HARDY
PROCESS SOLUTIONS
Measurement ▪ Automation ▪ Productivity

A Roper Technologies Company

Dynamic Series Checkweighers

HARDY
PROCESS SOLUTIONS

HARDY
PROCESS SOLUTIONS

Easiest to Use | Highest Performance | Lowest Total Cost

![Hardy Process Solutions logo]
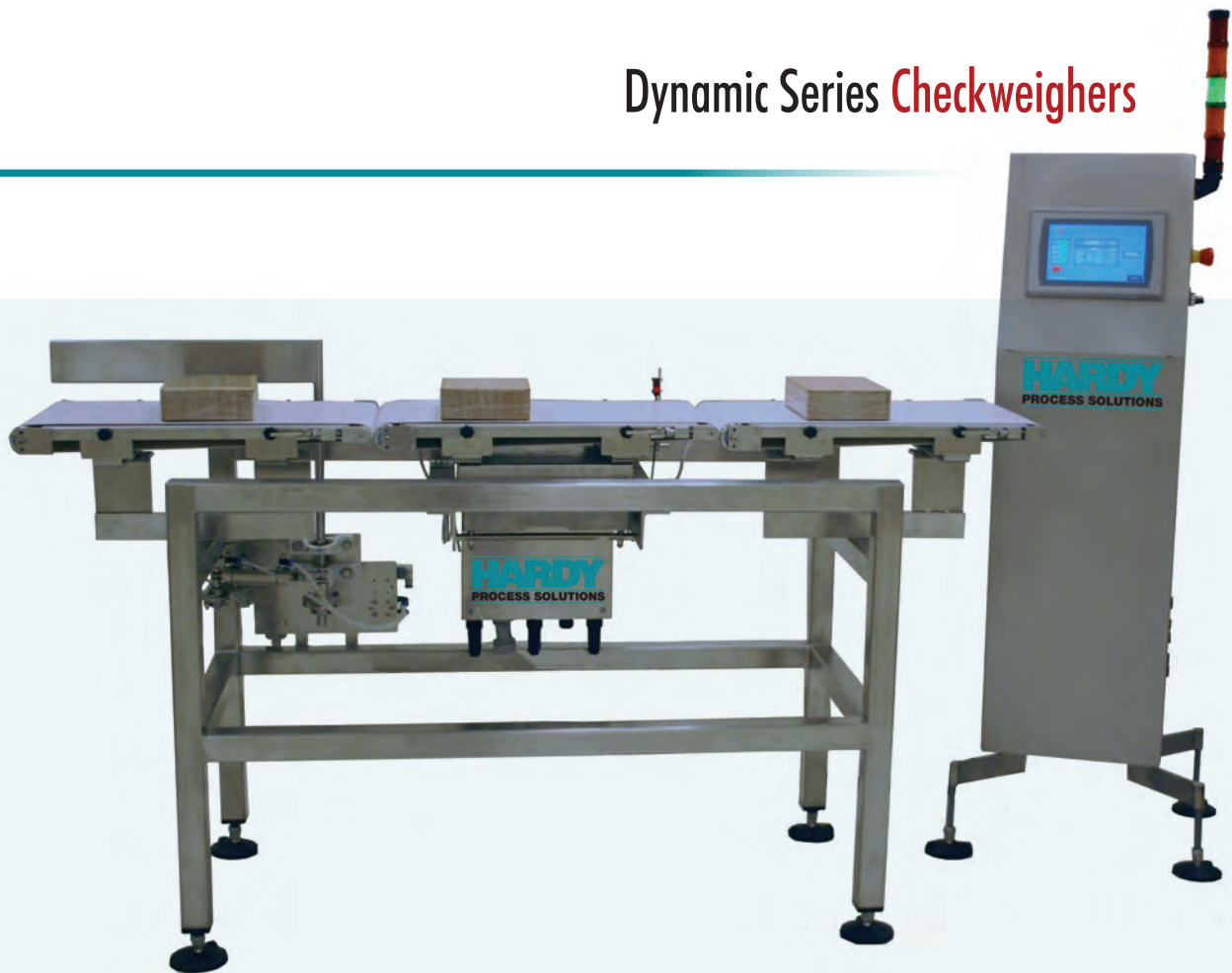
4 Standard Platforms

BUILT TO FIT YOUR REQUIREMENTS

PROGRAMMABLE TO FIT YOUR PROCESS

Dynamic C
Chain Weigher

0.01 to 22 pounds | 0.005 to10 kilograms | Up-to 350 units/minute

Rigid Products

- bottles
- cans
- cartons

Dynamic I
Intermediate Belt Weigher

1 to 50 pounds | 0.5 to 22 kilograms | Up-to 60 units/minute

All Products

- boxes
- tubs
- pails
- bulk foods

Dynamic S
Small Belt Weigher

0.02 to 22 pounds | 0.009 to 10 kilograms | Up-to 200 units/minute

All Products

- bottles
- pouches
- trays
- direct foods

Dynamic L
Larger Belt Weigher

1 to 200 pounds | 0.5 to 90 kilograms | Up-to 50 units/minute

All Products

- sacks
- kegs
- drums
- bulk bags

Easiest to Use | Highest Performance | Lowest Total Cost

Redefining How Checkweighing Machinery is Built, Integrated, Used and Maintained

Open Source

Hardy Dynamic Checkweighers are built on a Rockwell Automation software platform running Studio5000® and FactoryTalk® View, making it easy to modify the machine program to accommodate current manufacturing and data requirements, yet flexible enough to meet future needs.

Off-the-Shelf

Simple design, minimal use of custom parts, and controls built using readily-available components from Allen Bradley (CompactLogix® PLC, PanelView Plus, Stratix® Switch and 1606 Switched Mode Power Supply) simplify replacement, emergency repairs, and upgrades. Plenty of spare I/O, plus the ability to expand the rack using Point I/O modules, provides a future-proof control platform.

Seamless Integration

Machine communications over an EtherNet I/P backbone streamline integration and data exchange, allowing you to serve up process statistics, manufacturing performance, and machine status to The Connected Enterprise® by addressing equipment through one of the spare ports on the Stratix switch. You can also use readily-available, real-time data to optimize upstream processes or create closed-loop control by exchanging tags with another device on the network.

Data On Your Network

The Dynamic Checkweigher generates valuable production information that can be instantaneously shared across plant floor operations and to business level stakeholders. Perform 100% inspection on every discrete product manufactured or every case of goods produced; tie to upstream processes for real-time closed loop control; serve up a myriad of production analytics simply by pointing at data tags in the machine made available on your network. Customize the HMI to show information important to your process or hand off control to a PlantPAx® system.

100% Inspection

Hardy Dynamic Checkweighers ensure 100% product inspection while capturing key performance data of a manufacturing process. Whether it's a pouch, bag, bottle, can, box, case, tote, or even a slab, Dynamic Checkweighers guarantee that every finished product's weight data is captured and that it conforms to permissible quality control standards. Every machine ships with 5-ZONE capability that can be used to classify products, alert operators of varying process trends, or trigger a variety of optional reject or sorting devices.

Checkweighers are a critical part of the overall quality control process, used not only for checking product weight but overall packaged content, such as a bag of fasteners, peripherals such as chargers and cords, or even the presence of an instruction pack. 100% Inspection ensures your ability to meet regulatory requirements designed to protect consumers.

Other Applications include:

- Verify package contents
- Check product toletance
- Classify or sort product
- Measure give-away
- Overload safety check

Process Optimization

With Hardy Dynamic Checkweighers, you can tie weight trend data back to a filling operation to create closed-loop control and dramatically reduce overages in the process. You can also monitor production efficiency over time to increase throughput or eliminate waste, and even monitor standard deviation to PREDICT when filling processes are out of tolerance.

REDUCE GIVEAWAY

INCREASE EFFICIENCY

EVALUATE PROCESSES

How just **0.5 grams** overfill

Can cost you $35k

Control what you measure. Reduce give-away.

100% inspection allows closed loop control to optimize your process.

RAW SUGAR - 27.8 CENTS/POUND

Line's product speeed	220/prod./min
Price per gram	$0.0006
0.5 g overfill per product	$0.0003/prod
Cost per minute	$0.07/min.
Cost per hour	$4.04/hour
Cost per day	$97/day
Cost per year	**$35,402.00**

CheckMaster Software

Check Delay   Weight Trace   Check Time
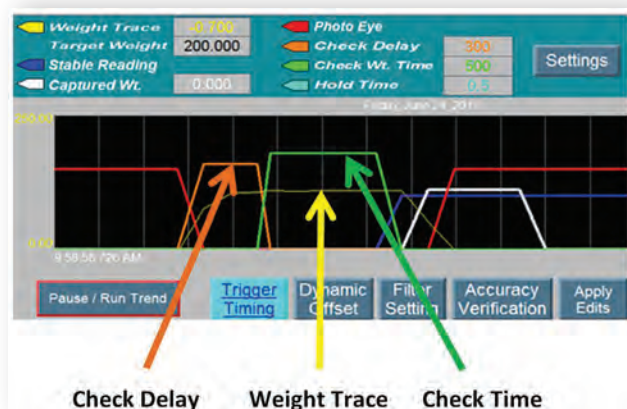
Built-in VISUALIZATION TOOLS eliminate the trial and error of product set-up, enabling operators to capture the entire checkweighing process and display results on the machine's high-resolution HMI screen. Operators can quickly and easily determine the perfect set of parameters to maximum weight capture time and optimize for repeatability and accuracy.

No Need for Photoeyes - CheckMaster software determines exactly when to capture weight and automatically analyzes Weight-Trace data to determine trigger timing, providing consistent measurements that make photoeyes optional.

Smart Design - At Hardy Process Solutions, we believe simplicity delivers the LOWEST TOTAL COST of ownership. Use of integrated motor-rollers are just one example of how Hardy reduces the need for custom parts, maintenance, and service. (Motor-rollers do not require tensioning or adjustment — no grease, no gears, and no drive-chains.)

Standard Build

- **HI 4050-CW Checkweight Controller**
- **AB 1769-PLC, expandable with spare I/O**
- **PanelView Plus - IP Addressable HMI**
- **AB Stratix Switch with 2 spare ports**
- **AB Performance Power Supply**
- **UL508 Certified Panel**
- **Smart Motor Drives**

Premier Integration

As a Rockwell Encompass Partner for 25 years, Hardy Process Solutions has leveraged the relationship with Rockwell Automation to provide checkweighing machinery solutions that integrate seamlessly into The Connected Enterprise. The combination of Open Source code and making all data tags available, together with Rockwell's Studio 5000 software, makes integration into existing systems quick and easy. The Dynamic Checkweighing machine simply appears as an IP-addressable device on a Network where all data and controls can be shared or monitored from any place on your network.

Easiest to Use　|　Highest Performance　|　Lowest Total Cost
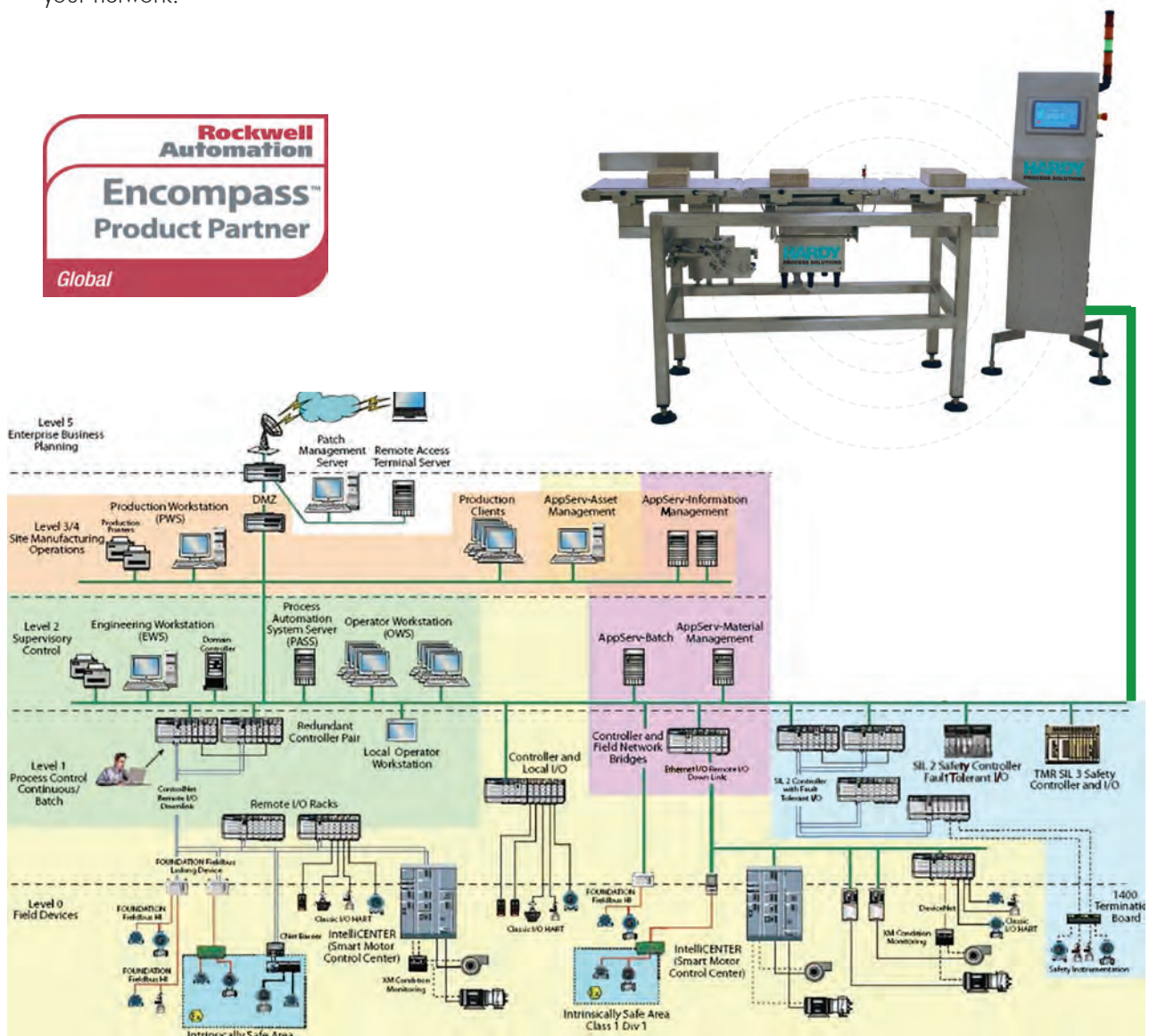
An Extensive STATISTICS package is included with every machine. Stats give real-time access to trends, conditions and numerous quality metrics that can be used for reporting, or directly utilized for tighter process control such as reducing product give-away and improving consistency. Open Source programming allows customers the ability to customize statistics to match factory data reporting needs.

Factory Talk Security® standardizes permission-based control and distribution of data twith The Connected Enterprise through a centralized administration console.

Proven Solutions

For nearly 100 years Hardy Process Solutions, headquartered in San Diego, California, has been providing innovative process control solutions. With that, we have saved our customers thousands of production hours and millions of dollars. Our goal is to provide superior weighing equipment as an industrial scale company that stays on the pulse of innovations in the field. At Hardy, we pride ourselves on the ability to continuously provide superior product quality and excellent customer support, which enables our customers to achieve their process goals.

Hardy delivers high performance weighing solutions with the LOWEST TOTAL COST to own. We include Industry Leading Technology in all of our scales and instruments to make it EASY for you to install, integrate, and maintain. Powerful solutions that are easy to use is why our customers realize increased production efficiency.

Instant Information

We offer instant access to videos, white papers, articles, case studies brochures, application notes, and more.

Simply go to:

www.hardysolutions.com/media-center/view

FREE Online and Phone Support
1-800-821-5831
www.hardysolutions.com

Unrestricted Access to Manuals and Drawings Online
Free Dial-In Technical Support and Applications Support
Onsite Certified Technicians for Hire

HARDY
PROCESS SOLUTIONS
Measurement ▪ Automation ▪ Productivity

Headquarters:
9440 Carroll Park Drive
San Diego, CA 92121
tel. +1-858-278-2900
tel. 800-821-5831
fax +1-858-278-6700
www.hardysolutions.com
hardyinfo@hardysolutions.com

ISO 9001:2008 CERTIFIED
Since 1993

Rockwell Automation
Encompass
Product Partner
Global

Follow us on Facebook and LinkedIn

Ask a HARDY Expert

CW-07/17
0400-CW01A