

ZODIAC HAWK

Solid State Coder with Integrated Print Checking



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)

- Snacks
- Nuts / Grains
- Powders
- Hardware
- Frozen Food
- Vegetables

Horizontal form, fill and seal machines (HFFS)

- Bakery products
- Bread
- Biscuits
- Cake
- Confectionary

Thermoform and tray-sealing machines (TFTS)

- Berry fruits
- Seafood
- Cheese
- Processed meats
- Red meats
- Pharmaceutical products





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

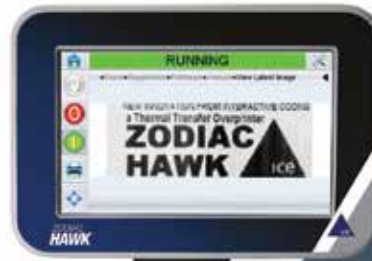
HOW IT WORKS

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.

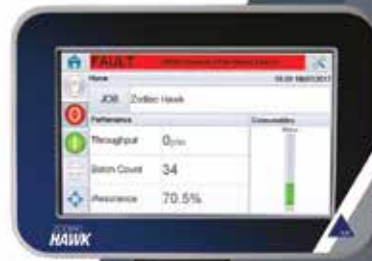
iAssure™ technology determines the type and magnitude of any mismatch and determines if the code is a pass or fail. Once a pre-set number of consecutive fails is reached, the Zodiac Hawk can signal for a product to be rejected or stop the line entirely.

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

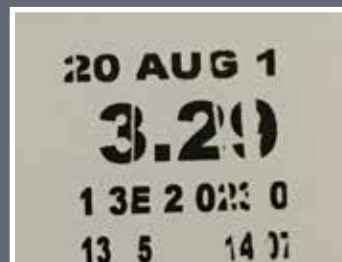


Checking system, iAssure™, detects bad print

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

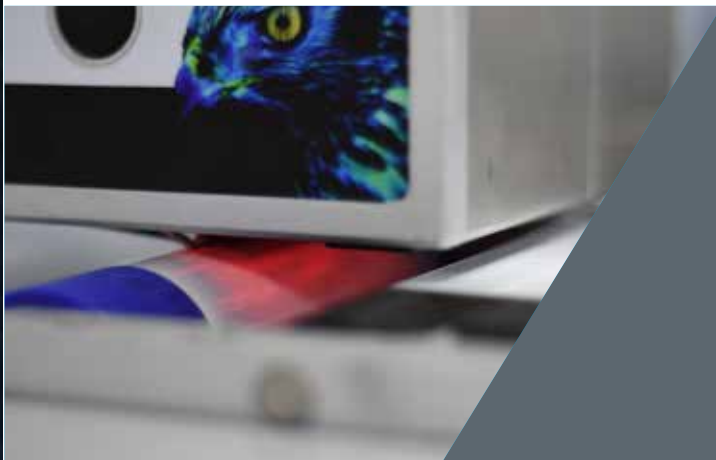


Damaged printhead



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 05mm 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

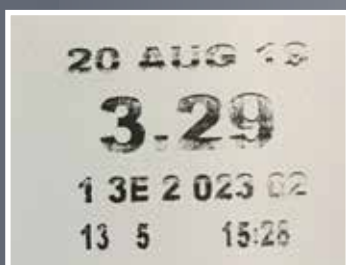
Pouches or zipper packs with uneven film surfaces

Compact design with simple operator CLARiTY™ interface

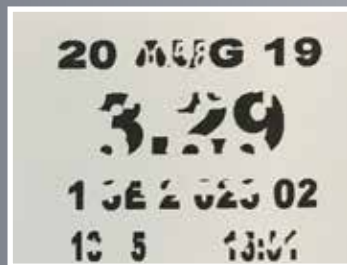
Custom made brackets to easily integrate on the production line

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

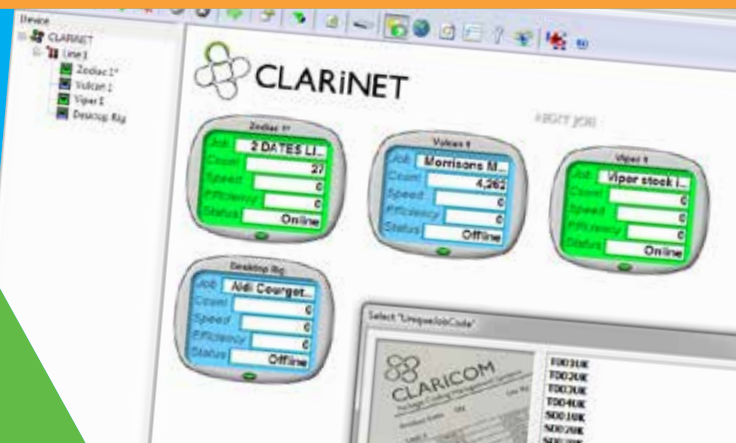
Transfer of data and images via a USB memory device

CLARINET™

Networking software

Network capability for plant wide solutions

Das hboard 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

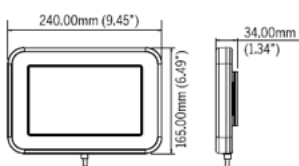
| | |
|-----------------------|-----------|
| Power supply | 90 – 264V |
| Operating temperature | 0 - 40°C |

Regulatory approvals

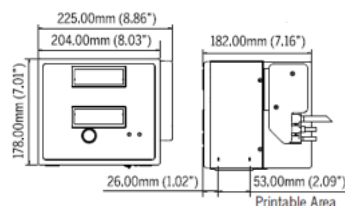
MET N RTL, CE Mark, FCC

Dimensions

Control panel



Printer body



Power supply

