

PRINTING TECHNOLOGY & INNOVATION DAYS FOR FLEXIBLE PACKAGING

Kuala Lumpur, Malaysia, November 20-21, 2019



COMMON STATEMENT: IMAGE TO PRINT PARTNERS

janoschka

nordmeccanica
group



SIEGWERK



WINDMÖLLER & HÖLSCHER



ROSSINI

« we as partners want to share our thoughts, together with you, our customers, to contribute all together to overall improvements to our industry... »



The World is changing...
and **so do we!**



Printing exists
since more than 500 years...

Printing has been
a major factor
for changes in this world...



Johannes Gutenberg
1408 - 1468



**We don't want to look back 500 years –
but what has changed in our Industry over the past Years?**





FOOD FOR THE WHOLE WORLD – FLEXIBLE PACKAGING CAN MANAGE THAT

Image to Print 2019 – Common Statement

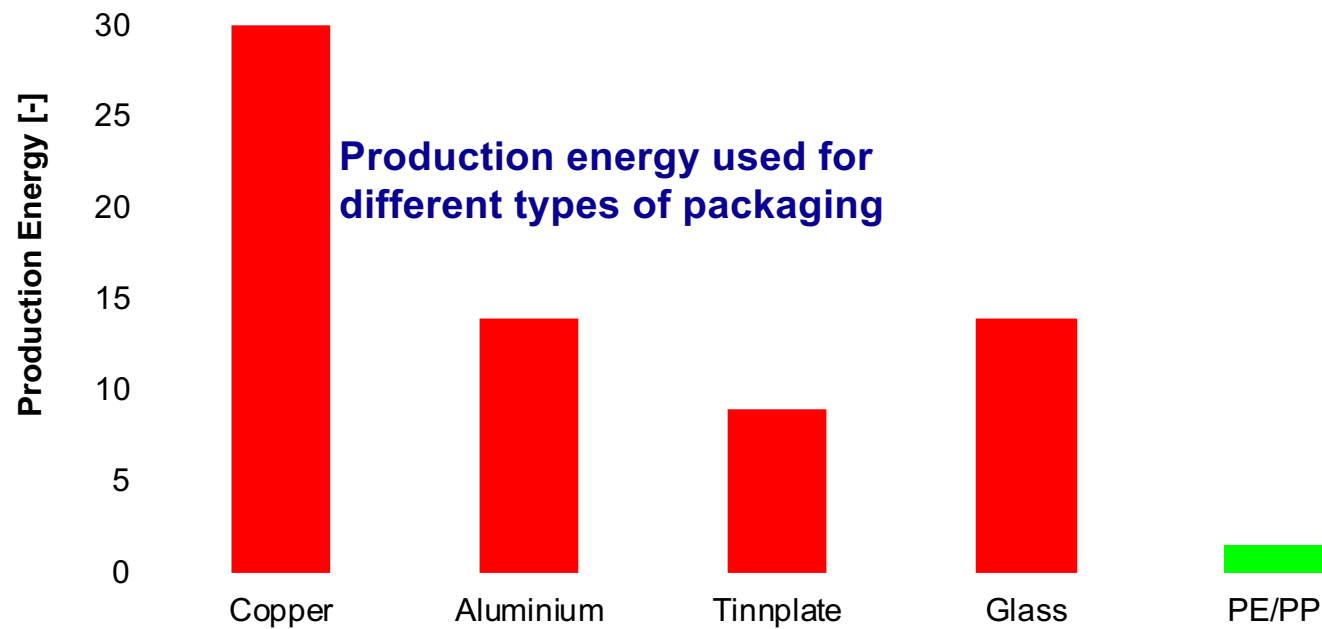
A man and a woman are walking through a supermarket aisle, looking at products on the shelves. The woman is in the foreground, wearing a yellow cardigan over a dark top. The man is slightly behind her, wearing a plaid shirt over a white t-shirt and glasses. The entire image has a blue overlay.

**FLEXIBLE PACKAGING IS SUSTAINABLE
AND SHOWS TOP PERFORMANCE FOR THE
ENVIRONMENT, PEOPLE AND INDUSTRY**

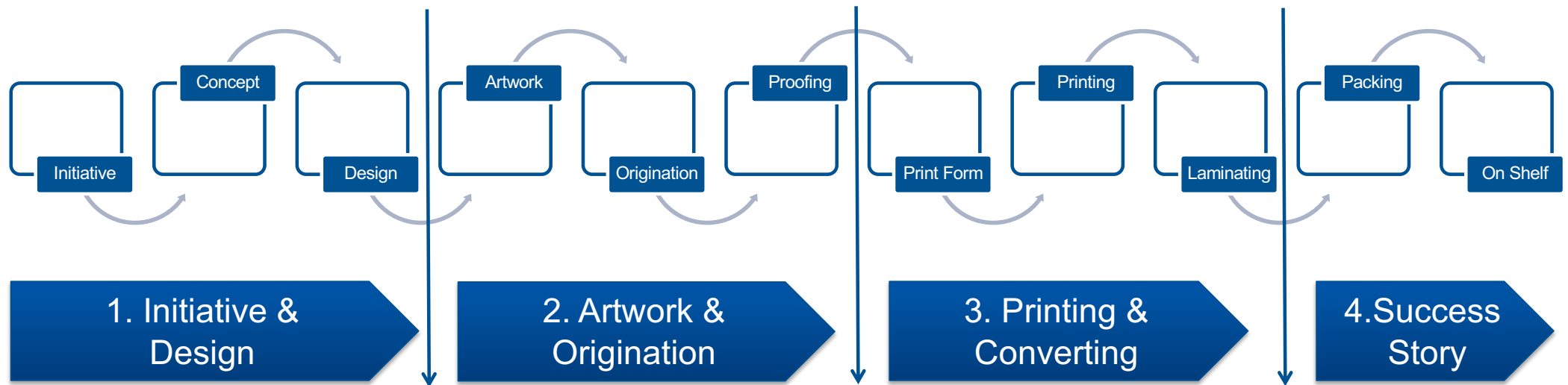
Main advantages of flexible packaging:



- less weight
- less production energy
- less emissions at production, distribution and disposal



THE GRAPHIC SUPPLY CHAIN – the Entire Process has to be Environmental-friendly



janoschka






SIEGWERT



WINDMÖLLER & HÖLSCHER

Sustainable: Responsibility for Employees and the Environment



-  as a symbol for innovative sustainability in all segments
- Fostering resource-saving production in our own manufacturing plants
- Machine innovations to support resource- saving by our customers
- Flexible Packaging contributes to environmental protection (e.g. Save-Food-Initiative)
- Support of numerous initiatives, e.g. Blue Competence (VDMA) and  CEFLEX
- Energy efficiency of our presses in accordance with the standards of German TÜV (German Technical Inspection Association) 

Our Contribution in Flexo Press Developments ...



STARFLEX 1990

(Equal Job,
20.000 meters)



MIRAFLEX M 2018

■ Total production time:	156 min	106 min	- 32%
■ Energy consumption:	383 kWh	205 kWh	- 47%
■ Total waste:	1720 m	480 m	- 72%
■ Waste of ink:	21,5 kg	7,3 kg	- 66%
■ Solvent consumption:	60 ltrs.	38 ltrs.	- 37%



Our Contribution in Rotogravure Press Developments



MERKUR HELIOSTAR 1990

(Equal Job,
30.000 meters)



HELIOSTAR S 2018

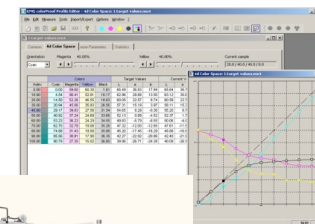
■ Production time:	130 min.	85 min.	- 35 %
■ Energy consumption:	450 kWh	260 kWh	- 42 %
■ Waste of substrate:	1120 m	320 m	- 71 %
■ Waste of ink:	14,9 kg	7,5 kg	- 49 %



Pre-Press Developments

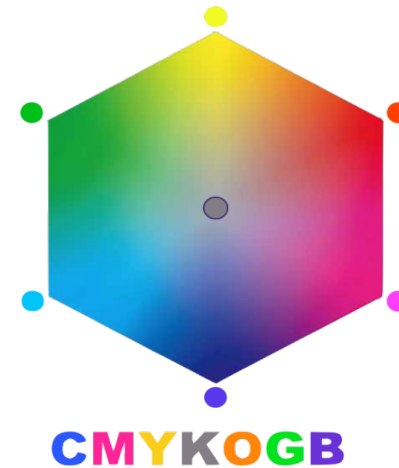
By applying **PCM** (Print Color Management) in the pre-press stage, color matching times on press have been reduced significantly.

This means less **waste** and less **cost**!



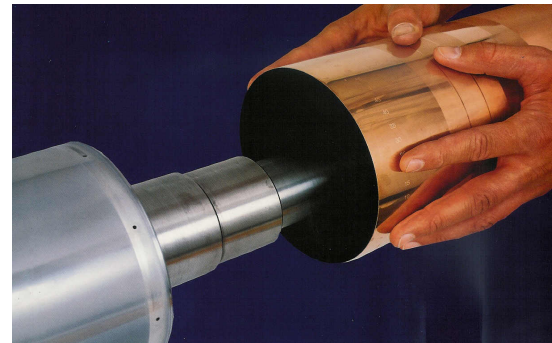
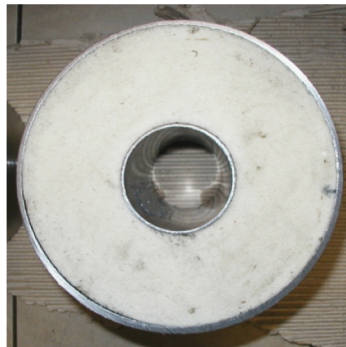
Multi-Color Process

- less ink storage (Spot Colors)
- no ink changes
- faster job changes and set-up times
- print multiple jobs at the same time
- reduced cost



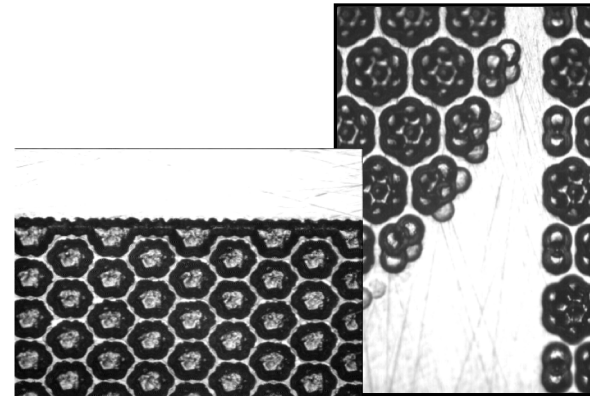
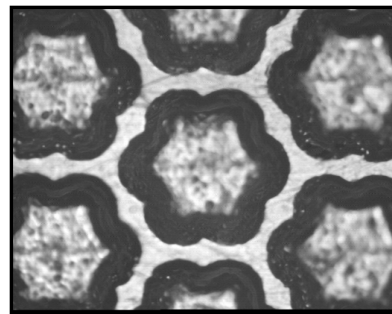
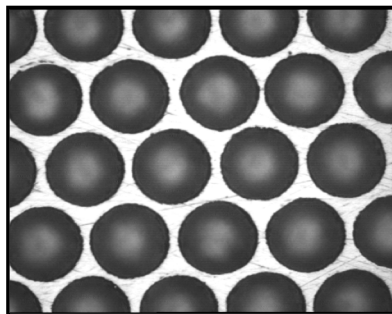
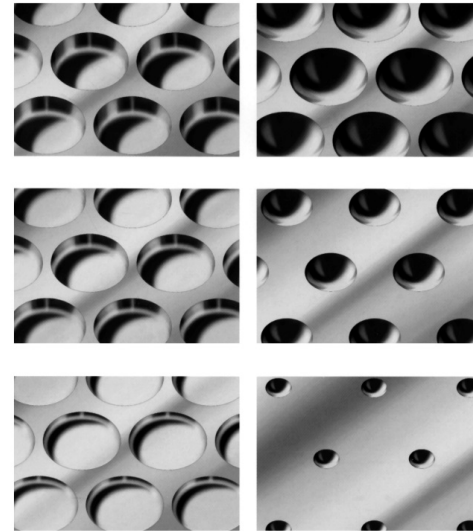
Light Weight Solutions for bases and Sleeves

- easier **handling**
- reduced **set-up times**
- reduced **storage costs**
- reduced **transport costs**



Developments such as **Laser-Engraving**

- **faster** engraving time
- higher **quality** and higher **definition**
- better **printability** and **ink transfer**
- **less** ink-consumption
- **reduced** waste



SUSTAINABILITY & RESPONSIBILITY

- A responsible approach to nature and humankind is a natural part of our corporate culture.
- Protect the health and the safety of our employees.
- Care for the use & handling of chemical products and treatment of all industrial waste.
- Production sites close to the printing plants in order to reduce time, transport cost and energy.

Sustainable processes



Sustainable sourcing: how to avoid risks in the supply chain

- **Qualification:** Siegwerk's suppliers must fulfill **economic, social and ecological standards**. This is ensured by means of a strict selection process.
- **Control:** We thoroughly scrutinize suppliers using our own **audits**.



- All **raw materials** used are non-toxic and meet Siegwerk's stringent internal standards, which go beyond legal requirements.
- Our **Formulation Guidelines** ensure packaging printing inks that are **safe for the consumer** and **minimally polluting for the environment**.
- This applies in particular to applications on **food, pharmaceutical, personal care and tobacco packaging**.



Sustainable development of printing inks



Solutions for a better future



UniXYL - 2nd generation
bio-based inks
No competition with food



Low-migration UV Flexo series
especially developed for **food**
packaging applications



Wastebuster Project: Feeding – Recycling – Education
Distribution of **one million Futurelife**
Smartfood™ dual compartment pouches in



South Africa
EN 13432-certified ink systems
don't have any negative effect
on **compostability** of packaging

UV ink certified with the **Cradle-2-Cradle**
material health GOLD status



Inks for sustainable packaging solutions

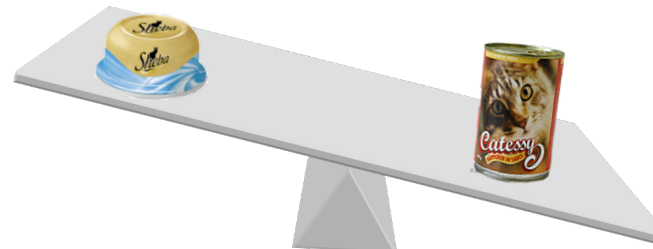


Reduction of net CO₂ emissions in transport

- Special inks for labels for PET bottles and beverage packaging made of cardboard laminates => **less weight** compared to glass bottles



- Special inks for stand-up pouches and Alu containers => **less weight** compared to tin cans



Ink solutions for a Circular Economy



Design for Less



- Inks & Coatings for Flexible Paper applications
- Functional Solutions for re-use models
- Functional layers to improve barrier properties and surface properties



Ink solutions for a Circular Economy



Design for Recycling



- PVC free inks for improved recyclability
- High performance surface print solutions on Polyolefine films
- Functional layers to improve barrier properties and surface properties



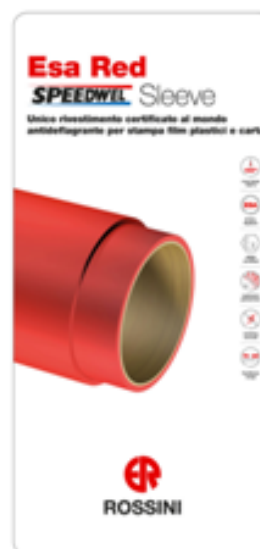
**INNOVATIVE PRODUCTS WITH LONGER LIFETIME,
HIGHER SAFETY AND LESS CONSUMPTION**



SAFETY
Automatic CI drum
cleaner (Flexo)



LONG LIFETIME
3 years warranty



SAFETY
ESAsleeve with
ATBX-certificate without
carbon black (Gravure)



**REDUCED MATERIAL
CONSUMPTION:**
Less glue required
in SL-lamination)





COMPANY FOUNDATION YEAR

M. Lino Italia	1928
M. Lino Quattro Barche	1965
Milano Macchine HEADQUARTER	1988
Mechanisch Comenlo	1988
L'Aquila Italia	1989
Cambridge UK	1990
Sofart Atlanta USA	1998
Alford France	1998
Colson de Mar Spain	2004
Shenon China	2005
San Paolo Brazil	2005
Atlanta Georgia USA	2008
Gimignano Romania	2008
Pune India	2014

WE PRODUCE SLEEVES & ROLLERS CLOSE TO OUR CUSTOMERS:
LESS TRANSPORT COSTS - BETTER SERVICE



Sales offices



Production facilities



SLEEVES & ROLLERS: SUSTAINABILITY & LESS IMPACT ON CARBON FOOTPRINT



HIGH-QUALITY
SLEEVES



STABLE PRINTING QUALITY & LESS WASTE
ALL PRODUCTS DESIGNED FOR LONG USE,
SAVING RESSOURCES

IMPROVED
FORMULAS



RUBBER COMPOUNDS CERTIFIED FOR CONTACT
WITH FOOD AND FOR MAXIMUM SAFETY

TAYLOR-MADE
MACHINERY



WASTE REDUCTION & PROCESS CONTROL
IN OUR PRODUCTION FACILITIES






OUR CONCEPT OF SUSTAINABILITY FOR A GREEN FUTURE



THE USE OF MODULAR CONCEPTS AND HIGH EFFICIENCY PARTS



- 
- **Pioneer in the solventless lamination.**
 - **10% net profit / year invested in R&D .**
 - **Daily commitment to reduce the emissions**
 - **Six sigma quality to improve and reduce the replacements.**
 - **Energy saving levels achievable through the implementation of the new concepts can reach up to 35% once compared to a low energy efficiency machines.**
 - **New engineering design to match the new friendly environment solutions**

WE BELIEVE AND WE DEVELOP A BETTER FUTURE



A large iceberg floats in a deep blue ocean under a bright blue sky with scattered white clouds. The visible tip of the iceberg is small and jagged, while the submerged portion is much larger and smooth, illustrating the concept of hidden potential or future-oriented thinking.

**We believe in the future!
We innovate and we develop technologies
for the future!**



**“We are partners,
we care for our Industry,
and our world...”**

**Thank you for being here
and thank you for your attention!**



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Kuala Lumpur, Malaysia, November 20 - 21, 2019



THANK YOU !

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