



CHECKLABEL
Quality Inspection machine.

CHECKLABEL ✓

QUALITY INSPECTION MACHINE

Quality inspection machine able to check the weaving quality of the ribbons and tapes: especially for labels, for plain, printed and elastic ribbons.

Our innovative **CHECKLABEL** machine is the only one in the world that uses an **Artificial Intelligence (AI)** system with a self-learning scan of the ribbon being processed up to 25 mt/min.

Our machine allows to **reduce the cost of the manual quality control and makes the control itself unaffected by the human judgement of the operator**, setting repeatable standards over time.

Once a job has been learned by the machine, it is saved for future repeat orders.

The quality control performed by the **CHECKLABEL** system is completely objective, constant and reliable.

MACHINE DESCRIPTION

SAVING SYSTEM

The system can save and upload the processed ribbons.

DETECTION SYSTEM

The software can recognise by itself which labels are correct and which ones are not; it is possible to set the tolerance.

DEFECTS MARKING SYSTEM

When a defective label has been detected, the dispenser of the adhesive marker **automatically puts a shiny marker/sticker on the defective labels** without stopping the process. Then the ribbon is rewound, ready to be processed on the finishing machines **OMNILABEL** cut & fold machines and the laser cutting machines **GALVOLABEL**, which can be equipped with a **photocell to detect and automatically remove the defective labels**.

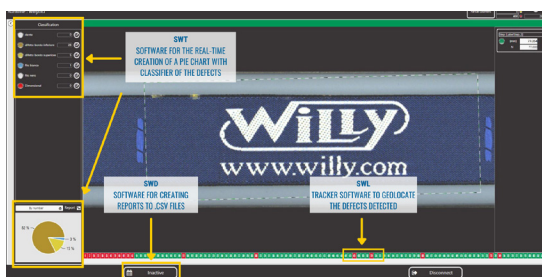
Check for the correct position of the “chip” applied on labels with woven antenna on the back.

SOFTWARE UPDATING

Software update and assistance available remotely.

MACHINE EQUIPMENT

Unwinder
Videocamera
Patented quality control system: detects the ribbon defects
Incorporated PC ready to work immediately without having to install an external software
Specific software
Rewinder
Sticker dispenser to recognise the defects



Defect Type	Defect Code	Defect Position	Defect Length	Defect Width	Defect Area	Defect Count	Defect Percentage
Stain	001	100	50	20	1000	10	10%
Weaving	002	200	100	30	3000	30	30%
Missing threads	003	300	150	40	6000	60	60%
...

POSSIBILITY TO EXTRAPOLATE A USEFUL REPORT ON .CSV FILE



ACCESSORIES (OPTIONS)

ACCESSORIES

SWL – Tracker software to geolocate the defects detected on the ribbon and see the icons of the good and bad parts of the ribbon in real time. By clicking on it, you can see the image of the exact point where the defects found occur.

SWT – Software for the real-time creation of a pie chart, with classifier of the defects found during the processing of the ribbon that allows you to trace and classify the series of the main defects found (for example: presence of stains, weaving defects, missing threads, etc.). On the screen, you can see the pie chart showing the percentage of the defect types detected.

SWD – Software for creating reports and exporting data to .csv files, useful both for data analysis for internal use, to improve production phases, and for external use, as documentation for supplying the finished product to customers.

V – Portable ultrasonic sealing unit. This accessory joins the end of one ribbon to the beginning of the next, giving extremely resistant joints.

DCK - Double checker. Unit with additional tape quality control station, equipped with a video camera to convert the Checklabel machine into the Checkribbon. Suitable for checking both sides of the ribbon at the same time.

MAIN DEFECTS RECOGNISED

ERRORS ON LOGOS AND DRAWINGS



IRREGULAR RIBBON EDGES



THREAD WITH WRONG COLOUR



JOINTS BETWEEN RIBBONS: by ultrasonic, heat sealing, stapler or adhesive film



CENTERING ERRORS



OIL STAINS ON THE RIBBON / TAPE



MISSING THREADS



WEAVING DEFECTS



PORTABLE ULTRASONIC-SEALING UNIT



This accessory joins the end of one ribbon to the beginning of the next, giving extremely resistant joints.

IDEAL SYSTEM TO OPTIMISE RIBBON INSPECTION AND TAPE QUALITY

1st STEP

Automatic quality inspection machine from roll to roll.

Main Advantages:

- **The quality control is objective and constant:** it does not depend on the operators' judgement.
- **Increased Productivity** compared to the operator's. Furthermore, the machine applies the stickers without stopping or slowing down the ribbon or tape.
- **The system is stable:** it is important to detect the defective labels, but it is equally important not to discard the good ones.
- **Artificial Intelligence system:** the machine recognises defects autonomously by comparing the memorised labels with the ones that pass under the camera during the working cycle.
- **PC incorporated:** Possibility to save each job system to recover what has been done previously.
- **Statistics** of the good and defective processed labels.

2nd STEP (FOR WOVEN LABELS PRODUCERS)

Your ribbon has already been checked by the **CHECKLABEL** machine and is ready to be processed on the further machines that automatically recognise the marked shiny stickers on the defective parts to eliminate.

- Our **laser** machines already have the **photocell** that **detects the stickers**. The labels with the stickers will not be processed or counted.
- On our **OMNILABEL** cut and fold machines we provide **special kits** to install as follows:
 - A) "J" – The **photocell** detects the shiny stickers for faulty labels without counting them out of the total amount. **The operator can easily identify the wrong labels with the shiny sticker** and discard them from the stacked or packaged ones.
 - B) "J" – **Photocell** to detect shiny stickers for faulty labels.
+
"W"/"CW" – **System to automatically reject after cutting** process the **defective labels marked** with a shiny sticker by means of a slide put on the back side of the machine.
 - C) "J" – **Photocell** to detect shiny stickers for faulty labels.
+
"QE" – **System to automatically reject** by means of a slide with trap door the **cut & folded defective labels marked** with a shiny sticker.

TECHNICAL DATA

OUTPUT DETAILS	MAX. SPEED	25 m/min	MACHINE DETAILS	ELECTRICS	220/240 V 1~ 50/60 Hz
	CHECKING AREA	Max ribbon width: 100 mm Max length: 140 mm		NOISE LEVEL	< 60 dB
			WEIGHT	310 kg	
			DIMENSIONS	170 x 70 x 180 cm	