ZODIAC
HAWK

Solid State Coder with Integrated Print Checking

RUNNING

Sainsburys

500g e

21 Sept

Robin Brunton, Kenya

RUNNING

Select → Waitrose 1kg Carrots → Preview

Display until: 29 JU
Supplier: 336ABC
: NORFOL
y: R.ABE
kg

ice

The world's first Thermal Transfer Overprinter that checks its own print

Building on the market leading success of the ZodiacHS, the Zodiac Hawk refines almost two decades of Thermal Transfer Overprinting (TTO) with all of the reliability, flexibility and accuracy of the original Zodiac with the addition of the latest technology to further improve uptime and productivity.

❯ **iAssure™** - Integrated print checking technology identifies code legibility issues

❯ Airless, all electronic printhead design with **Intelligent Motion™**

❯ Modular design for OEM integration flexibility

❯ Industry-leading simple cassette with 1200m ribbon capacity

❯ Top throughput up to 500 packs per minute

❯ Easy usability with the CLARiTY™ interface to ensure the right code is on the right product

FLEXIBLE PACKAGING APPLICATIONS

Ideal for flexible packaging, labels and glossy card applications that require content including regulatory, traceability or use by dates to be printed, our CLARiSOFT™ label design software helps to ensure the right information is printed on the right package.

The new Zodiac Hawk can now also print on newer flexible package types including resealable pouches, stick packs and sachets.

Vertical form, fill and seal machines (VFFS)	Horizontal form, fill and seal machines (HFFS)	Thermoform and tray-sealing machines (TFTS)
■ Snacks	■ Bakery products	■ Berry fruits
■ Nuts / Grains	■ Bread	■ Seafood
■ Powders	■ Biscuits	■ Cheese
■ Hardware	■ Cake	■ Processed meats
■ Frozen Food	■ Confectionary	■ Red meats
■ Vegetables		■ Pharmaceutical products

Introducing iAssure™, a revolutionary integrated print checking system helping customers to minimise production disruption and downtime

HOW IT WORKS

A built in sensor creates a real time image of the negative on the printed ribbon to compare with the intended image to see if they match.

iAssure™ technology determines the type and magnitude of any mismatch and determines if the code is a pass or fail. Once a pre-set number of consecutive fails is reached, the Zodiac Hawk can signal for a product to be rejected or stop the line entirely.

At a glance iAssure™ metrics are easily viewed on the CLARiTY™ control unit to determine the productivity of the printer.

For the first time, achieve improvements in Overall Equipment Effectiveness (OEE) by reporting on performance, reliability AND quality.
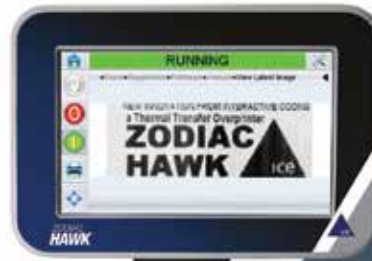
Real time view of the last print
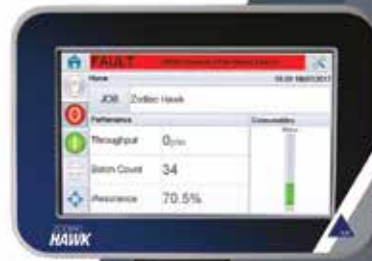
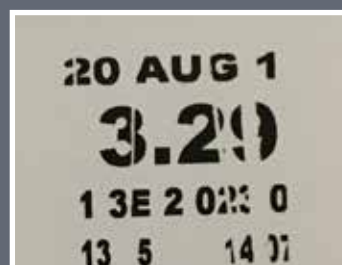**Operator alerted to address print issue**
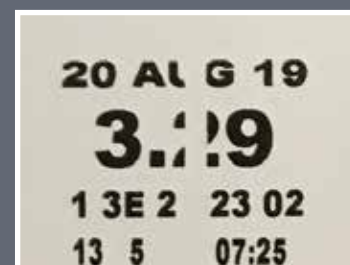
Checking system, iAssure™, detects bad print

CODE QUALITY ASSURANCE

iAssure™ technology catches common print defects quickly to avoid the accumulation of products that require rework, risk supply chain disruption, potentially incur fines or cause damage to brand reputation.

Ribbon creases

Damaged printhead

OUTSTANDING RELIABILITY AND EASY TO USE

〉 Industry leading simple change cassette with 1200m ribbon capacity

〉 Precise ribbon tension to reduce downtime related to ribbon-related faults and ribbon breaks

〉 Ribbon save modes with consistent 0.5mm gap between prints to maximise ribbon usage

〉 Robust cassette with no clutch, brakes or wear parts eliminating potential failure points and improving performance
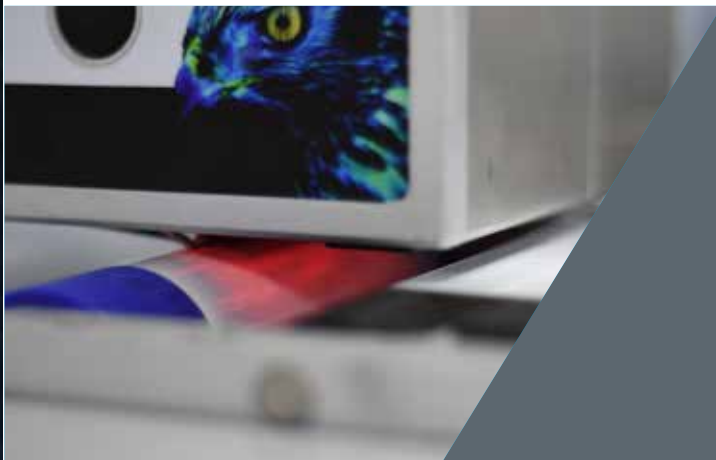
LEADING TECHNOLOGY IMPROVES UPTIME

Electronic printhead control maintains high print quality and removes the need for compressed air with associated cost and downtime

Minimal wear parts are easy to change out reducing maintenance interruptions

Faster throughput versus prior models by 25%

IDEAL FOR A RANGE OF APPLICATIONS

Ultra-fast horizontal FFS with print speeds up to 500ppm

Ultra-slow continuous speeds go down to 1 mm/s

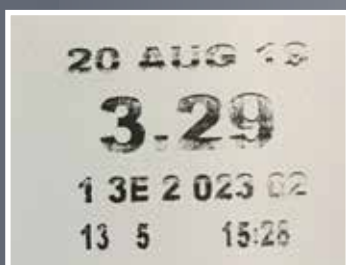Intermittent or continuous, left or right-hand operation

Pouches or zipper packs with uneven film surfaces

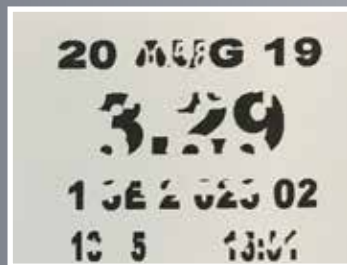Compact design with simple operator CLARiTY™ interface

Custom made brackets to easily integrate on the production line

Option to mount the power supply and connection hub in the host machine control cabinet

Worn print surface

Overprinting

CLARiSUITE™
Integrated Coding Software

CLARiTY™
Simple operator interface

› High resolution user interface with icon based controls, image display and colour touchscreen

› Intuitive streamlined interaction and wizard tool to avoid operator error

› Unique date calculation manager to configure date offsets, avoidance rules and controlled concessions

› USB scanpoint for job selection

› Multiple language functionality

› Master/slave to control multiple printers from a single screen

› Compatibility with other software due to patented generic file structure

› At a glance, on screen real time performance data

Visual job selection

Step-by-step guided entry

Minimal choice for minimal errors

Print layout preview for confirmation

CLARiSOFT™
Label design software

Design templates with drag and drop editing tool

Windows TrueType fonts for flexible label design

Multiple field types including text (bold, underline or italics), date and time, barcodes, graphics and shapes
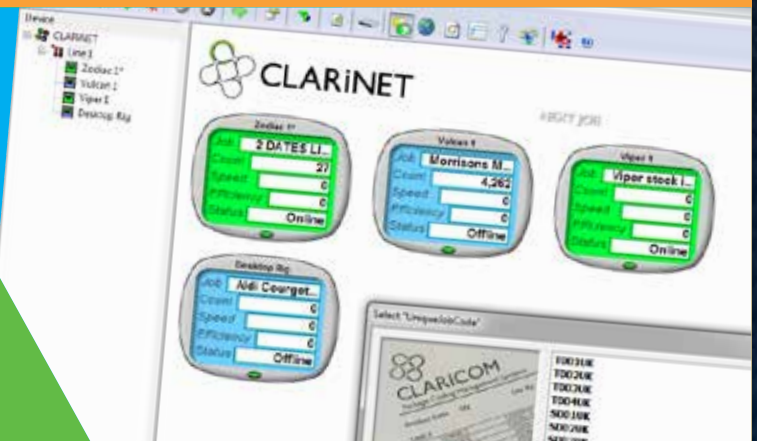
Transfer of data and images via a USB memory device

CLARiNET™
Networking software

Network capability for plant wide solutions

Dashboard view of printer efficiency, performance and line stoppages

Performance

Printer	Zodiac Hawk - 53mm
Printhead	53mm, 300dpi, 12dots/mm
Print area – Intermittent motion mode	RH 53mm (W) x 75mm (L)
Print area – Continuous motion mode	53mm (W) x 300mm (L)
Ribbon width	20mm – 55mm
Maximum ribbon length	1200 metres
Print speed – Intermittent motion mode	10mm/sec – 1000mm/sec*
Print speed – Continuous motion mode	1mm/sec – 1000mm/sec*
Maximum throughput	Up to 500 prints per minute*
Nominal ribbon waste between successive prints	0.5mm

*Print speeds and throughput are resolution, substrate, application and set-up dependent. iAssure™ technology is not currently supported for use with ribbon savings, high speed or high throughput print modes.

Controller

The controller consists of a removable touchscreen and power supply unit	TFT SVGA 800x480 8" full colour LCD and touchscreen

iAssure™ detectable defects

iAssure™ technology complements existing quality control processes. It is not designed to detect all printing errors and does not read barcodes.

Damaged print platen/roller	Dirty printhead
Damaged printhead	Ribbon wrinkles
Uneven print surface	Overprints
Misaligned printhead	Alphanumeric print defects

General

Clutchless bi-directional ribbon drive	Simple ribbon webbing
Ribbon saving features- radial ribbon save, interleaved ribbon save, intermittent stripes	Job selection and database support as standard
Multiple operator languages	3 levels of password protection
On-board diagnostics	On-board memory, compact flash and/or expansion card
Off-line set up and parameter storage	

Software

CLARiSOFT® Image Design Software	Flexible date/time formats with auto best before date calculation and concession management
Full downloadable font support for Windows TrueType (including multiple languages and Unicode support)	Auto increment/decrementing text, counters and barcodes
Fixed, variable and merged text fields and text blocks	Formats for shift coding
Scalable text including rotation, mirror and inverse printing	User configurable drop-down list fields
Basic shape drawing	Link fields to databases
Multiple graphic formats supported, any size up to maximum print area	Field orientation 0°, 90°, 180° and 270°
Mirror image printing, image rotation	128mb message store memory
Real-time clock functions	Barcodes EAN 8, EAN 13, UPC-A, UPC-E, Code 39, EAN 128, Code 128, ITF, RSS (including 2D composite codes), DataMatrix, QR; others available on request

Connectivity

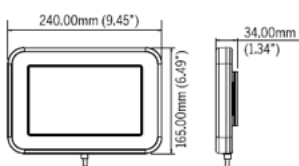|	
External inputs/outputs - 3 x PNP inputs, 2 x relay outputs and 2 PNP +24V outputs	External communications – 1 Serial port (RS232), 2 Ethernet ports, 2 USB ports, 15 Pin I/O connection, Binary and ASCII comms protocols and Windows drivers ZPL and SATO emulations
Master/slave unit – link up to 4 coders to a single controller and CLARiTY™ control unit	CLARiNET™ coder independent network management software
Host PC Mode (remote database) using CLARiNET™	CLARiTY™ Configuration Manager
Server unit – fully integrate user interface into packaging machinery	

Services

Power supply	90 – 264V
Operating temperature	0 - 40°C

Regulatory approvals

MET N RTL, CE Mark, FCC

Dimensions

Control panel
240.00mm (9.45")
34.00mm (1.34")
165.00mm (6.49")

Printer body
225.00mm (8.86")
204.00mm (8.03")
182.00mm (7.16")
178.00mm (7.01")
26.00mm (1.02")
53.00mm (2.09")
Printable Area

Power supply
226,87mm (8.93")
85.00mm (3.35")
151,00mm (5.94")