



Storopack - SPECIALIST IN PROTECTIVE PACKAGING	3
PAPERplus® OVERVIEW	4
CONSULTING AND SERVICE	6
Storopack PROCESS	8
FOUR DIMENSIONS OF PACKAGING	9
Working Comfort®	10
Working Automation	11
PACKAGING SYSTEMS	12
PAPERplus® Classic	14
PAPERplus® Classic CX	16
PAPERplus® Track	18
PAPERplus® Chevron	20
PAPERplus® Papillon	22
PAPERplus [®] Dragonfly	24
PAPERplus® Shooter	26
SUSTAINABILITY	28
CUSTOMER CASE STUDIES	30

As of: 2023

1874 Founded as a tannery

1959 Storopack Hans Reichenecker GmbH + Co. is founded; Production of technical molded parts made from Styropor®



locations

603 million Euros in revenue

2,300 employees



PERFECT PROTECTION MEANS BEING EQUIPPED FOR ANY SITUATION.

Storopack is a specialist in protective packaging.

Our promise is to provide "Perfect Protective Packaging" to optimally protect every product while in transit. We think holistically, advising our customers on how to make the packaging process more efficient and, if desired, integrating tailored solutions. Our comprehensive range covers all of the requirements associated with optimal product protection. With 2,300 employees at certified production facilities and locations in 18 countries, we maintain a decentralized structure and are always in direct vicinity to our customers.

OUR STRENGTHS - YOUR ADVANTAGE:

- OWNER-MANAGED FAMILY COMPANY
- LOCAL CONTACTS
- ► INTERNATIONAL FOCUS
- ► RELIABILITY
- SERVICE AND CUSTOMIZED ADVICE
- ► HIGH PRODUCT DIVERSITY
- ► CONTINUOUS IMPROVEMENT OF PACKAGING PROCESSES
- ► PROCESS OPTIMIZATION
- ► COMPLETE SOLUTIONS ALL FROM A SINGLE SOURCE
- ► TURN-KEY SOLUTIONS WITH AUTOMATION PROCESSES

Storopack image film: www.storopack.com/perfect-protective-packaging

PAPERPLUS® IS THE CLASSIC WAY TO PACK.

Whether filling voids, cushioning from impact shock or blocking and bracing goods against transport damage: Storopack's PAPERplus® paper cushioning offers allaround perfect protection for your packaged goods, whether they're small and fragile or bulky and heavy. Our product portfolio is just as diverse as the protective functions of PAPERplus®: Storopack offers a variety of paper cushioning systems that produce just the right packaging materials for every requirement and can be used individually or integrated into existing packaging processes.

They all have one thing in common: innovative shapes enable optimal cushioning and exceptional stability with limited use of materials and a lower pack weight. Storopack customers can also choose from various types of paper. And because PAPERplus® allows you to produce paper cushioning as required directly at the packing station, you can save valuable storage space, while sending your products on their way well protected.

THE BENEFITS OF PAPERplus®

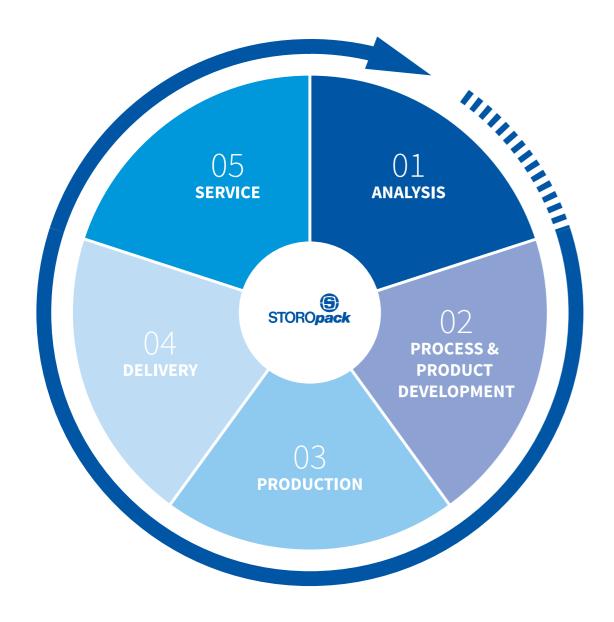
- ▶ WIDE RANGE: INDIVIDUAL SOLUTIONS FROM A DIVERSE RANGE OF PADDING AND PAPER TYPES
- ▶ EFFICIENT: PATENTED CREASING TECHNOLOGY FOR MAXIMUM MATERIAL UTILISATION
- ► RELIABLE: HIGH AVAILABILITY WITH CONTINUOUS OPERATION
- ► ERGONOMIC: FOR EXAMPLE TOUCH PANELS, FOOT PEDALS AND NOISE REDUCTION
- ► IMAGE: PAPER HAS A FAVORABLE IMAGE WITH END CUSTOMERS
- ▶ RECYCLABLE: PAPER PADDING IS PART OF THE PAPER RECYCLING LOOP AND IS FULLY RECYCLABLE
- ► RENEWABLE: PAPER COMES FROM RENEWABLE RESOURCES
- SUSTAINABLE: NO USE OF COATED PAPER

PAPERplus® product video: www.storopack.com/paperplus-video









GOOD CONSULTING MEANS DEVELOPING TAILORED SOLUTIONS.

Five steps to optimal protective packaging and ergonomic procedures – in the Storopack process, we combine comprehensive consulting, technical expertise, and innovation in order to develop the right solution for you. We analyze the existing packaging and production processes and the current cost situation. On this basis, we ensure ergonomic workflows, optimal value for money,

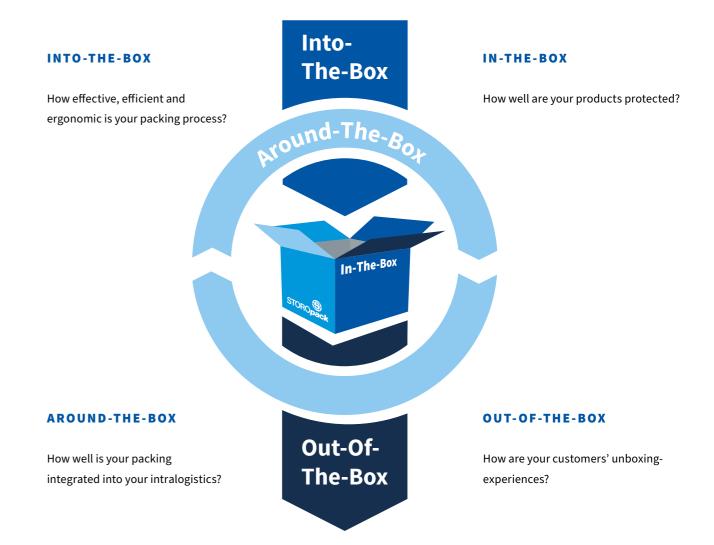
and protective packaging, which can be integrated into your processes with ease. We can use components of our comprehensive portfolio or customize something new just for you. Thanks to our network of sites around the world, we manufacture in close proximity to you, deliver just in time, and are personally available at all times to assist you with our technical know-how.

The optimum packing process: www.storopack.com/optimum-packaging-process-video

WE AIM TO IMPROVE YOUR PROCESSES ON A CONTINUOUS BASIS.

A key component of our strategy to achieve perfect protective packaging is the four-dimensional model. We analyze all of the packaging steps for every Storopack process, from intralogistics to unpacking at the end customer's location.

This model forms the basis for tailored protective packaging solutions as well as our efforts to optimize your packing processes.





Working Comfort®

COMFORT.PROTECT -

PERFECT PRODUCT PROTECTION WHENEVER YOU NEED IT

Ease of access and streamlined processes are of the essence when filling the shipping carton with paper cushioning, air cushions, or packaging chips. It is imperative that the protective packaging material is always available in sufficient quantities and within easy reach. That is why we offer our Working Comfort® module COMFORT.PROTECT. The protective packaging is provided on demand and in a space-saving way. To meet ergonomic requirements, this may be done via silo above a conveyor belt, for instance, or at an available packing station. This avoids unnecessary movements and physical strain, thereby safeguarding the health and safety of personnel in the packing area.

COMFORT.PROTECT AT A GLANCE:

- FLEXIBLE: CAN BE USED WITH PAPER CUSHIONING, AIR CUSHIONS, FOAM CUSHION PACKAGING AND PACKAGING CHIPS
- WITHIN REACH: THE PACKAGING MATERIAL IS AVAILABLE AT THE PACKING STATION ITSELF
- RELIABLE: PROTECTIVE PACKAGING IS PRODUCED ON DEMAND
- GOOD FOR HEALTH: PACKAGING PROVIDED IN A HIGHLY ERGONOMIC POSITION



COMFORT.PACK-

EVERYTHING WITHIN REACH AND IN THE RIGHT PLACE

The ergonomically designed packing stations offer everything needed for the packaging process in a compact space – from cartons, consumables, and tools to brackets for hardware such as scanners and monitors. The packing stations can be easily combined with other Storopack Working Comfort® modules for an efficient process.

For comfortable and ergonomic work: COMFORT.PACK with COMFORT.PROTECT PAPERplus® swivel arm solution

Developed for high throughput applications: AUTO.PROTECT solution with PAPERplus®

Working Automation

AUTO.PROTECT -AUTOMATIC RELIABLE PROTECTION

It is not always possible to eliminate voids within the carton, especially when dealing with a varied product range. As a result, goods move around during transit, which may damage both the carton and its contents. With our Working Automation module, AUTO.PROTECT, you can protect your products against these hazards.

AUTO.PROTECT automatically fills boxes with padding material, which provides reliable protection. Our experts will advise you on the optimum protective packaging and develop the module to your precise requirements and products. The result: automatic reliable protection for your shipping goods.

AUTO.PROTECT AT A GLANCE:

- INDEPENDENT: PROTECTIVE PACKAGING IS AUTOMATICALLY INSERTED TO THE BOX WITHOUT TYING UP PERSONNEL
- RELIABLE: PERFECT PRODUCT PROTECTION THANKS TO SUITABLE PROTECTIVE PACKAGING
- CUSTOMIZED: IN TERMS OF THE PROTECTIVE PACKAGING MATERIAL, FILLING METHOD, AND CARTON FORMATS

PAPERplus® BROCHURE PERFECT PROTECTIVE PACKAGING



PAPERPLUS® Classic IS THE IDEAL PROTECTIVE PACKAGING FOR HEAVY WEIGHT PRODUCTS.

The PAPERplus® Classic and Classic² paper cushioning systems are the ideal protective packaging solution for heavy weight products. With paper pads, made from one or two ply paper, even heavy products can be securely blocked and braced in cartons and cushioned all around. At the press of a button, PAPERplus® Classic produces

robust, tear-resistant, but also flexible and highly malleable paper cushioning. Storopack customers can choose between the kraft, recycling and grass paper.

PAPERplus® Classic for cushioning and

block and brace applications

Sturdy protection for heavy items:

THE BENEFITS OF PAPERplus® Classic

- ▶ ROBUST: HIGH CRIMP PROVIDES THE STRENGTH AND DURABILITY TO PACK HEAVY OBJECTS
- FLEXIBLE: PAPER PADS CAN BE EASILY SHAPED AND EVEN COILED
- USER-FRIENDLY: ELECTRICALLY HEIGHT-ADJUSTABLE THUS MAKING THE MOVEMENTS OF THE OPERATOR ERGONOMIC AND FASTER
- EASY TO HANDLE: INTUITIVE TOUCH SCREEN TO STORE OPERATING MODI
- VARIABLE: MACHINE PROCESSES SINGLE AND DOUBLE-PLY PAPER GRADES AS WELL AS KRAFT, RECYCLING AND GRASS PAPER



PAPERplus® Classic

PAPERplus® Classic²





PAPERPLUS® Classic CX MEANS SAFE, FAST AND EFFICIENT PACKAGING.

PAPERplus® Classic CX from Storopack produces robust yet flexible paper cushions, which adapt to the shape of the shipping goods, providing optimum protection even for heavy goods within the box. They fill voids, are suitable for wrapping/cushioning products, and to block and brace shipping goods within the box.

Thanks to perforated paper, the individual cushions can be easily separated from each other, meaning that the machine does not need a blade. As such, users benefit from safe and ergonomic workflows. In addition, the operator can choose between three different speeds and various padding properties to further increase packing comfort. The PAPERplus® Classic CX is very fast and can be integrated easily in any packing station due to its compact design.

The paper consumable can be delivered via pallet which enables extremely long usage periods. If all the paper has been used up, the system can be reloaded in just a few simple steps. Thanks to the quick and easy feeding of the continuous paper, the machine is immediately ready for use again.



THE BENEFITS OF PAPERplus® Classic CX

- SAFE: BLADE-FREE TECHNOLOGY THANKS TO PERFORATED PAPER
- ► FAST: PRODUCES PAPER CUSHIONS IN A MATTER OF SECONDS
- ► CONVENIENT: USER CAN CHOOSE BETWEEN THREE DIFFERENT SPEEDS
- EFFICIENT: PAPER CAN BE REPLACED IN JUST A FEW STEPS
- COMPACT: THANKS TO A SPACE-SAVING DESIGN, IT CAN BE OPTIMALLY INCORPORATED WITHIN EXISTING PACKING LINES
- FLEXIBLE: A CHOICE OF MODES TO REFLECT DIFFERENT PAPER CUSHIONING NEEDS
- PRACTICAL: SUITABLE FOR PACKAGES FROM MEDIUM TO LARGE
- VARIABLE: PAPER CUSHION VOLUME CAN BE INDIVIDUALLY ADJUSTED DEPENDING ON THE ITEMS BEING SHIPPED



PAPERplus® Classic CX Floor Stand Model

PAPERplus® Classic CX product video: www.storopack.com/paperplus-classiccx-video



PAPERPLUS® Track OFFERS ULTRA-HIGH SPEED FOR THE IDEAL PROTECTIVE PACKAGING.

With the PAPERplus® Track paper cushion system, you're well equipped to ensure high throughput and secure packaging material: the machine produces paper cushion in mere seconds directly at the packing station, delivering highly effective padding despite limited use of material. Thanks to the sturdy padding, the system is ideal for medium to large packages – the perfect solution for shipping spare parts, electronic components, ceramics, and more. PAPERplus® Track is compact in size and, like all other Storopack padding systems, can also be integrated into existing distribution lines.

As a result, PAPERplus® Track guarantees optimal packing processes and reduces process costs. Especially user-friendly: perforated paper makes it possible to separate the paper cushion without a blade and with a single motion. Users also benefit from greater flexibility – the volume of paper cushion can be adjusted specifically for every product. Another advantage: the machine features a touchscreen and can be operated online using a smartphone or tablet.

THE BENEFITS OF PAPERplus® Track

- FAST: MORE PAPER CUSHIONS THE MOMENT THEY ARE REMOVED THANKS TO ON-DEMAND FUNCTION
- FORWARD-LOOKING: FEATURES A INTUITIVE TOUCH SCREEN AND CAN BE CONTROLLED VIA SMARTPHONE OR TABLET
- UNTIRING: LOW-MAINTENANCE MACHINE WITH FAST AND EASY PAPER LOADING
- ADJUSTABLE: ADJUSTABLE DENSITY MAKING IT SUITABLE FOR A WIDE RANGE OF APPLICATIONS
- ► USER-FRIENDLY: PERFORATED PAPER ALLOWS THE PAPER CUSHIONS TO BE MECHANICALLY SEPARATED EASILY WITHOUT A CUTTING MECHANISM FOR INCREASED OPERATING SAFETY
- ▶ INTEGRATABLE: CAN EASILY BE INTEGRATED INTO EXISTING PACKING PROCESSES DUE TO COMPACT DESIGN



PAPERplus® Track

PAPERplus® Track product video: www.storopack.com/paperplus-track-video



PAPERplus® Chevron OFFERS

MAXIMUM FILL WITH LESS MATERIAL.

PAPERplus® Chevron delivers maximum fill with less material. The unique paper cushion system produces crinkled paper tubes that are large in volume and offer exceptional shock absorption. Very little paper is required to fill void in the package, and will block and brace light to medium-weight shipping goods in the carton.

The high-quality paper cushioning is flexible, malleable

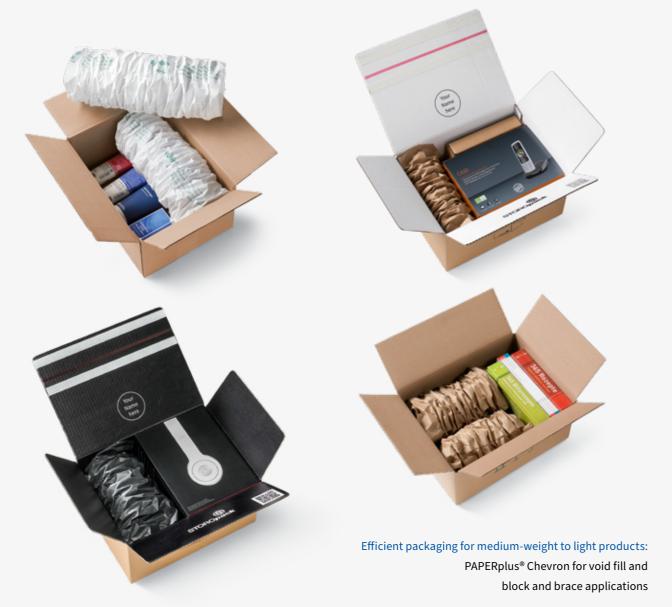
and, due to perforation, very easy to separate manually.

PAPERplus® Chevron is available in a variety of versions, including free-standing and tabletop models, and can be easily integrated into existing packing processes.

Storopack customers can choose between brown, black and white paper.

THE BENEFITS OF PAPERplus® Chevron

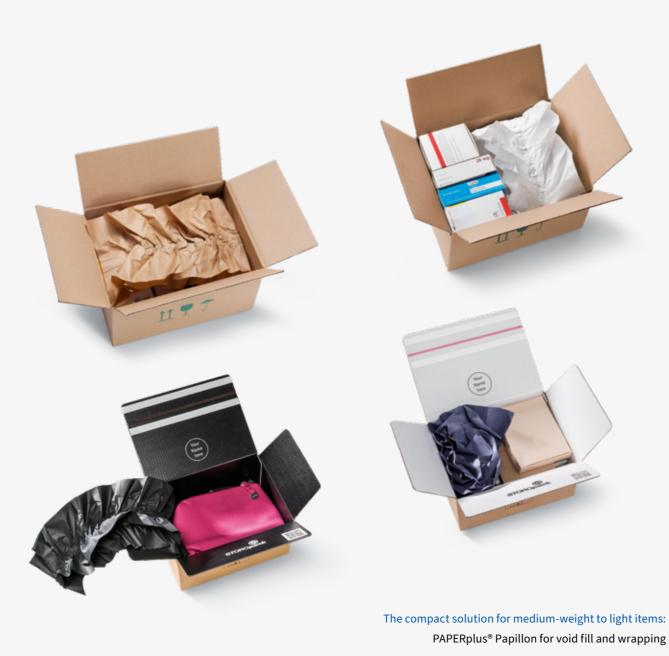
- ► EFFICIENT: FAST TOP FILL WITH LITTLE PAPER REQUIRED
- ▶ FAST: MORE PAPER CUSHIONS THE MOMENT THEY ARE REMOVED THANKS TO ON-DEMAND FUNCTION
- ► ECONOMICAL: USES ONLY A SMALL AMOUNT OF PAPER PADDING TO FILL A PACKAGE
- INTEGRATABLE: CAN EASILY BE INTEGRATED INTO EXISTING PACKING PROCESSES
- ▶ USER-FRIENDLY: SIMPLE-TO-USE MULTIFUNCTIONAL CONTROL PANEL FOR EFFICIENT WORKING
- UNIQUE: TUBULAR CUSHIONS REINFORCED WITH RIDGES FOR ADDITIONAL STIFFNESS





PAPERplus® Chevron³





PAPERPLUS® Papillon MEANS OPTIMAL PROTECTION FOR SMALL AND MEDIUM-SIZED SHIPPING GOODS.

Thanks to its special, patented shape, the paper cushioning of the PAPERplus® Papillon system offers optimal protection for small and medium-sized shipping goods. It's suitable for filling voids and wrapping products, boasts large volume at a low weight, and is especially soft and flexible.

Available in a variety of models, the PAPERplus® Papillon machine is simple to adapt to the specific needs of our customers.

Three operating modes also simplify on-demand production of paper cushioning directly at the packing station, while the system itself features a compact, space-saving design. A silo and a single PAPERplus® Papillon can supply multiple packing stations with cushioning at the same time. The paper used by PAPERplus® Papillon to create paper cushioning is available in brown and several other colors.

THE BENEFITS OF PAPERplus® Papillon

- USER-FRIENDLY: EASY TO OPERATE
- SMALL: REQUIRES ONLY A SMALL FOOTPRINT, IS LIGHT AND CAN EVEN BE HAND-CARRIED
- ► INTEGRATABLE: EASY INTEGRATION WITH MULTIPLE SETUPS
- ▶ VERSATILE: AUTOMATIC, ON-DEMAND AND FOOT-PEDAL MODE AVAILABLE
- ADAPTABLE: QUICKLY ADAPTS TO THE PRODUCTS IN THE BOX DUE TO SNUGLY AND LIGHT PADS
- ► ELEGANT: UNIQUE SHAPE FOR SPECIAL UNBOXING EXPERIENCE







PAPERplus® Papillon Floor Stand Model

23

PAPERplus® Papillon product video: www.storopack.com/paperplus-papillon-video



PAPERplus® Dragonfly MEANS INNOVATIVE AND FLUFFY VOID FILLING.

Based on the technology of the popular PAPERplus® Papillon machine, PAPERplus® Dragonfly is designed for fast and efficient void filling. Adjustable to three different speeds to suit the operators' packing comfort, PAPERplus® Dragonfly produces between 50 and 60 meters of extra wide crimped paper pads per minute, rapidly filling the box to hold down and secure the shipping goods. It's the only machine on the packaging

market with a Variable Cushion Density Feature to create fluffy paper pads with adjustable volume as needed. This allows for an optimal pack integrity in medium to large parcels weighing between approximately five and ten kilograms. Like PAPERplus® Papillon, Dragonfly is very safe to operate: no cutting system, but sophisticated gears separate the paper.

Fluffy packaging for medium to light-weight products: PAPERplus® Dragonfly for void fill and wrapping

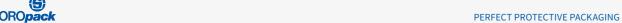
THE BENEFITS OF PAPERplus® Dragonfly

- ► COMPACT: BOASTS COMPACT ASSEMBLY DIMENSIONS
- ▶ VARIABLE: THE VOLUME OF THE PAPER PADS CAN BE ADJUSTED
- FAST: PRODUCES PAPER PADS AT UP TO 60 METERS PER MINUTE AT THREE SPEED SETTINGS
- FLEXIBLE: CAN BE INCORPORATED INTO EXISTING PROCESSES
- VERSATILE: PADS ARE SUITABLE FOR FILLING VOIDS AND WRAPPING SHIPPING GOODS
- ▶ ROBUST: SUITABLE FOR LARGE AND MEDIUM-SIZED PARCELS WEIGHING BETWEEN FIVE AND TEN KILOGRAMS
- SAFE: BLADELESS SYSTEM



PAPERplus® Dragonfly Floor Stand Model

PAPERplus® Dragonfly: www.storopack.com/paperplus-dragonfly-video



PAPERPlus® BROCHURE

PAPERplus® Shooter IS MULTI-LAYER PAPER CUSHIONING AT MAXIMUM SPEED.

The PAPERplus® Shooter transforms single-layer kraft paper into multi-layer paper cushioning at maximum speeds, which you can use to fill cartons and block and brace products. The PAPERplus® Shooter can produce up to 160 meters of paper cushioning a minute.

The system is available as a free-standing or tabletop

model, both of which are exceptionally easy to use:

they're compact in size with an adjustable height and boast a rotating head and an automatic cutting device. The speed can be infinitely adjusted as required. Our customers can also integrate the PAPERplus® Shooter into existing packing processes with the greatest of ease, and produce paper cushioning directly at the packing station.

The user-friendly and fast solution for light goods: PAPERplus® Shooter for void fill

THE BENEFITS OF PAPERplus® Shooter

- EFFICIENT: PRODUCES MULTI-PLY FILLING MATERIAL FROM A SINGLE-PLY PAPER
- ▶ USER-FRIENDLY: SPEED INFINITELY ADJUSTABLE TO LEVEL OF COMFORT OF THE USER
- CONVENIENT: NO PAPER JAMS EVEN AT HIGH FEED RATES
- ERGONOMIC: HEIGHT-ADJUSTABLE MACHINE, SWIVEL HEAD
- EFFORTLESS: FLAT CUSHIONING STRIP FLUFFS OUT AND ALMOST AUTOMATICALLY SPREADS ITSELF OVER THE GOODS, ENABLING A FAST PACKAGING PROCESS
- ▶ SUSTAINABLE: PAPER MADE FROM 100% RECYCLED PAPER



PAPERplus® Shooter³ Floor Stand Model





SUSTAINABILITY MEANS
THINKING ABOUT TOMORROW,
TODAY.



Sustainability encompasses many aspects. Whether environmental, economic, or social issues, the underlying principle is the same, i.e. to live in a way that enables future generations to have a life that is just as good as – or even better than – our own. As a family-run company, we take these principles extremely seriously.

New, more sustainable raw materials are a great way to protect the environment and natural resources.

Therefore, our product-development experts are increasingly using suitable eco-friendly and sustainable materials for our products.

PAPERplus® Classic Grass

- CONSISTS OF GRASS FIBERS AND RECYCLING PAPER
- ► CAN BE FULLY RECYCLED OR COMPOSTED
- OFFERS THE SAME OUTSTANDING PROTECTIVE PACKAGING PROPERTIES AS OTHER Storopack PAPER TYPES
- USES FAR LESS WATER AND ENERGY DURING PRODUCTION THAN WOOD FIBERS





PAPERplus® RECYCLING PAPER

- ► IS MADE FROM 100% RECYCLED MATERIAL
- CAN BE COMPLETELY RECYCLED
- PROTECTS PRODUCTS RELIABLY THANKS
 TO THE SIMILAR PACKAGING PROPERTIES AS
 CONVENTIONAL KRAFT PAPER
- AVAILABLE IN SEVERAL COLORS

REDUCE

 Storopack supplies paper with recycled constituents. This means an efficient use of the recycling loop.

REUSE

Because of the outstanding quality of PAPERplus®, the paper padding can be used many times.

RECYCLE

- PAPERplus® paper padding is part of the paper recycling loop and is fully recyclable. Disposal via existing recycling facilities contributes to reducing the use of primary raw materials.
- PAPERplus® uses inks which the recycler can easily remove (de-inking process).

RENEW

PAPERplus® paper padding consist of paper made from wood or grass.

More about Sustainablity at Storopack: www.storopack.com/sustainability

PAPERplus® BROCHURE







Mail-order pharmacies deliver medication quickly and directly to customers' homes. One such company is BS Apotheken OHG, based in the Lower Saxony town of Bad Laer in Germany. BS Apotheken OHG required an efficient protective packaging solution to enable it to dispatch orders of medical and cosmetic products to a total of around 1.6 million customers. In conjunction with BS Apotheken OHG and the external operator of the logistics center, arvato, Storopack developed an individual solution: PAPERplus® Chevron padding is produced fully automatically and the machine is integrated by means of a driven roller conveyor system. When paper padding is required to secure a packaged product firmly in place, PAPERplus® Chevron produces it directly in the box. The box is then sealed and labelled.

With the fully automated packaging line the packages are quickly ready for shipping and the medical and cosmetic products are perfectly padded and secured in place within the box. Packaging performance is between 10 and 12 boxes per minute. Thanks to full automation the packaging process runs continuously without any breaks, allowing approximately 10,000 boxes to leave the logistics center daily.

▶ Video: www.storopack.com/arvato



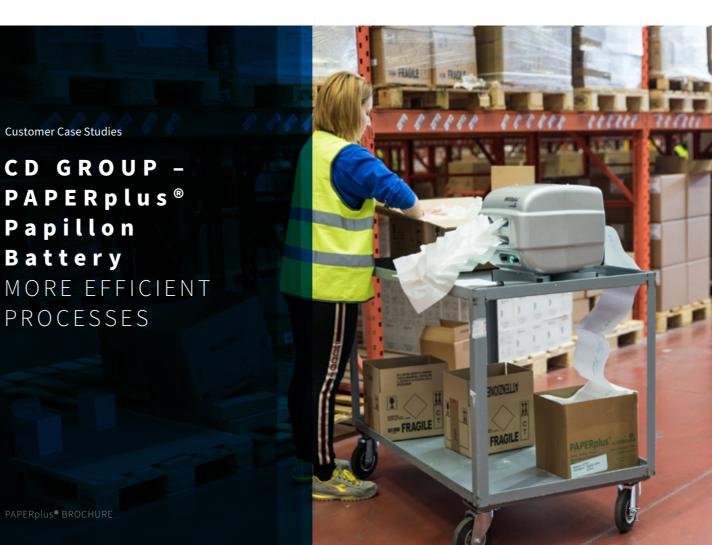
Storopack has been working with the service provider for a few years now. In order to keep up in the everchanging market of e-commerce, CD Group has to be able to provide a flexible, customizable and especially fast service to its customers. To improve its competitiveness CD Group wanted to modernize their packaging system.

At the Liscate location, CD Group now uses PAPERplus® Papillon Battery machines on tables with wheels. Equipped with long lasting operating batteries, the machines on tables represent a mobile solution, allowing employees to pack directly in the warehouse. The company also sets great store in sustainable solutions which is why PAPERplus® Papillon white a paper made from recycled material is now used. In addition, white paper makes for a great unboxing experience.



















If you would like to obtain additional information or speak to us directly, please feel free to get in touch with us. At Storopack we are happy to help.

Storopack Deutschland GmbH + Co. KG

Untere Rietstrasse 30 72555 Metzingen Germany

Africa & Middle East +49 7123 164-0 Asia-Pacific +852 3421 2392 +800 7867 6722 Europe North America +1 800 827 7225 South America +55 11 5677 4699

info@storopack.com www.storopack.com

© 2020 Storopack Hans Reichenecker GmbH. All rights reserved.

