

the most sustainable pallet wrapping solution

PAPERWRAP

Powered by EW Technology and Matco International, PaperWrap introduces a new era of pallet wrapping - packing pallets without any plastic



Semiautomatic stand alone



Fully automatic stand alone



Fully automatic line integration



Recyclable | up to 62% lower CO2 emissions



Higher Pallet stability versus plastic film



Printing | branding on the paper



Patented technology



Partnership with Mondri Group



One-stop-shop | machines / services / paper



Semi automatic and **fully** automated systems



Increase of uptime versus plastic reels



- Automatic wrapping process
- Manual feeding
- Minimal space requirement
- Wrapping up to 25 pallets/h
- Paper Folding Device: best stability with lowest paper consumption
- Mondi Paper | up to 62% lower carbon footprint
- Higher pallet stability during pallet transport

SPECIFICATIONS


Capacity
(pallets/hour)
10 - 25


Max. reel weight
(kg)
35


Max. reel diameter
(mm)
350


Paper width
(mm)
490


Wrapping operations
until reel change
30-60


Paper loading
system
none


Max. pallet
length/width
1250/1250

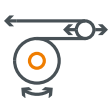

Max. wrapping height
(mm)
2000/2500


Max. pallet
weight
1500


Remote Maintenance
System
yes

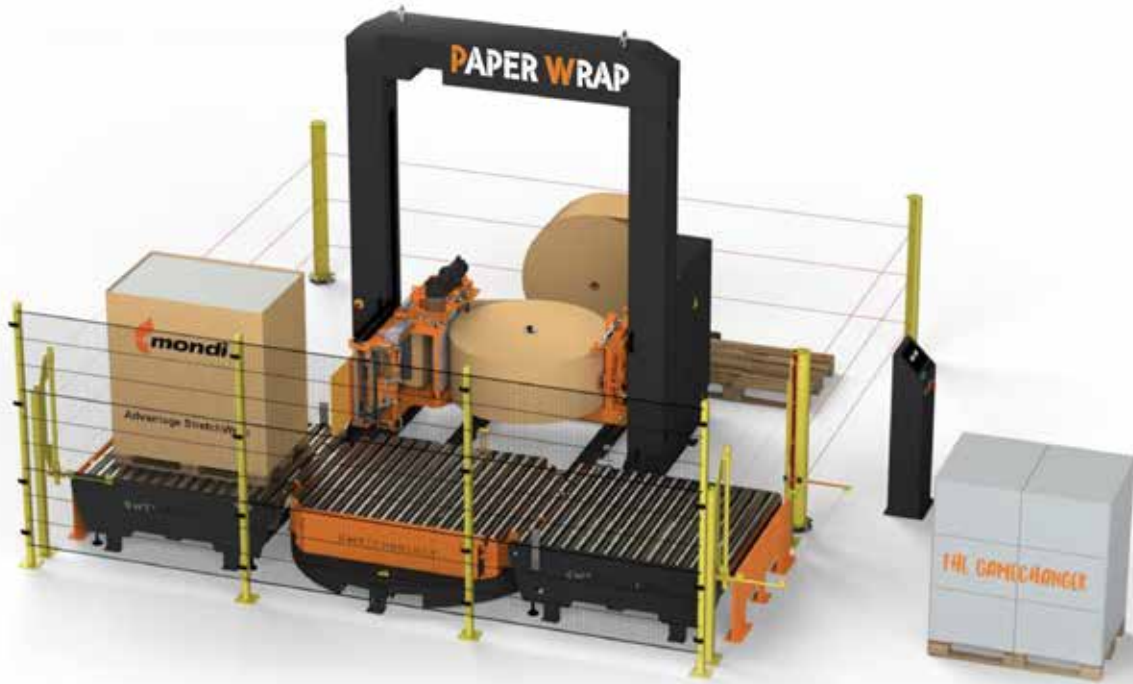

Folding
Device
yes


Tilting
Carriage
yes


Electronic Tension
Control
yes


Automatic glueing
system
yes


Integrated Printing
System
no



- Automatic wrapping process
- Automatic feeding (in/out)
- Wrapping up to 40 pallets/h
- Option for integrated printing system
- Able to handle Jumbo Reels
- Paper Folding Device: best stability with lowest paper consumption
- Mondi Paper | up to 62% lower carbon footprint
- Higher pallet stability during pallet transport

 Capacity (pallets/hour) 20-40	 Max. reel weight (kg) 450	 Max. reel diameter (mm) 1200	 Paper width (mm) 490	 Wrapping operations until reel change 375-750
 Paper loading system manual loading trolley	 Max. pallet length/width 1600/1300	 Max. wrapping height (mm) 2000/2800	 Max. pallet weight 2000	 Remote Maintenance System yes
 Folding Device yes	 Tilting Carriage yes	 Electronic Tension Control yes	 Automatic glueing system yes	 Integrated Printing System yes



- Automatic wrapping process
- Automatic pallet transport
- Wrapping up to 70 pallets/h
- Different Equipment and Add-ons available (see below)
- Fully automated end-of-line packaging
- Able to handle Jumbo Reels
- Extensive range of conveyors
- Paper Folding Device: best stability with lowest paper consumption
- Mondi Paper | up to 62% lower carbon footprint
- Higher pallet stability during pallet transport

1 PaperWrap
Fully automatic pallet wrapping machine for paper

2 PaperTop
Fully automatic PaperTop sheet dispenser (requires downholder with folding arms)

3 Downholder
With or without folding arms for topsheet

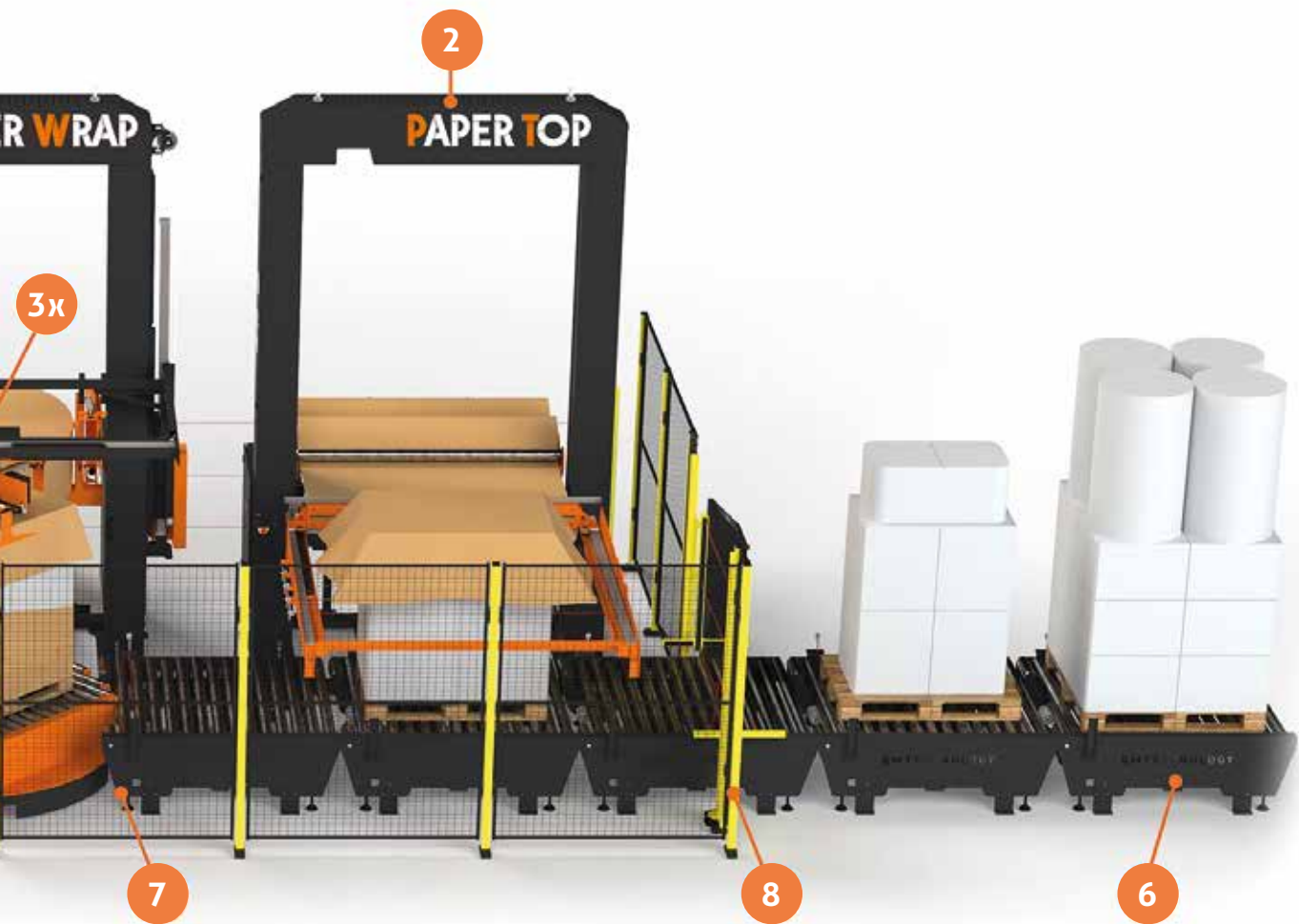
4 Integrated printing system
For individual pallet labelling (labels, logos, QR- and barcodes)

5 Pallet labelling system
For 1, 2 or 3-side labelling

6 Conveying technology
For inlet, outlet and customized layouts

7 Weighing technology
Integrated into pallet conveyor

8 Safety equipment
Fences, light curtains and muting systems (standard or customized layout)



Capacity
(pallets/hour)
50-70



Max. reel weight
(kg)
450



Max. reel diameter
(mm)
1200



Paper width
(mm)
490



Wrapping operations
until reel change
375-750



Paper loading
system
manual loading trolley



Max. pallet
length/width
1600/1300



Max. wrapping height
(mm)
2000/2800



Max. pallet
weight
2000



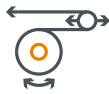
Remote Maintenance
System
yes



Folding
Device
yes



Tilting
Carriage
yes



Electronic Tension
Control
yes



Automatic glueing
system
yes



Integrated Printing
System
yes

SPECIFICATIONS



- Fully automatic PaperTop sheet dispenser
- Requires down holder with folding arms
- Capacity: up to 70 pallets/h
- Adjustable paper pull-out length
- Flexible for paper widths up to 1800 mm
- Fully covered, even at the top
- Best protection
- Mondi Paper | up to 62% lower carbon footprint
- Higher pallet stability during pallet transport

SPECIFICATIONS


Capacity
(pallets/hour)
50 - 70


Max. reel weight
(kg)
100


Max. reel diameter
(mm)
300


Max. paper width
(mm)
1800


Operations until
reel change
375 - 550


Paper loading
system
yes


Max. pallet
length/width
1600/1300


Max. pallet height
(mm)
2000/2800


Max. pallet
weight
2000


Remote Maintenance
System
yes



Add-on for PaperWrap fully automatic

Down Holder available with or without folding Arms for PaperTop sheet dispenser

With folding arms:

- Higher pallet stability during wrapping cycle
- Adjustable pressing force
- Holds the cover sheet on the pallet in place
- Folds the cover sheet down along the edges of the pallet
- For a perfect closure also from the top
- Requires PaperTop sheet dispenser
- With driven downholder head
- Complete mass balancing with counterweights for maximum energy efficiency
- With horizontal stroke to support the pallet while conveying out

Without folding arms:

- Higher pallet stability during wrapping cycle
- Adjustable pressing force
- For the stabilization of light and unstable pallets
- Increasing speed and capacity for unstable loads
- Complete mass balancing with counterweights for maximum energy efficiency
- With horizontal stroke to support the pallet while conveying out

**Add-on for PaperWrap fully automatic**

- For individual pallet labelling (Label, Logos, QR- and Barcodes)
- Available with 1 / 2 / 3 print heads and 108 / 216 / 324 mm max. print height
- Capacity: up to 70 pallets/h
- Very process-safe piezo inkjet with ink tank recirculating ink system
- Cost savings for pallet labelling
- Very dark and intense print
- Connection to ERP system possible for exchange of pallets individual print data
- No cartridges
- Monochrome (standard) or optionally bicolor





Add-on for PaperWrap fully automatic

- Compact and robust 3-sided labeller
- Thermal transfer or direct thermal print
- Up to 600 dpi printing resolution
- Available for 1,2 or 3 side pallet labelling
- Only 2 pallet stop positions are required for 3-sided labelling
- Processing of large label rolls with a diameter of 350 mm
- Spring-loaded dispensing pad for pressing on the label
- Developed for round-the-clock use
- Preparation for scanners on the dispensing stamp for verification
- Print module technology from leading global manufacturers is used
- Standard label size: 150 x 210 mm (GS1); other sizes on request
- Capacity: 90 pallets/h with 3 sided labelling
- Lifting axis for label height adjustment optional available





- Standard or customized conveyor technology
- Robust and long-life construction
- Frequency-controlled version available for different conveying speeds
- Standard conveyor width 1365 mm; others available on request
- Standard conveying height 500 mm; others available on request
- Maximum pallet weight 1500/2000 kg
- Incl. light barrier sensors for control
- Various conveying layouts





Add-on for PaperWrap Fully Automatic Wrapper

- For automatic weighing of the pallet
- Weighing technology built into pallet conveyor
- Very high accuracy +/- 0.5 kg
- The measured pallet weight can be printed on the pallet or transferred to the production data management system via an interface



- Fences, safety doors, light curtains and muting systems
- Individual for all machine variants
- As standard layout or for customized security area
- Highest level safety in the smallest possible space



FURNITURE INDUSTRY, HUNGARY



PaperWrap fully automatic line integration

3-head printing system, enables to print clear messages, company logos, pallet labels and QR codes on the pallets. Maximum print height 324 mm. Highly visible messages and guaranteed attention. In addition, a hold-down device so that even very light and small pallets can be wrapped. Outputs of up to 70 pallets per hour.



ELECTRONIC INDUSTRY, GERMANY

PaperWrap fully automatic line integration | PaperTop | Down Holder | folding Arms for Top Sheet

Pallets fully covered; also from above! The cover sheet is applied one station upwards and then held in position by a hold-down device with integrated folding arms and folded downwards along the pallet edges. The weight of the pallets is recorded directly in the conveyor technology and transmitted to the customer's ERP system and then printed on the pallet label.



WAREHOUSE & LOGISTICS, GERMANY



PaperWrap fully automatic line integration | PaperTop | Down Holder | folding Arms for Top Sheet

The PaperWrap machines are also the right way to replace single-use plastic and reduce the CO2 footprint in warehouses and logistics. In this case with a fully automatic line integration in a 90° arrangement. The available space is ideally utilized.



OFFICE SUPPLIES DISTRIBUTOR THE NETHERLANDS

PaperWrap fully automatic line integration

Mixed pallets are wrapped on a fully automatic line with pallet lifts, allowing Kangaroo to use standard hand pallet trucks without forklifts. With its strong sustainability goals and focus on paper products, PaperWrap is a perfect fit.





MONDI

Sustainable by design – Let's paper the world

Mondi Group is a global leader in sustainable packaging and paper, active in over 30 countries. As PaperWrap's trusted partner for premium kraft paper, Mondi combines innovation with circular solutions to help businesses wrap, protect and present their products responsibly while reducing environmental impact.

BRANGS+HEINRICH

Packaging, protecting, securing - since 1875

With 150 years of experience, Brangs+Heinrich delivers first-class packaging solutions across Europe. Their regional presence and commitment to sustainability make them the ideal partner for PaperWrap in Germany and the Benelux.

**Brangs + Heinrich****Ranpak®**

RANPAK

Advancing sustainability for the supply chain

Ranpak provides innovative, environmentally friendly packaging solutions worldwide. With over 50 years of expertise in protective packaging, PaperWrap is a perfect fit in their sustainable portfolio for USA, Canada, Mexico and Australia.

SAMSON PALLET STABILITY

Sustainable solutions for safe logistics

For more than 130 years, Samson Pallet Stability has been improving pallet safety and logistics efficiency. With their expertise in consultancy, training, and innovation, Samson Pallet Stability sees PaperWrap as a natural addition to their innovative solutions and represents PaperWrap in the UK.

**Samson
Pallet Stability**

Advantage StretchWrap

LIFE CYCLE Assessment

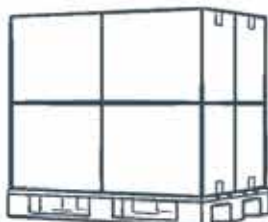
Life Cycle Assessment

LCA is a method used to assess the environmental impacts throughout a product's life cycle from raw material acquisition to production, use and end-of-life treatment, such as recycling and final disposal (i.e. cradle-to-grave).

Functional Unit

The packaging required to wrap one Euro-pallet at the customer for the transportation of goods, excluding the pallet itself, further transport or product losses. The end-of-life of the wrap is included.

The reference flows in the LCA are:



Paper-based Advantage StretchWrap: 840g per Euro-pallet



Plastic stretch film, 0% recycled content: 400g per Euro-pallet



Plastic stretch film, 50% recycled content: 400g per Euro-pallet



Plastic stretch film, 30% recycled content: 400g per Euro-pallet



Baseline scenario: both materials are recycled at the end-of-life



Impact Assessment Method:

Environmental footprint (EF) method 3.0:

This method is the impact assessment method of the Environmental Footprint initiative by the European Commission and has 16 mid-point indicators.

Advantage StretchWrap is responsible for lower impacts in these categories:



Climate change



Fossil resource use



Ionising radiation - human health



Particulate matter



Human toxicity (cancer)



Human toxicity (non-cancer)



Freshwater ecotoxicity



Acidification



Mineral and metal resource use



We evaluate each potential application of Advantage StretchWrap on a case-by-case basis



Choose the right materials for the right applications: Application and wrapping processes need to be taken into consideration for efficient wrapping



Carbon footprint:

Advantage StretchWrap has the smallest footprint



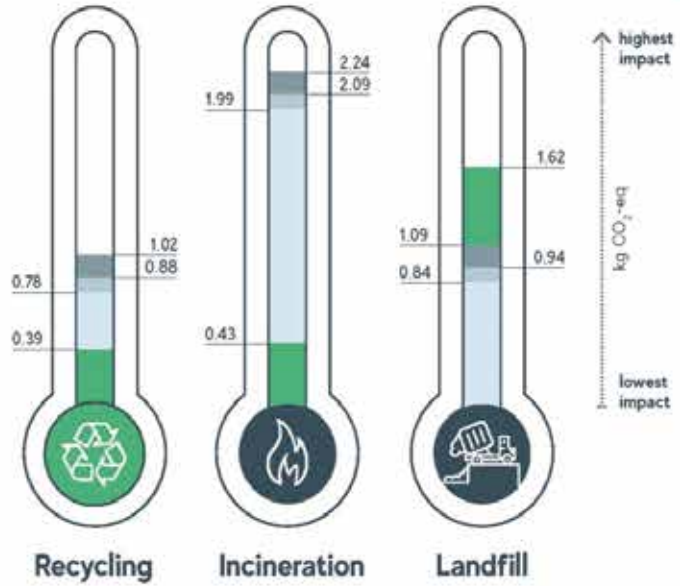
- Plastic stretch film, 0% recycled content
- Plastic stretch film, 30% recycled content
- Plastic stretch film, 50% recycled content
- Paper-based Advantage StretchWrap

This means that **Advantage StretchWrap's** carbon footprint is:



Climate Change impact across the full life cycle

based on 3 end-of-life scenarios



Recycling is the best end-of-life scenario for paper, but also for plastic.



Advantage StretchWrap can be recommended to mitigate climate change impacts



The different end-of-life scenarios have an impact on the results – recycling is the preferred option



There are impacts in other categories which need to be reduced to show an overall environmental advantage

Mondi's recommendation

Life Cycle Assessment
KEY take AWAYS

*The 16 environmental indicators of the EF method:
Climate change, Ozone depletion, Ionising radiation, Photochemical ozone formation, Particulate matter, Human toxicity (non-cancer), Human toxicity (cancer), Acidification, Freshwater eutrophication, Marine eutrophication, Freshwater ecotoxicity, Land use, Terrestrial eutrophication, Water use, Fossil resource use, Metal and mineral resource use

ADVANTAGE StretchWrap



✓ Benefits

- + Recyclable lightweight paper
- + Circular driven solution of high recycling value
- + Safe for transport (EUMOS standard)
- + Outstanding paper stretch of 11%
- + Exceptional tensile energy absorption (TEA)
- + High quality responsibly sourced Nordic fibres



End-uses

- + The new Advantage StretchWrap is a machine finished paper that replaces plastic stretch film.
- + Suitable for wrapping pallets of different dimensions including irregular shapes and underhang.

PEFC	FSC	Quality Management System	Environmental Management System	Food Safety Regulations
•	•	ISO 9001:2015	ISO 14001:2015	BFR, FDA, CONEG



Technical Data

Properties	Unit	Method	Typical values
Basis Weight	g/m ²	ISO 536	70
Thickness	µm	ISO 534	105
Tensile strength	kN/m	ISO 1924-3	MD/CD
Stretch	%	ISO 1924-3	MD/CD
Tensile Energy Absorption	J/m ²	ISO 1924-3	MD/CD
Tear strength	mN	ISO 1974	MD/CD
Cobb60	g/m ²	ISO 535	28

Issued from 01.01.2023, latest version available on www.mondigroup.com

Test conditions:
ISO 187:1990 (23 ± 1°C / RH 50 ± 2%)



SPECIALITYWORLD
by mondi



WRAPPING
by mondi

SUSTAINABLE by DESIGN

www.mondigroup.com

PAPER WRAP
GREEN BY ORANGE

PaperWrap green by orange GmbH
Keßlastraße 18
4722 Peuerbach, Austria
www.paperwrap.com

✉ INFO@PAPERWRAP.COM