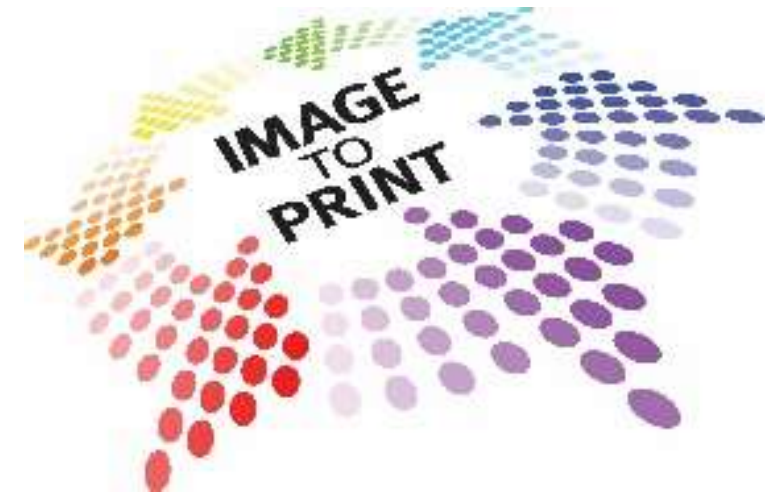


# PRINTING TECHNOLOGY & INNOVATION DAYS FOR FLEXIBLE PACKAGING

Jakarta, Indonesia, March 20-21, 2019



## COMMON STATEMENT: IMAGE TO PRINT PARTNERS

**janoschka**

*nordmeccanica*  
group



**SIEGWERT**

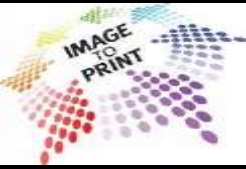


**WINDMÜLLER & HÖLSCHER**



**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?**



A photograph of a smiling woman in a crowd, overlaid with a blue tint. The woman is in the foreground, looking slightly to her left and smiling broadly. She has her hair styled in braids and is wearing a red top with a white patterned collar. In the background, other people are visible, some wearing headwraps, all slightly out of focus. The entire image has a semi-transparent blue overlay.

**FOOD FOR THE WHOLE WORLD –  
FLEXIBLE PACKAGING CAN MANAGE THAT**

A man and a woman are walking through a grocery store aisle, looking at the shelves. The woman is in the foreground, wearing a yellow cardigan over a dark top. The man is behind her, wearing a plaid shirt over a white t-shirt and glasses. They are both smiling. The background shows shelves stocked with various products. The entire image has a light blue overlay.

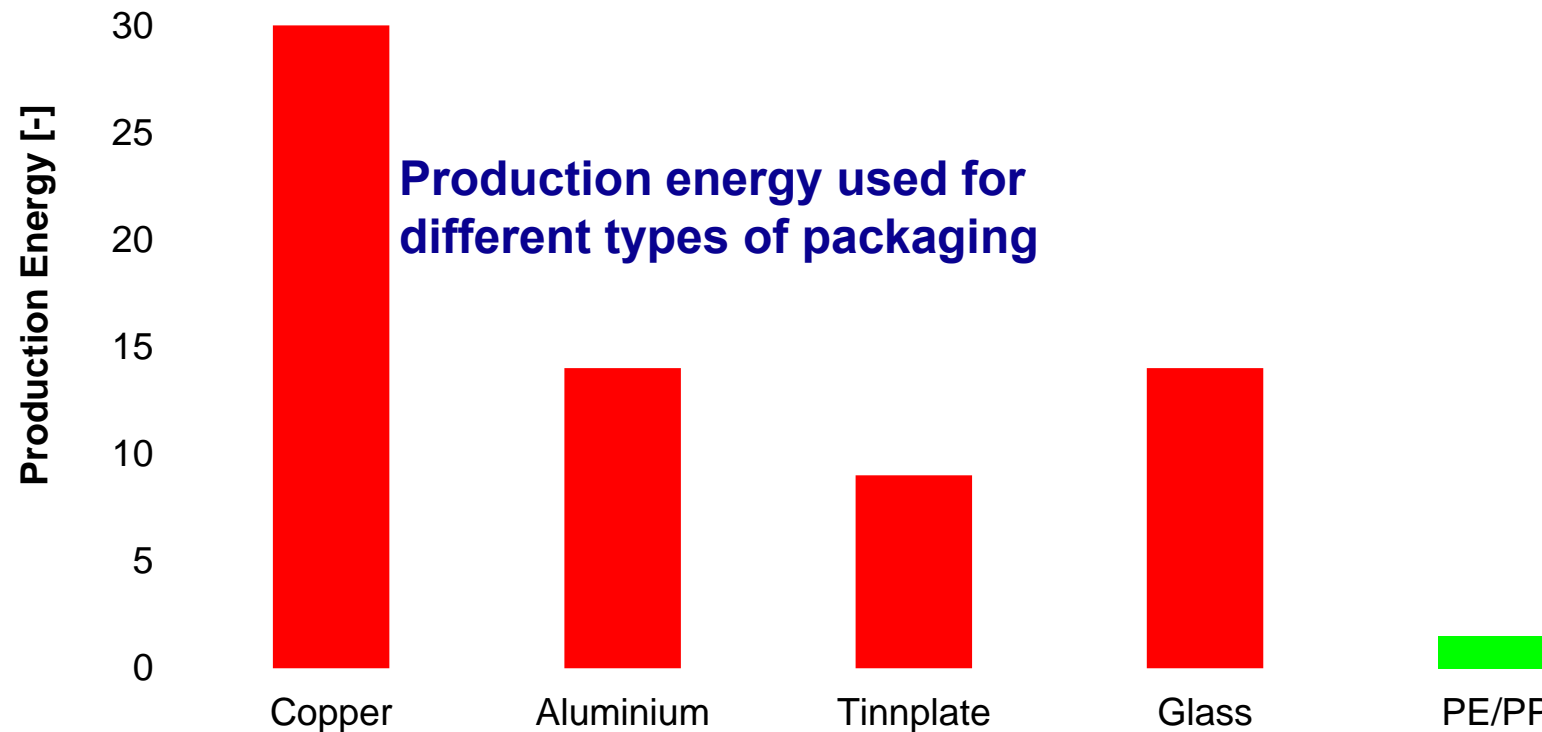
**FLEXIBLE PACKAGING IS SUSTAINABLE  
AND SHOWS TOP PERFORMANCE FOR THE  
ENVIRONMENT, PEOPLE AND INDUSTRY**



# Main advantages of flexible packaging:



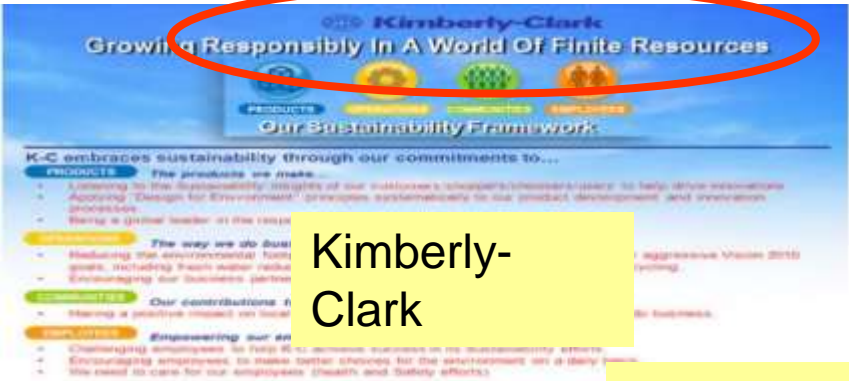
- less weight
- less production energy
- less emissions at production, distribution and disposal





# Environment, Sustainability, CO<sub>2</sub> Footprint, ...

## The Brands` Topic Today



Kimberly-Clark



Wal-Mart



Unilever

Danone



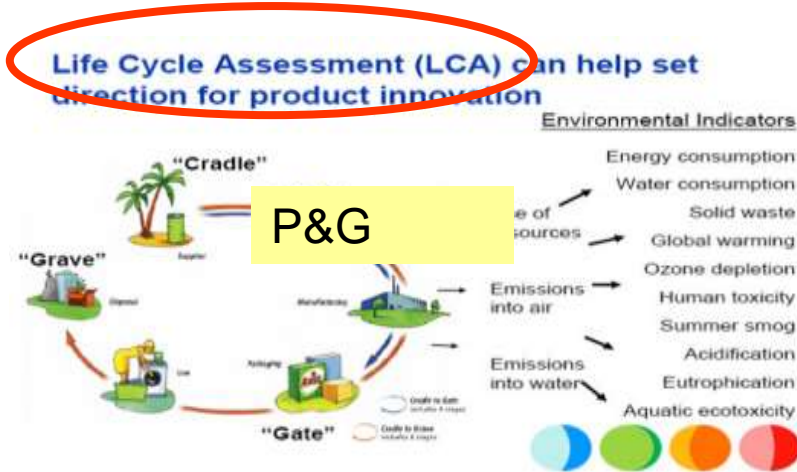
Nestle



Masterfood



Pepsico



P&G

# Results in Flexo Press Developments ...



STARFLEX 1990

(Equal Job,  
20.000 meters)



MIRAFLEX AM 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%



# 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.

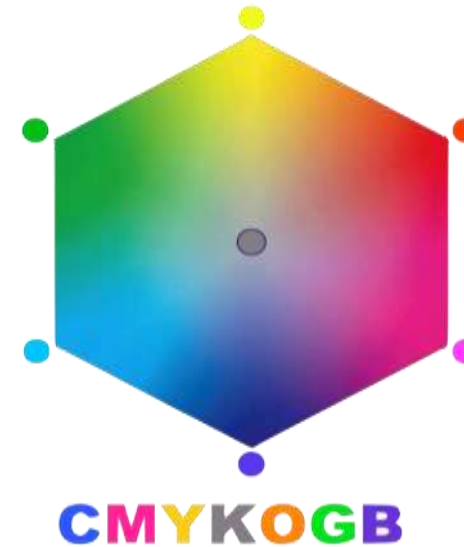
This means less **waste** and less **cost**!



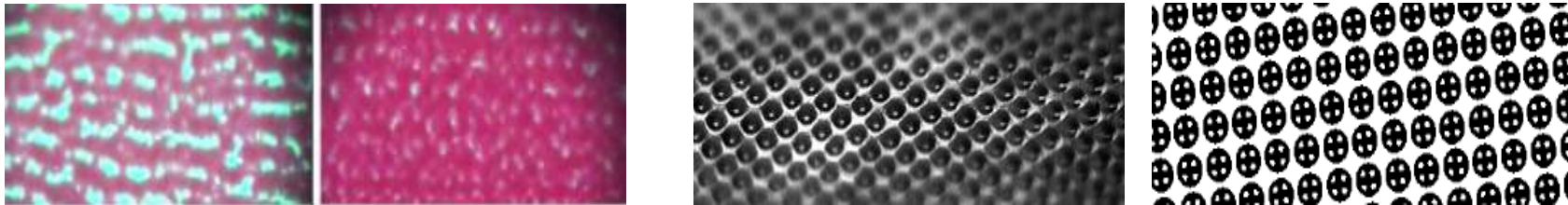


## Multi-Color Process

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



## New Flexo Technologies



- New set of **screenings** in conjunction with **new plates** minimizes ink consumption, improves sustainability and **lowers printing cost**
- Offers **more tonal range**, gray levels, gamut and contrast
- Plates last **longer** on press



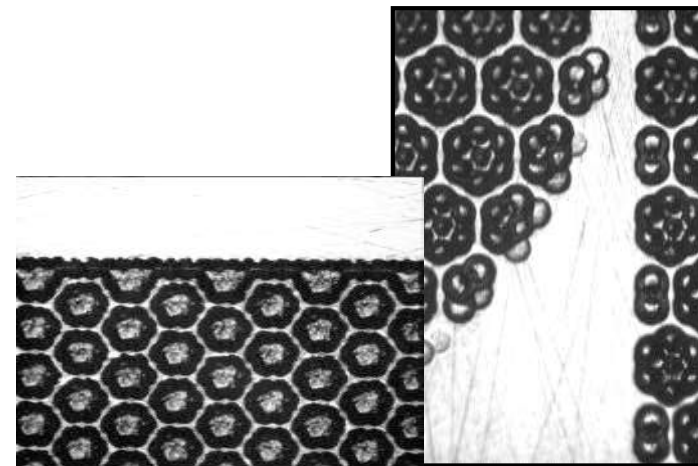
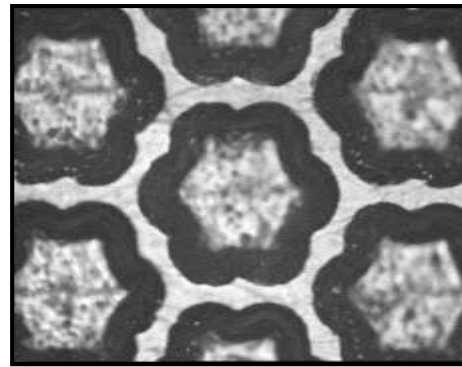
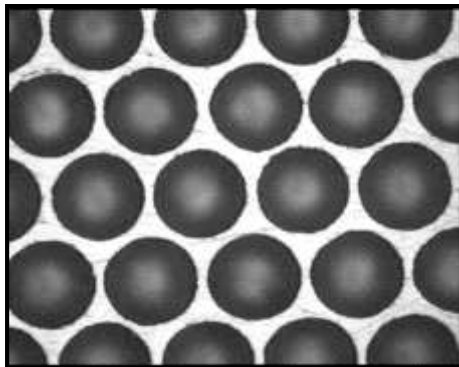
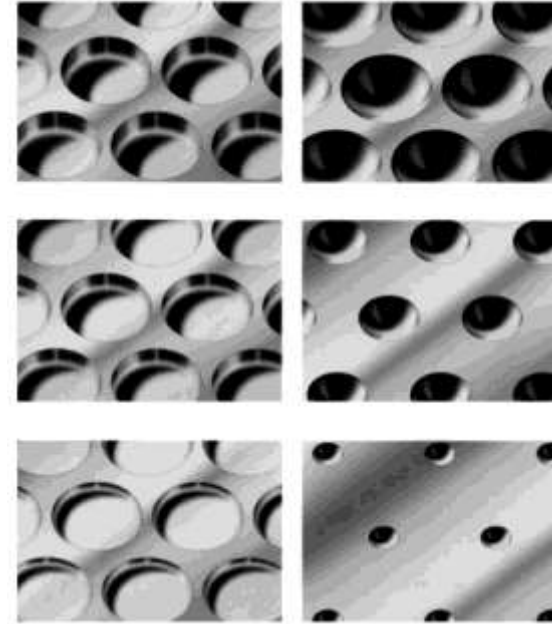
## Light Weight Solutions for bases and Sleeves

- 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





# Janoschka cares for environment:

- Environmental friendly, fully automatic production-lines
- Production sites close to the printing plants in order to reduce time, transport cost and energy.
- Janoschka cares for the use & handling of chemical products and treats all industrial waste.

**janoschka**



## 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** - 2<sup>nd</sup> 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  
**bio-compostability** of packaging

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





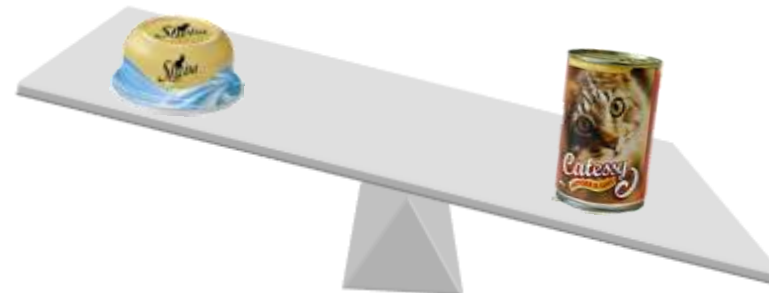
# Inks for sustainable packaging solutions

## Reduction of net CO<sub>2</sub> 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**





# Inks 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





#### COMPANY FOUNDATION YEAR

Milano Italia  
 Milano Quartiere Barona  
 Milano Rescaldina **HEADQUARTER**  
 Mechernich Germania  
 L'Aquila Italia  
 Cambridge UK  
 Buford Atlanta USA  
 Illfurth France  
 Cabrera de Mar Spain  
 Shenzen China  
 San Paolo Brasil  
 Atlanta Georgia USA  
 Timisoara Romania  
 Pune India

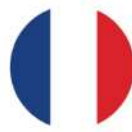
## WE PRODUCE SLEEVES & ROLLERS CLOSE TO OUR CUSTOMERS: LESS TRANSPORT COSTS - BETTER SERVICE



#### Sales offices



Rossini UK Ltd.



Rossini France



Rossini GmbH



Rossini Erminio Printing Rollers (Shenzhen) Co., Ltd.

#### Production facilities



Rossini World



Rossini S.p.A. HeadQuarters



Rossini S.p.A. L'Aquila



Rossini Spain



Rossini India Printing Rollers Pvt. Ltd.



Rossini North America, LLC



Rossini Sleeve Technologies



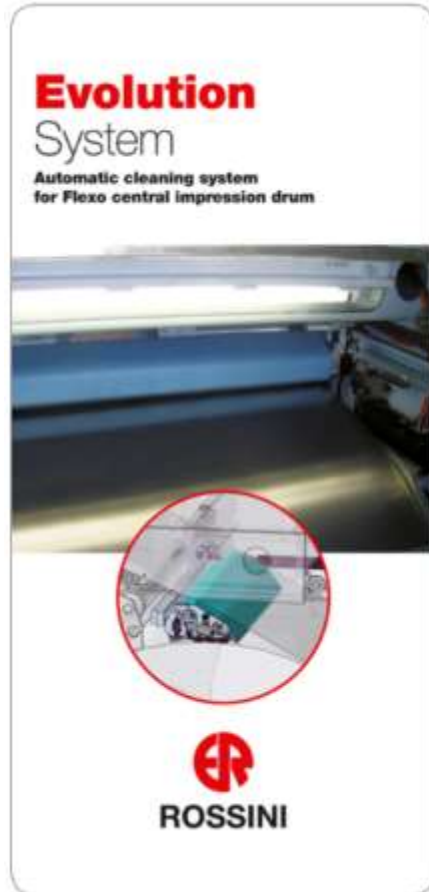
Rossini Do Brasil



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



## ROSSINI



**SAFETY:**  
Automatic CI drum  
cleaner (Flexo)



**LONG LIFETIME:**  
3 years warranty



**SAFETY:**  
ESAsleeve with ATEX-  
certificate – without  
carbon black (Gravure)



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





## SLEEVES & ROLLERS: **SUSTAINABILITY & LESS IMPACT ON CARBON FOOTPRINT**



**ROSSINI**



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







**nordmeccanica** s.p.a.

**280 employees.**

**3 Locations, 7 Plants.**

**Over 30,000 m<sup>2</sup> (330,000 sqf).**

**Plant expansion: 2006-7-8-10-11-12-13-14-15-16**

**110 M Euro Volume of yearly sales (~300 machines delivered in one year).**

**70% Global Market Share.**

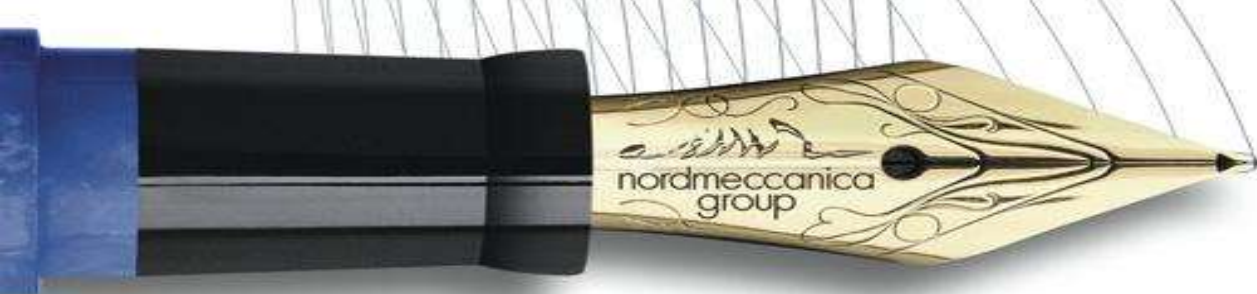
**Nordmeccanica NA.**

**Nordmeccanica LA.**

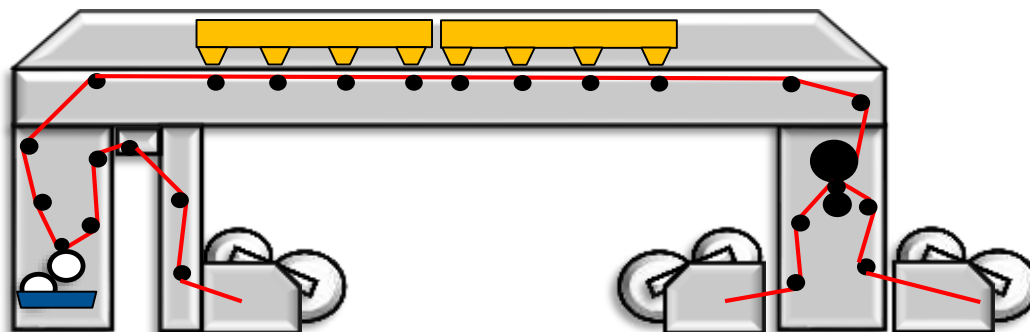
**Nordmeccanica China.**

**Nordmeccanica India.**





nordmeccanica s.p.a.



**Know how , lower costs, lower energy, higher quality, reduced footprint**



  
nordmeccanica  
group



nordmeccanica s.p.a.

## Sustainability

- Pioneering Solvent Less lamination.
- Products developed using the most advanced energy savings technologies.

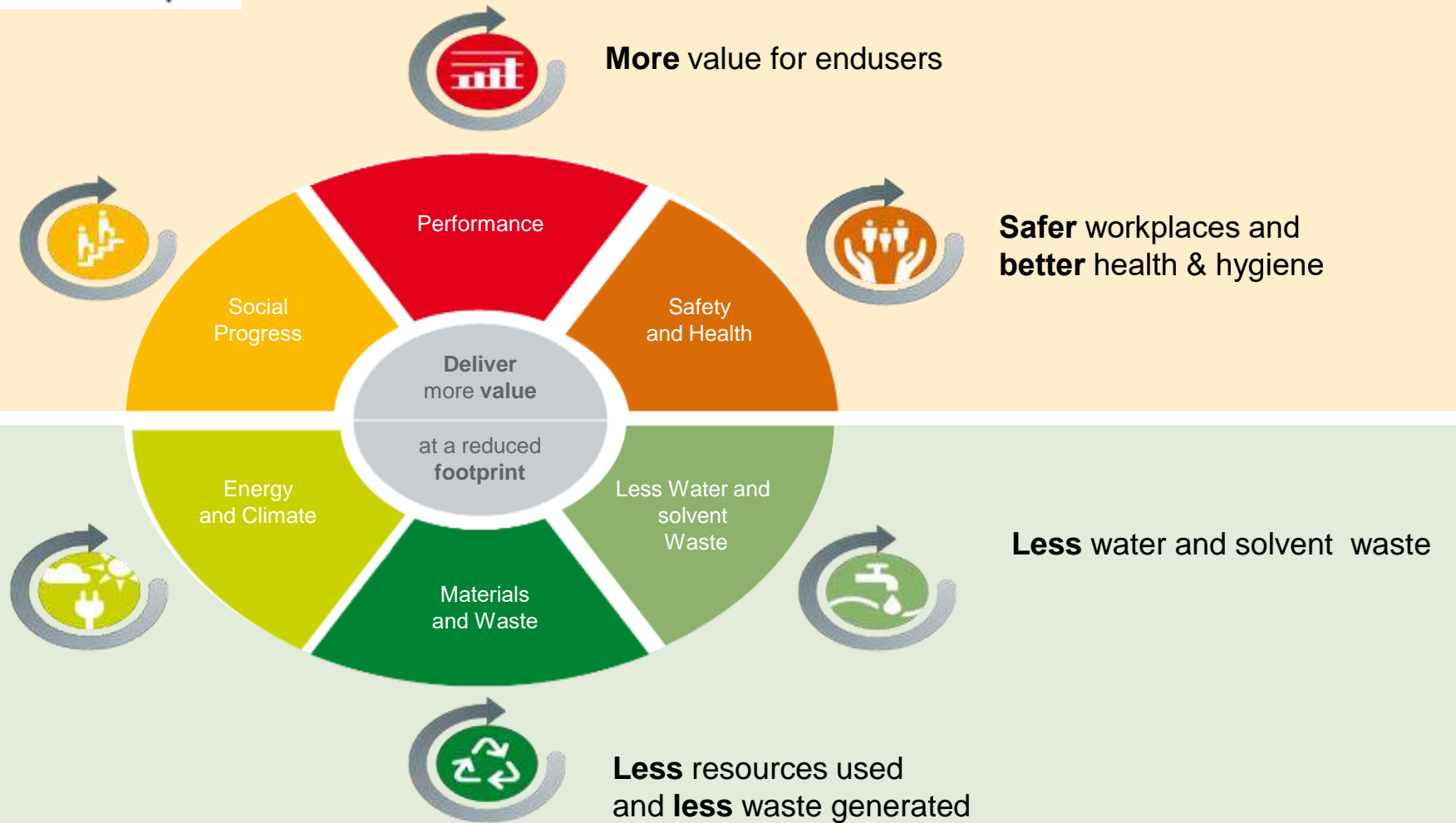


  
nordmeccanica  
group

# Sustainability

**More** social progress  
and **better** quality of life

**Less** energy used and  
**less** greenhouse gases  
**less** water pollution







**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...”**

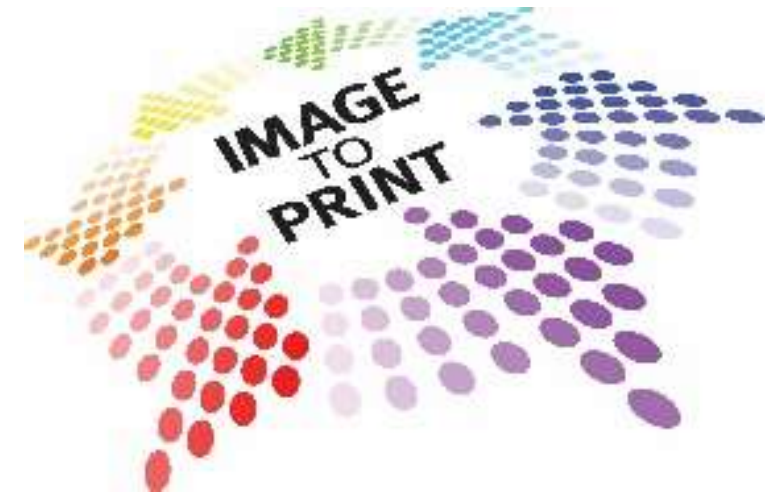
**Thank you for being here  
and thank you for your attention!**





# PRINTING TECHNOLOGY & INNOVATION DAYS FOR FLEXIBLE PACKAGING

Jakarta, Indonesia, March 20 - 21, 2019



## THANK YOU !

**janoschka**

*nordmeccanica*  
group



**SIEGWERK**



**WINDMÖLLER & HÖLSCHER**



**ROSSINI**