camera in relation to the web			
- Position the camera quickly			
A grid symbolizing:	-	-	yes
- The numbered step-and-repeats of the specific print job			
- Location of the memorized positions			
- The location of the electronic stops			
- The location of the camera in real time			
Help function on screen	yes	yes	yes

Memorized positions			
4 records for camera positions	-	-	yes
4 records for specific images (e.g. print approval reference images)	-	-	yes



## Ideal for controlling color registration and monitoring color and defects at any press speed.

### Scanning

„Scanning” functions are very important. They allow the control of 100 % of the web by sampling.

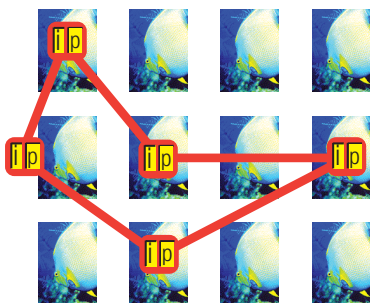
The „camera” icon remains visible on the grid and rulers when scanning. The operator can immediately find the flaw on the web.

It is possible to freeze an image on screen in order to analyze, correct a flaw and monitor the evolution of the problem.

3 scan modes are offered:

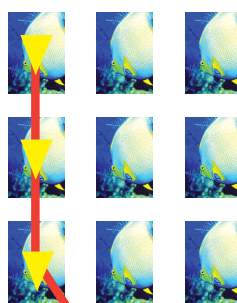
- ◆ **Cyclic scan of memories**

The camera positions itself on each programmed memory.

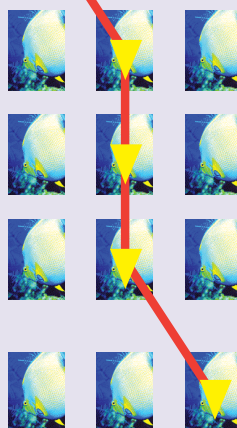
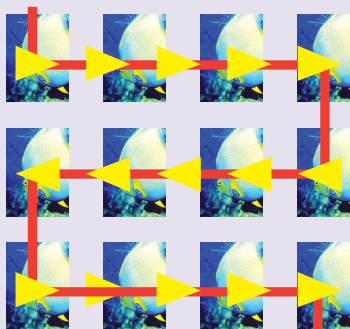


- ◆ **„Z” scan, step by step along X and Y axis**

The camera automatically relocates on the same area of all steps in turn allowing perfect monitoring.



- ◆ **„S” scan, at constant speed along X and Y axis at programmed speeds.**



RHEINTACHO Vision Systems S.A.S., with its Headquarters in Buhl (France), is the latest member of the RHEINTACHO Group as from April 1<sup>st</sup>, 2017.

The newly founded company RHEINTACHO Vision Systems has emerged from the acquisition of the French company RGK Video Systems and is specialized in the development, production and sales of camera-based inspection systems.

The mother company RHEINTACHO Messtechnik GmbH is known as the specialist for customized solutions for rotational speed measurement.

In-house product development, production and assembly departments guarantee quick and innovative solutions to customers' individual requirements.

The production range incorporates a wide range of solutions of a high technical quality, principally in the field of rotational speed: sensors, hand-held measuring devices, rotary encoders and switching devices.

RHEINTACHO is a family-owned company and intends to remain as such. With flat hierarchies, short routes and eye-level communication, we can fully concentrate on our priorities: customer satisfaction, innovation, flexibility, quality, efficiency, growth.

In order to fulfill all our customers' requirements at a competitive price, we rely on efficient co-operation based on reliability and continuity.

Because we do this successfully, we approach our work with pleasure and passion - even under pressure. This is how we intend to continue growing, in a harmonious and sustainable fashion.

Find a challenge for us.



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