Goodbye manual packing A buyers guide to right-sized automated packaging



Or... how to box 1,100 orders per hour, <u>with just</u> two people.



At Sparck, we believe automation should make your life easier. That is why we created this (slightly biased) buyers' guide. Leap over obstacles and lead the way to a leaner, cleaner fulfillment process, packed with high-tech.



#### YOUR GUIDE TO THIS GUIDE

- 01
- 02 Setting the goal
- 03 See, try, buy
- 04 Off to the races
- 05 Training for that six-pack
- 06 The inevitable packaging pains
- 07 Reaching peak performance



SPARCK TECHNOLOGIES

### Moving from manual to automated



### **MOVING FROM** MANUAL TO **AUTOMATED**

Right-sized automated packaging modernizes a key link in the e-commerce chain. It's free hands, less stress, less costs, less waste, more control, more capacity, more speed. A game changer.

#### Inventing automation, again

In 1924, we we're the first to automate the production of the Dutch wooden shoe. In the 1950's, we were the first company worldwide to automate the process of putting letters into envelops. (Yes, people used to send letters.)

Ten years ago, we were the first to introduce this exciting technology: rightsized automated packaging. Looking at the manual packaging process of large e-commerce retailers, we thought: "Can we make this easier?" Turns out: yes, we can! It takes a high-tech machine, but out packs twenty seasoned manual packers without breaking a sweat.

Turning packers into pilots

How does it work? An operator scans the order and simply pushes a button. The order then heads down the runway and takes off, getting measured, boxed, sealed, weighed, and labeled. Any shape or texture, variable sizes, multi- or single item orders. From a pair of headphones to carry-on suitcase, and all sizes in between.

Out the other end comes an airtight, right-sized parcel every 3 to 7 seconds. It's an innovative solution that fully integrates with your warehouse management system.

### Box an order in just two steps

Scan it & push the button

01

02

### What happens in between?

One, two, or three mills feed corrugate into the machine. Using fan-fold corrugate for dynamic switching and

A scanner captures a 3D image of each unique order item or items to determine the minimum box size required.

On demand box construction allows for a fit-to-size box in 40,000,000+ range of sizes.

Box sealed with 100% security

for easy open, recycling, or returns, improving the customer experience.

cvp impack

# Pick up your right-sized package

Fit-to-size, weighed and

Order weight verification optimizes rate shopping via an in-line scale, assuring accurate weight and measurements of each parcel.

Carrier compliant labels are created and applied to ensure accurate delivery.

#### GETTING INTO THE AUTOMATION MIND-SET



Getting your eyes on the benefits and making the financial case to the Boardroom is a must. Discover how automated packaging can save on labor, materials, and transportation costs—all with a solid return on investment (ROI).

There can be multiple arguments for investing in automated packaging.

It may be a capacity issue: the comp cannot handle current, peak, or pred future volumes manually, perhaps because there isn't the manpower or required operational space. The choice a Sparck solution, with its ability to cr 'right-size' packages, also has powerf sustainability arguments.

But either way: the board will expect to see a hard economic return on investment (ROI) case. That itself has several elements, including savings in labor costs, savir

SPARCK TECHNOLOGIES

SPARCK TECHNOLOGIES

### SETTING THE GOAL

bany dicted	in cardboard and other packaging and consumable materials. Along with – in the case for fit-to-size packaging – more effective, and thus cheaper, utilization of shipping and transportation.
rice of reate ful	There may be additional benefits to consider, such as savings in warehouse space that can be reallocated to more profitable activities, or the ability to operate 24/7 without too many staff on night shift rates.
t ngs	From our first meeting with a potential customer, we can quickly evaluate whether there is potential benefit to partnering with Sparck Technologies.

Every customer has a unique set of challenges, so while a daily volume of 1,500 packages might be a typical starting point, it may be that other factors combine make the investment viable at significantly lower volumes. There are other decisions to be discussed, whether packaging is branded or non-branded, the preference for paper or plastic tape, and specific labelling requirements exist, to name a few.

#### The Sparck way

It is tempting for automation manufacturers to let their customers believe that successful and profitable ownership is simply a matter of 'plug and play'. Unfortunately, this is rarely the case.

In this white paper, we describe our approach. Being around since 1924 we know this works well for companies investing in our automated packaging solutions and we would suggest that buyers look for comparable procedures and approaches when making any significant investment in technology and automation.

#### SETTING THE GOAL

#### Things to focus on:

Return on investment

Cut costs, save on cor

Expand warehouse ca

Improve on customer

Achieve low total cost

Increase safety

Be more competitive

Be more sustainable

Be less dependent on

Support growth

End peak season stres

Operational proficience

rugate
apacity
promise
t of ownership
labor
SS
су

6 6

ANSOH4

#### THE PRE-SALE PROCESS

## SEE, TRY, BUY

Get a firsthand look at the machines, test it out yourself, and be ready to make a confident purchase decision. We let our machines and customers do the talking, and the results speak for themselves.

The pre-sale process is all about builtrust. Trust in a manufacturer as a partner, and trust in its promises.

Now that you know your goals, we've got something to talk about. Our dat analysts have developed tools that of help create an ROI case. For example we can pull a week's worth of orders range, size, and other characteristics ERP and simulate the performance of those orders with a Sparck CVP solur This tells us two things: do the orders physically fit through the machine ar how much less cardboard would a C consume versus standard boxes base volume savings.

SPARCK TECHNOLOGIES

ouilding re've data at can nple, lers – cics – off	This is a key part of our pre-sales service and something customers find hard to do themselves. We clearly present the analysis results, making the economic case crucial for building a strong argument to the Board.
cics – off e of	
olution.	
lers	
and	
a CVP	
ased on	

#### See a demo

To move beyond discussions, we always invite you to visit a demo-site. for a hands-on experience. During your visit, we can take a selection of your own goods and demonstrate, live, how our equipment efficiently handles and packs them. This personalized demonstration allows you to see the machine in action, showcasing its performance, precision, and ease of use. We find it becomes a highly convincing factor in understanding the true value and potential impact of our solutions on their operations.

#### Visit our customers

We encourage you to connect with our customers and hear their experiences firsthand. To make this even more impactful, we're happy to arrange field trips where you can see our machines in action and witness the efficiency and benefits they bring to real-world operations. With customers located across the globe, there's always an opportunity to visit a site near you. It's an invaluable chance to see the technology in action and speak directly with those who've already reaped the rewards.



#### Getting everyone on board

Selling automation to Management is one challenge, but gaining workforce buy-in is another, as employees may feel uneasy about how it impacts their jobs. It's crucial to show them that automation can make their work less physically demanding, more productive, and ultimately more rewarding, while also addressing concerns about pay, job security, and maintaining brand quality in packaging.

### "Great uptime and performance"

### "This is the way to go"

### "The speed is insane" Jimmy Heisey, WebstaurantStore

### "Front runners on sustainability"

Andrew Coffey, ASDA Logistics Services

Will Todd, Global Freight Management

Adam Hall, Internet Fusion Group



lan Murfin, Boot

#### sparcktechnologies.com

THE PRE-SALE PROCESS

### CVP IMPACK



#### The similarities:

Order type – any shape/texture

Order profile – single & multis

Seamless flow – variable sizes

WMS – seamless integration

#### The differences:

Throughput – 500/hour

Box closure – tape

Box type - RSC style

Box height - >3.94in / 100mm



#### The similarities:

Order type - any shape/texture

Order profile – single & multis

Seamless flow – variable sizes

WMS - seamless integration

SPARCK TECHNOLOGIES

### OR CVP EVEREST?

#### The differences:

- Throughput 1,100/hour
- Box closure glue
- Box type tray and lid
- Box height >1.1in / 28mm



#### INSTALLATION AND COMMISSIONING

At Sparck, we are adamant that your signature on a sales contract is the beginning of a mutual partnership.

A key part of our partnership is a wellstructured installation plan. We assign a dedicated project manager, with ongoing support from our sales team, to ensure flexibility for any last-minute adjustments as your needs or market evolve.

While installation in a new building is typically more straightforward, we most often work within existing operational sites. Slight disruption is inevitable, but careful planning and communication help minimize the impact.

There may be ancillary tasks that need to be planned and completed beforehand, such as providing electricity, air, and

SPARCK TECHNOLOGIES

### OFF TO THE RACES

other utilities. Access logistics also require careful planning, especially for challenging areas like mezzanine floors. Equipment placement must also consider ongoing operations and potential future expansions.

We will create and share a detailed timetable for our time on-site, working around the constraints of your live operations as much as possible to minimize disruption.

## Plug & pray play

Forward planning and communication is the key to success. How does Sparck do it?

In most cases, except for the extremely complex installations, we expect to unload and position the equipment near its final location within <u>one day</u>.

This is followed by final positioning, securing, connecting to utilities, and testing offline operation. Afterward, we conduct staff training and ensure seamless IT integration with your WMS and other systems. From delivery to final acceptance and commissioning, the entire process typically takes around ten working days. But this is an estimate, we can go faster or slower based on your needs.

#### Week 01





#### Week 02















#### **TRAINING & EDUCATION**

### TRAINING FOR THAT SIX-PACK

At Sparck, we take training to the next level, ensuring that every team member is equipped with the right skills and knowledge to succeed with our automated packaging solutions.

and routine maintenance, which varies depending on your on-site engineering capabilities. We equip relevant staff to handle routine upkeep and serve as a knowledgeable point of contact for our maintenance and support teams if more significant issues arise. Overall, our machines are engineered for complete reliability, delivering exceptional uptime even in the most demanding environments. CVP statistical data shows uptime ranging from 85-95%, depending on the specific operational conditions.

Our machines are designed to integrate seamlessly with your systems, software, and operations. We understand that every company is unique, which is why we offer flexible training options at your location. If additional training is required, we also offer sessions at our state-of-theart technology and innovation centers. Training at your location consists of two components, each typically lasting about a day, often with the same team participating in both. First, machine operator training is conducted, made easier by our intuitive Graphical User Interfaces (GUI) that ensures ease of use. Second, we provide training in basic

SPARCK TECHNOLOGIES

- -

### THE INEVITABLE PACKAGING PAINS

24/7 maintenance support and the best service in the business easily help resolve any issues that may arise.

Our most comprehensive maintenance contract includes scheduled and preventive maintenance, remote support, on-site visits for breakdowns and repairs, and all spare parts. We typically provide a supply of commonly needed spares to be kept on-site for quick access. Remote support is available by phone during and beyond regular working hours, and is enhanced via the integrated service cameras for optimal performance.

A common challenge with automation is managing software upgrades. When a machine builder introduces an upgrade, such as for a control system, the process is usually straightforward. However,

SPARCK TECHNOLOGIES

complications can arise when a WMS (Warehouse Management System) or other software vendor makes updates that impact the interface with automated machinery—or when a new system is purchased altogether. While it's the responsibility of the IT vendor to ensure integration with existing equipment, it's crucial that the original equipment vendor (us) actively collaborates to ensure the new interfaces function correctly. We are fully committed to doing so.

#### OPTIMIZING YOUR PACKAGING AUTOMATION



## **REACHING PEAK** PERFORMANCE

The sky is the limit. Or actually, 1,100 packages per hour is. Really everything depends on your specific situation. Products, personnel, software, line integration, there are all kinds of factors at play. And when up & running, you can tweak these factors to get the most out of the machine.

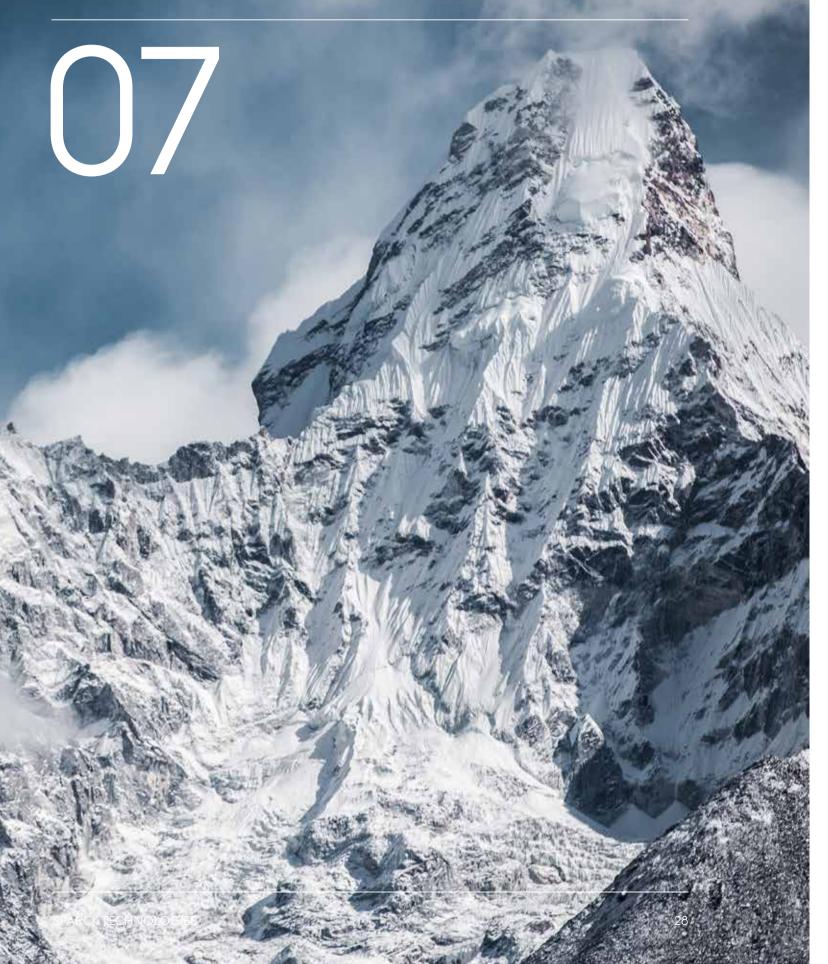
#### Gear up for package perfection

Maximizing the return on your automated packaging investment starts with ensuring the technology's efficiency, durability, and reliability, as well as the competency of operators, technical staff, and service support.

These advanced machines offer substantial benefits, including faster, more efficient throughput, reduced use of cardboard and void fill, increased trailer density, and fewer vehicles on the road.

However, realizing the full potential of this technology depends on maintaining

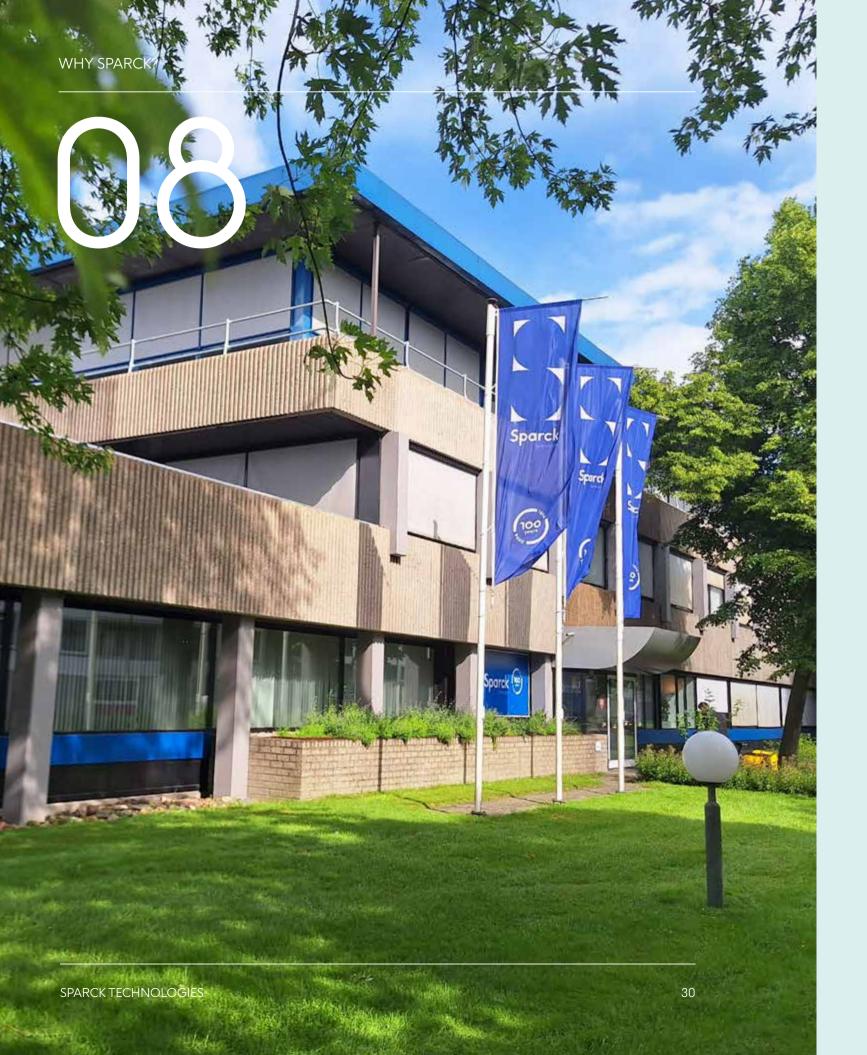
SPARCK TECHNOLOGIES



maximum uptime throughout the year, especially during peak periods.

#### **Operational resilience**

Achieving the highest packaging performance requires partnering with a leader in packaging technology. At Sparck, our machines are engineered to exacting standards with only the most reliable grade 'A' components, offering proven reliability. By choosing Sparck, you benefit from a proven track record and ongoing investment in innovation, ensuring operational excellence and long-term success.



#### WHY SPARCK?

## 100 YEARS OF AUTOMATION

Sparck Technologies is a century young global tech company specialized in automated fit-to-size packaging. From the first machine built in 1924 to today's cutting-edge solutions, Sparck's fascination with the power of automation has never wavered.

#### Sparck origins

Founded in 1924 as HaDeWe in the Netherlands, our company has a rich history of innovation through automation. In our modest history, we succeeded to kickstart four technological revolutions. From automating Dutch wooden shoe production to introducing groundbreaking stencil and envelope stuffing machines, our journey has been marked by major technological advancements.

#### Engineers at heart

In 2013, we embarked on a new path, driven by the demand for more efficient and sustainable automated packaging solutions. Our brilliant team of engineers blazed a trail of innovation with a revolutionary technology: smart automated fit-to-size packaging systems designed to reduce costs and minimize waste. This led to the development of our first fit-tosize automated packaging solution, the CVP Impack. Six years later, we unveiled the CVP Everest, capable of creating up to 1,100 boxes per hour. Our automated packaging solutions set the benchmark for performance, usability and efficiency. However, we go beyond the box...and our solutions; we're committed partners consistently pushing boundaries.



# ENJOY YOUR OWNERSHIP

Over the last century, our solutions have set the benchmark for performance, usability and efficiency. We understand the unique industry complexities and evolving business needs. With unwavering dedication, we stand as the ultimate partner, combining trust with proven technology

who disappear after the sale, offering little support for what should be a long, productive machine life. We understand that our customers aren't automation experts or engineers and have businesses to run. That's why we follow a proven process to work closely with our customers, offering expert advice, installation, commissioning, and ongoing support with speed, efficiency, and reliability. As innovators at Sparck, we are committed to constantly finding new ways to improve our machines and services, striving every day to make them even better for tomorrow.

We're not claiming that anything described here is rocket science—in fact, a methodical approach to identifying and resolving potential issues during the acquisition and ownership process should be standard practice for all machinery and automation vendors. But, surprisingly, it often isn't. We frequently hear about businesses, even outside our sector, that quote only for the 'bare bones' machine, then tack on extra charges for transport, forklift hire, and other necessities. Some vendors show up unannounced at their own convenience, block workspaces for days, or miscalculate power and air requirements. Worse, there are those

SPARCK TECHNOLOGIES



Visit **sparcktechnologies.com** to discover how the CVP Impack and CVP Everest contribute to operational and cost efficiencies. Contact our sales team today to learn how we can help your business achieve its packaging goals.

