



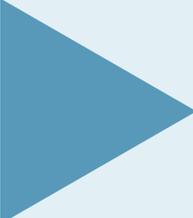
Zschimmer & Schwarz Group

Generink

Open Innovation



ZSCHIMMER & SCHWARZ



Zschimmer & Schwarz

Company history

Company philosophy

- ▶ Since 1894 our company stands for **outstanding service** and **high quality**.
- ▶ We offer a broad-based product portfolio and truly understand the needs of our customers – which is why we focus on both **long-term perspective** and **solidity**.
- ▶ With our expertise, innovation strength, and top-quality standards, we create **sustainable value today and for the future**.

Chemistry
tailor-
made



Key figures 2017

Turnover	€M 589.9
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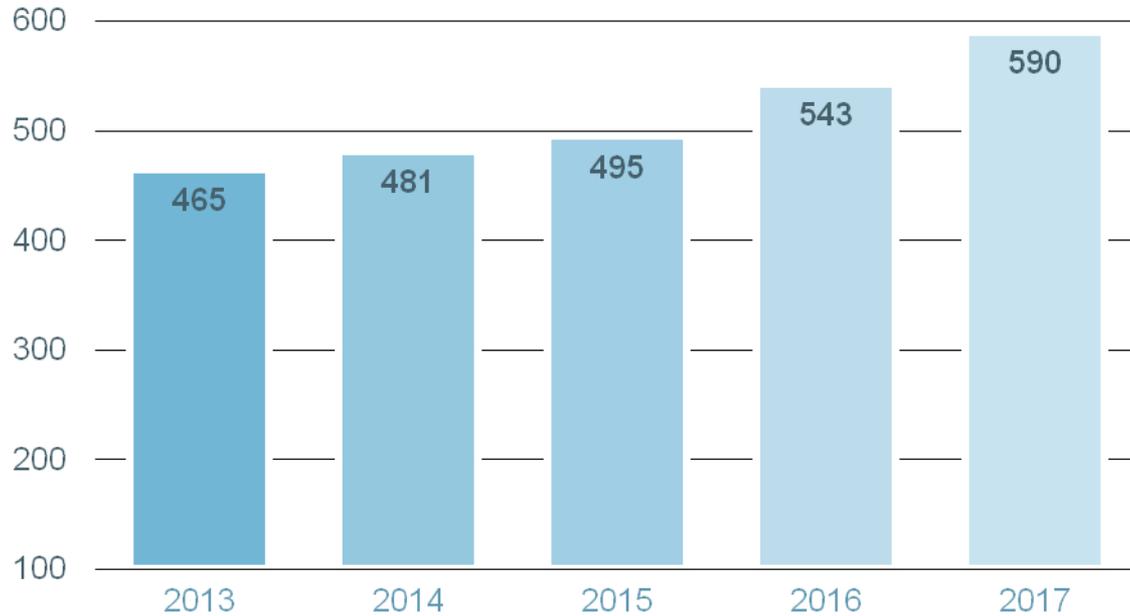
Number of employees	1,368
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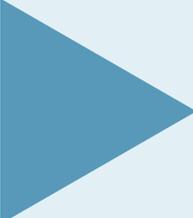
Subsidiaries	28
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Locations	27
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Sales development in €M





Zschimmer & Schwarz

Markets and divisions

End-user markets



PERSONAL CARE



HEALTHCARE



DETERGENTS AND CLEANERS



AUTOMOTIVE



ENGINEERING



CONSTRUCTION



PAINTS AND COATINGS



CLOTHING



CONSUMER DURABLES



Business divisions



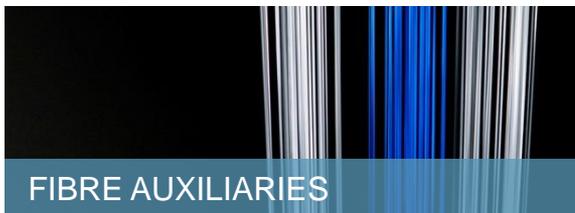
CARE SPECIALITIES



LEATHER AUXILIARIES



CERAMIC AUXILIARIES



FIBRE AUXILIARIES



TEXTILE AUXILIARIES

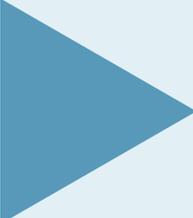


PHOSPHONATES



POLYMERS

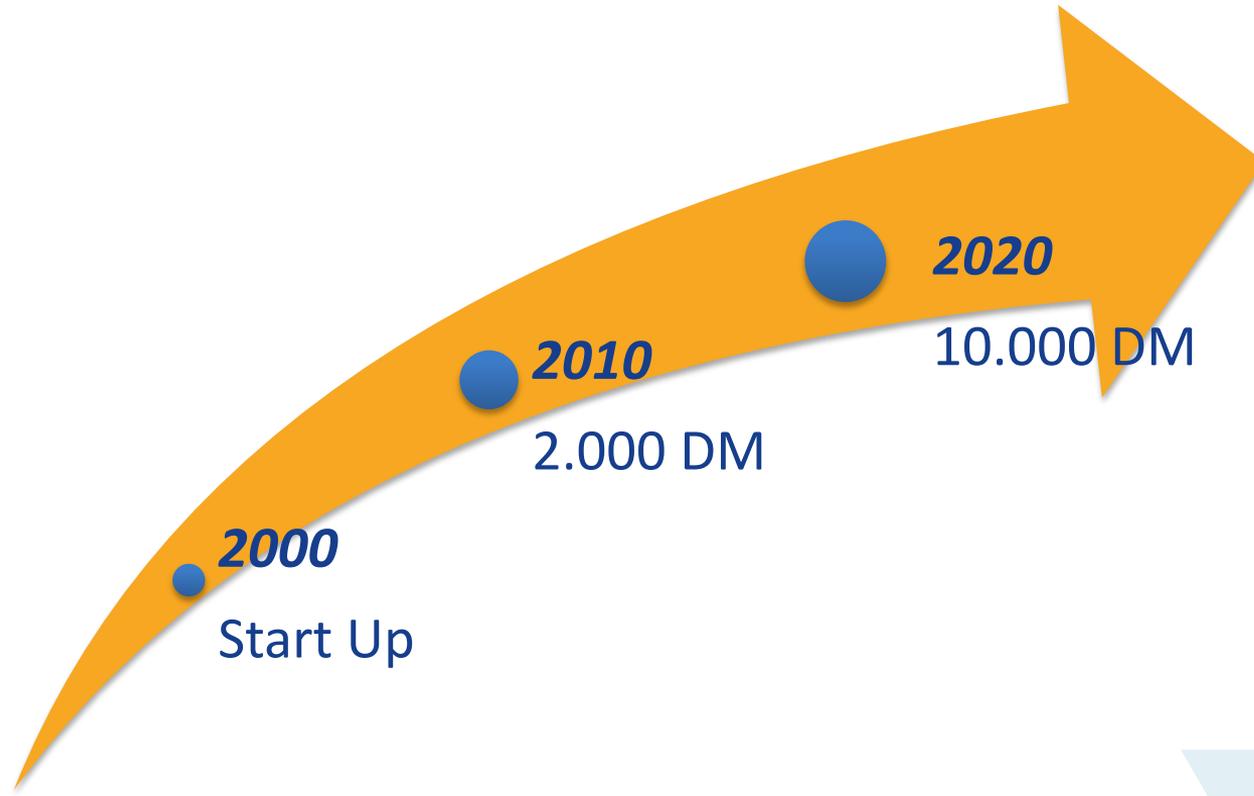




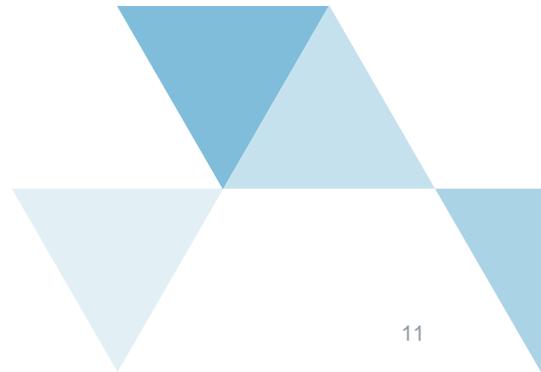
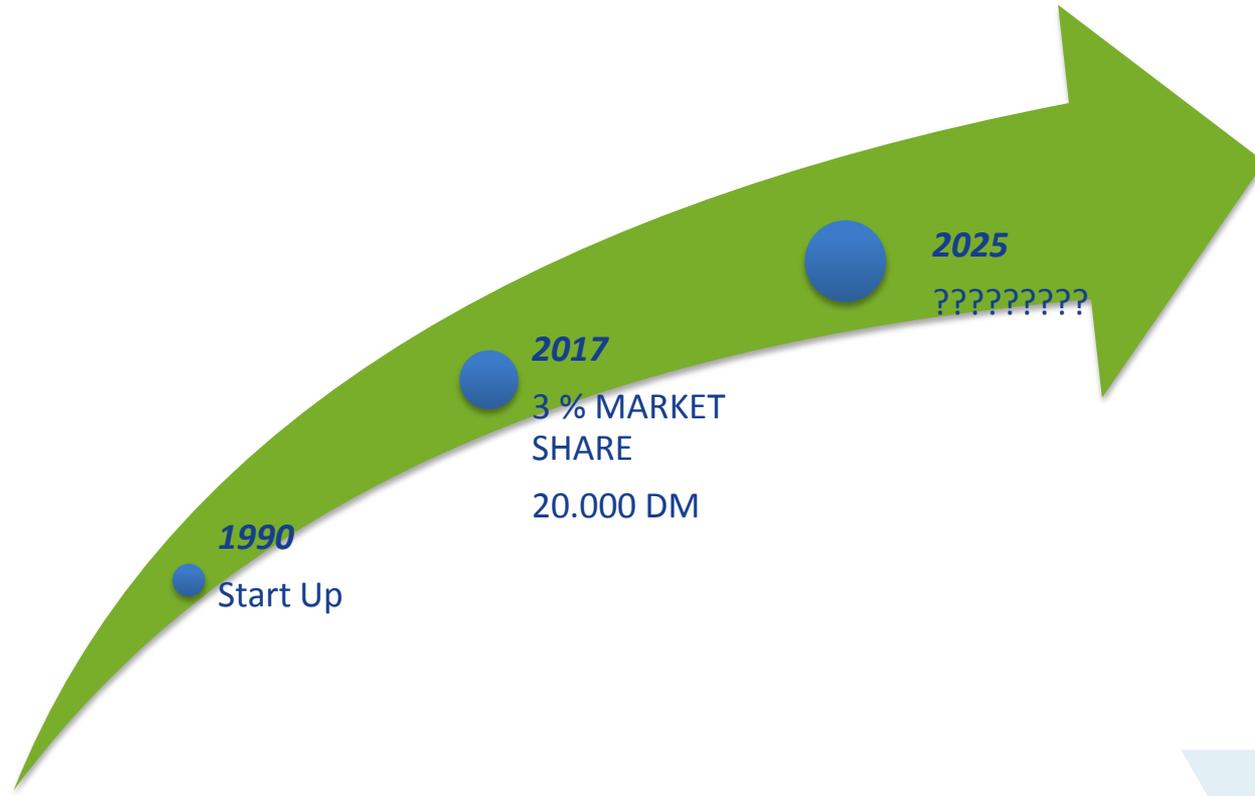
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Digitalization

DIGITAL ON CERAMICS



DIGITAL ON TEXTILE



Business divisions



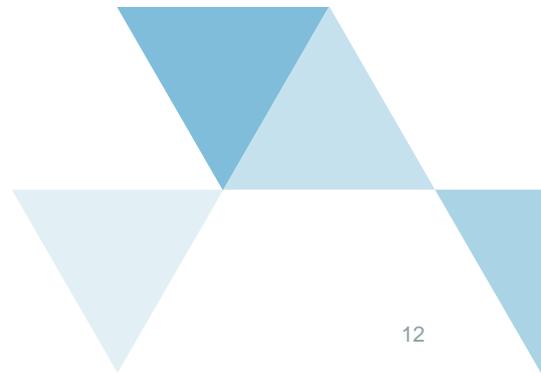
DIGITAL



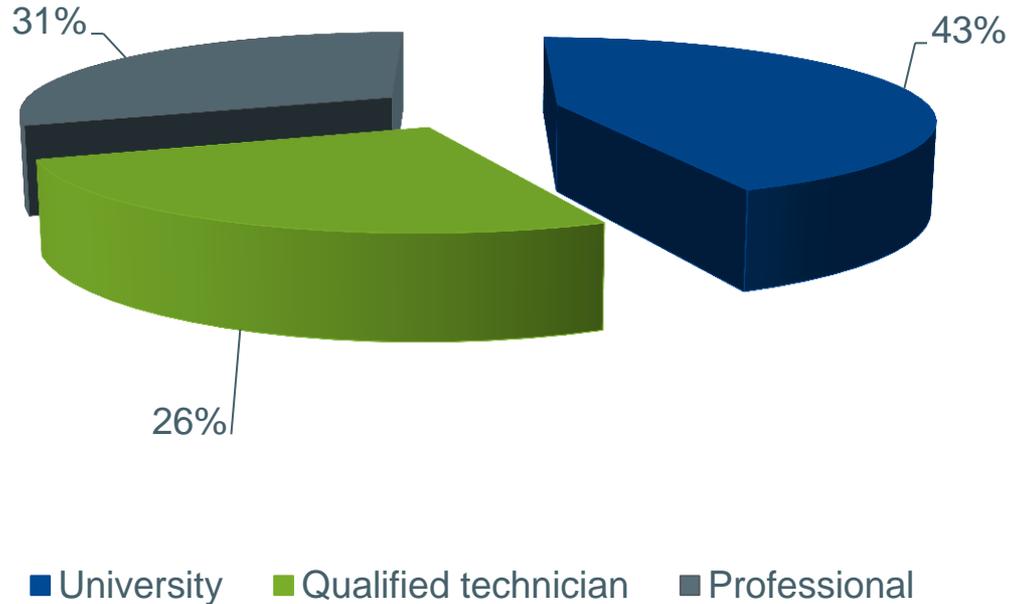
DIGITAL



DIGITAL?



Human Resources Zschimmer & Schwarz España



VNIVERSITAT
ID VALÈNCIA



UNIVERSITAT
POLITÈCNICA
DE VALÈNCIA



UNIVERSITAT
JAUME I



INSTITUTO DE
TECNOLOGÍA
QUÍMICA

New R&D centre

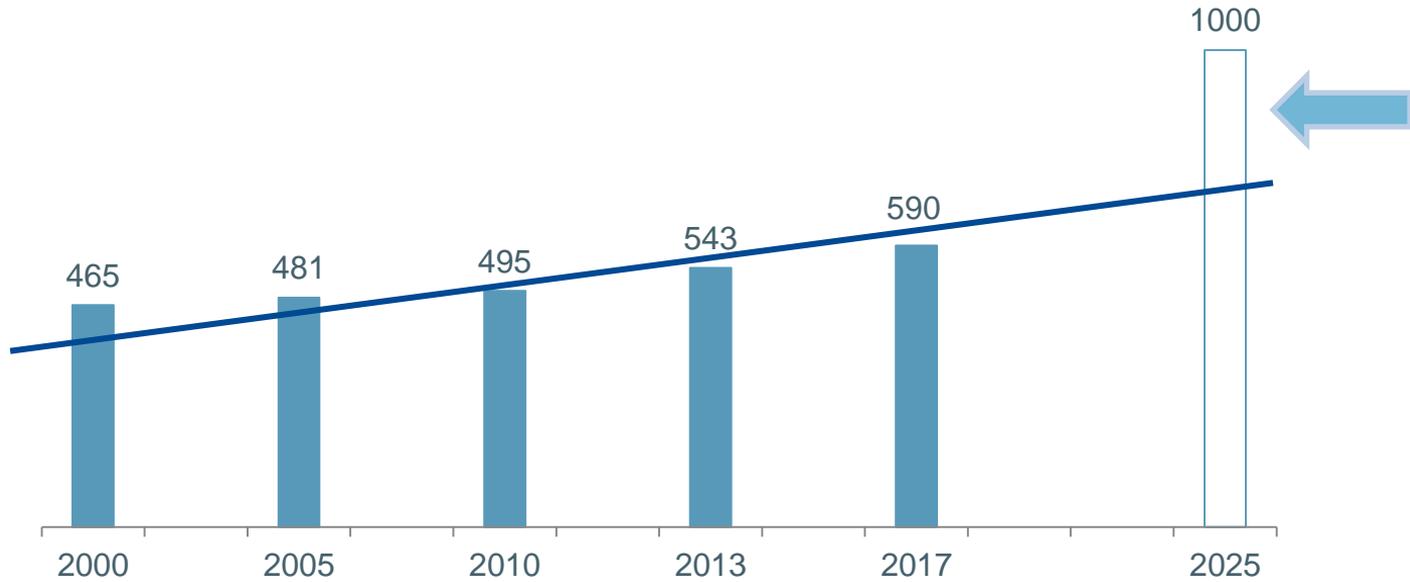




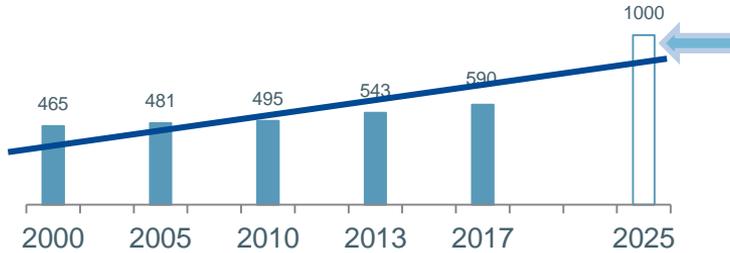
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Z&S Future

Future of Z&S Sales



Future of Z&S Sales



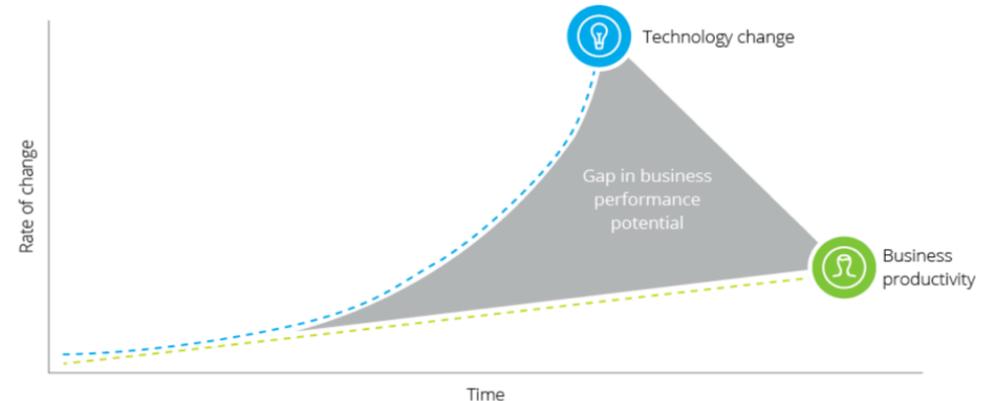
WE HAVE NOT ALL KNOWLEDGE

WE ARE ABLE TO WORK WITH

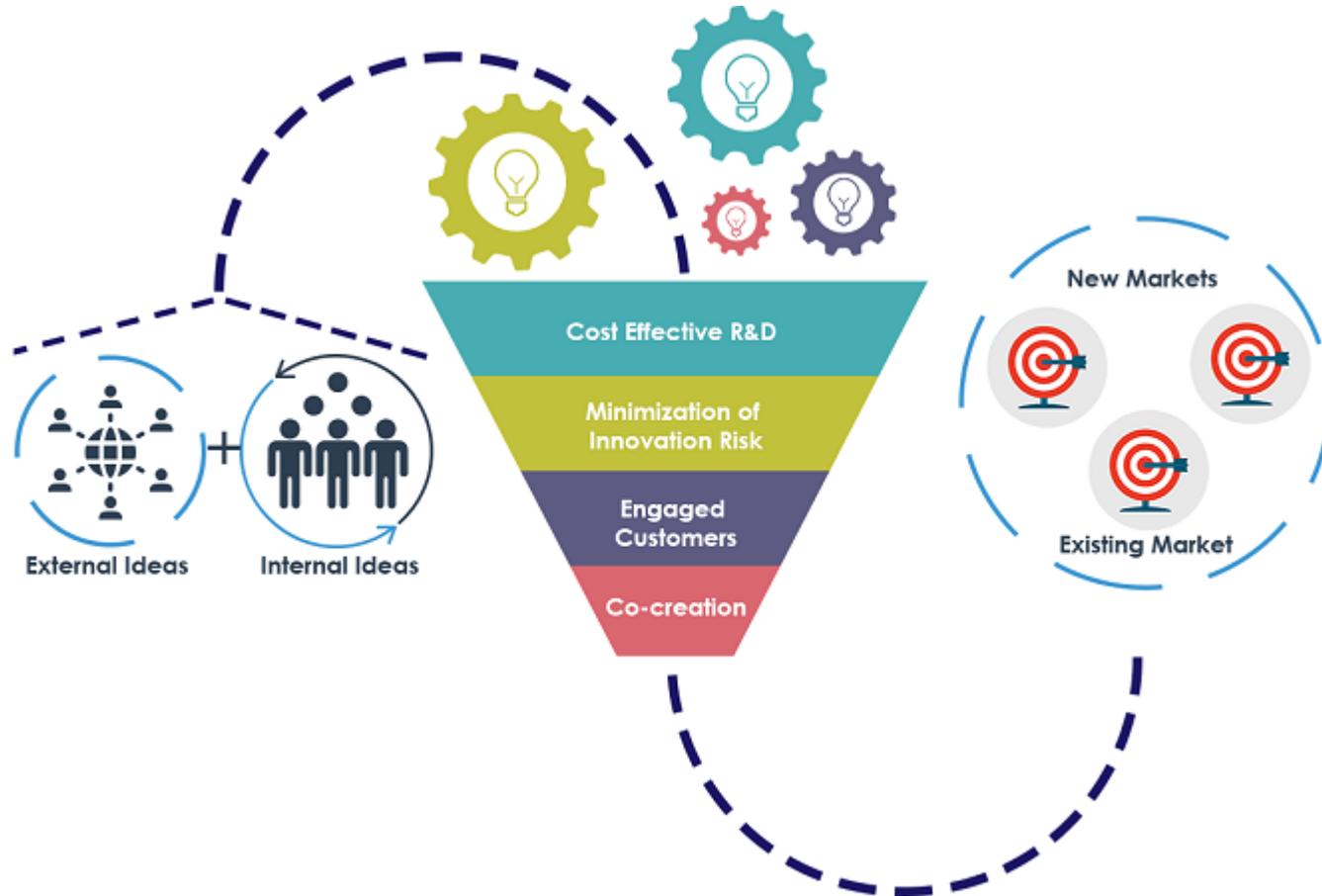
MULTI-DISCIPLINARY TEAMS

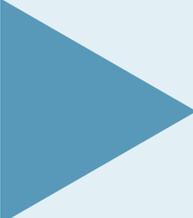
Figure one: Change in technology vs. business productivity

OPEN Z&S TO
EXTERNAL TALENTS !



Open innovation

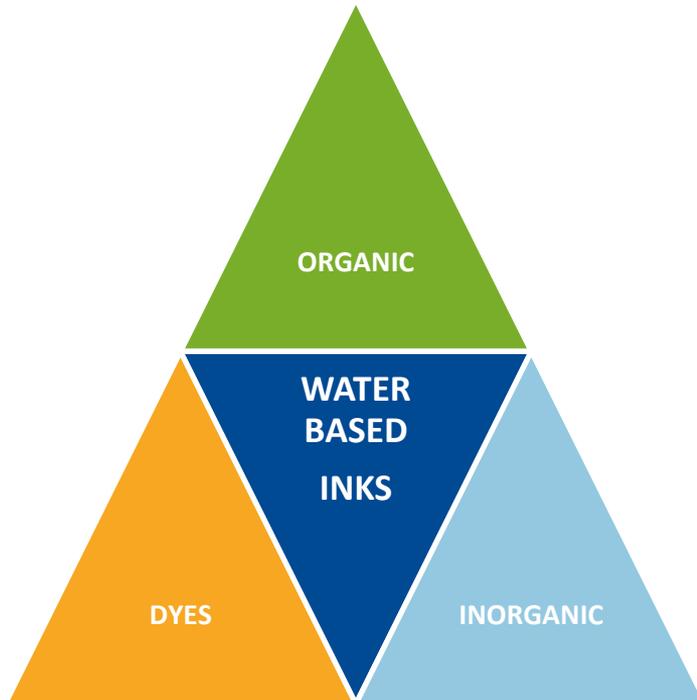




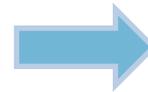
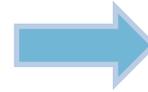
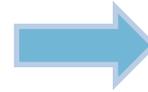
Zschimmer & Schwarz España

GENERINK: the Challenge

From the ink to the surface



P
R
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A
D



DIGITAL ON PLASTICS State of the art

	Solvent	UV	Water
Print on Film	OK	OK	NG → OK
Image durability on film	NG	OK	NG
VOC	NG	OK	OK
Odor	OK	NG	OK

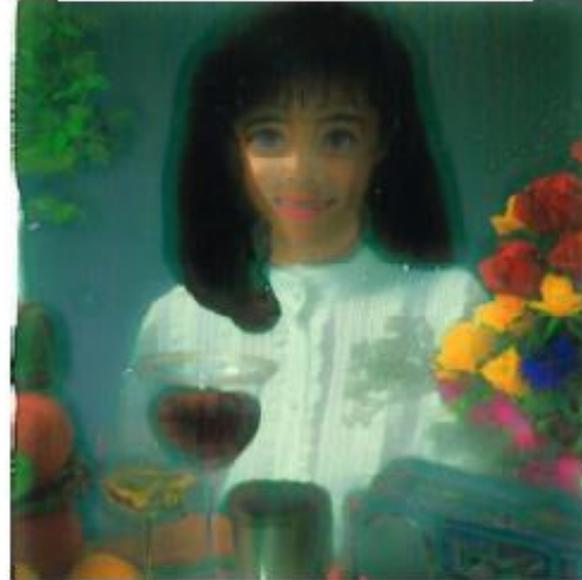


PROBLEM 1 – Image resolution

Water-based ink on Paper



Water-based ink on **PET film**



PROBLEM 2 – Alcohol Derivates Resistance

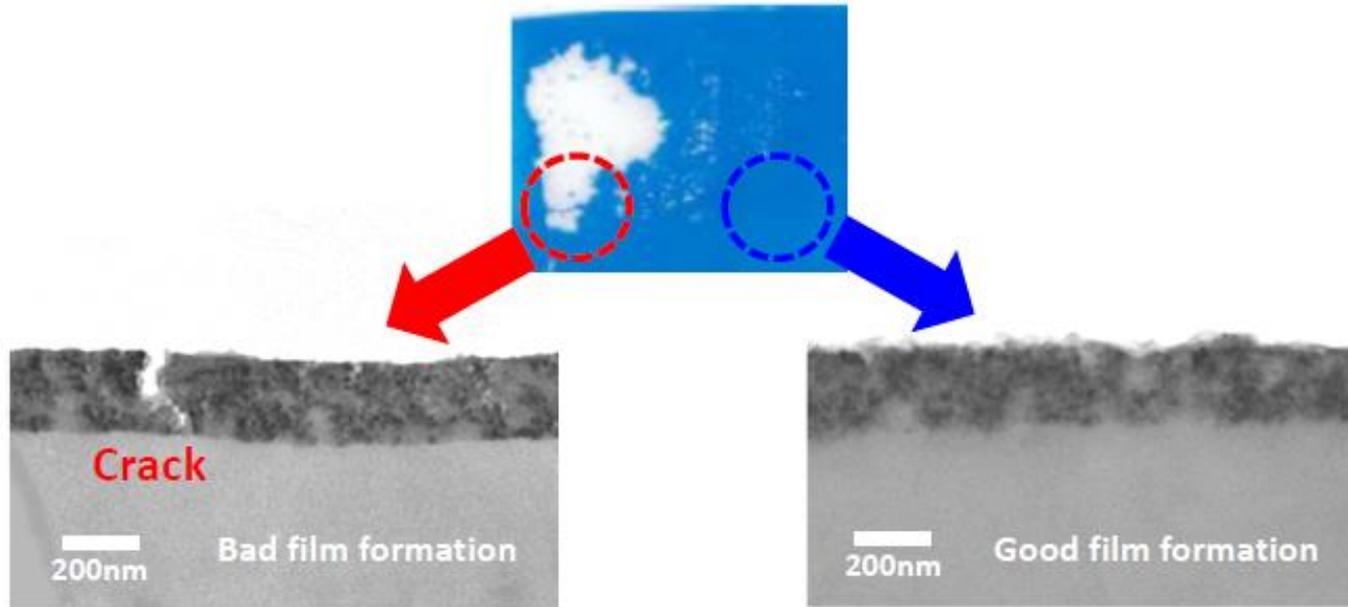
New water-based ink system on **PET film**



Rubbed by alcohol (EtOH)

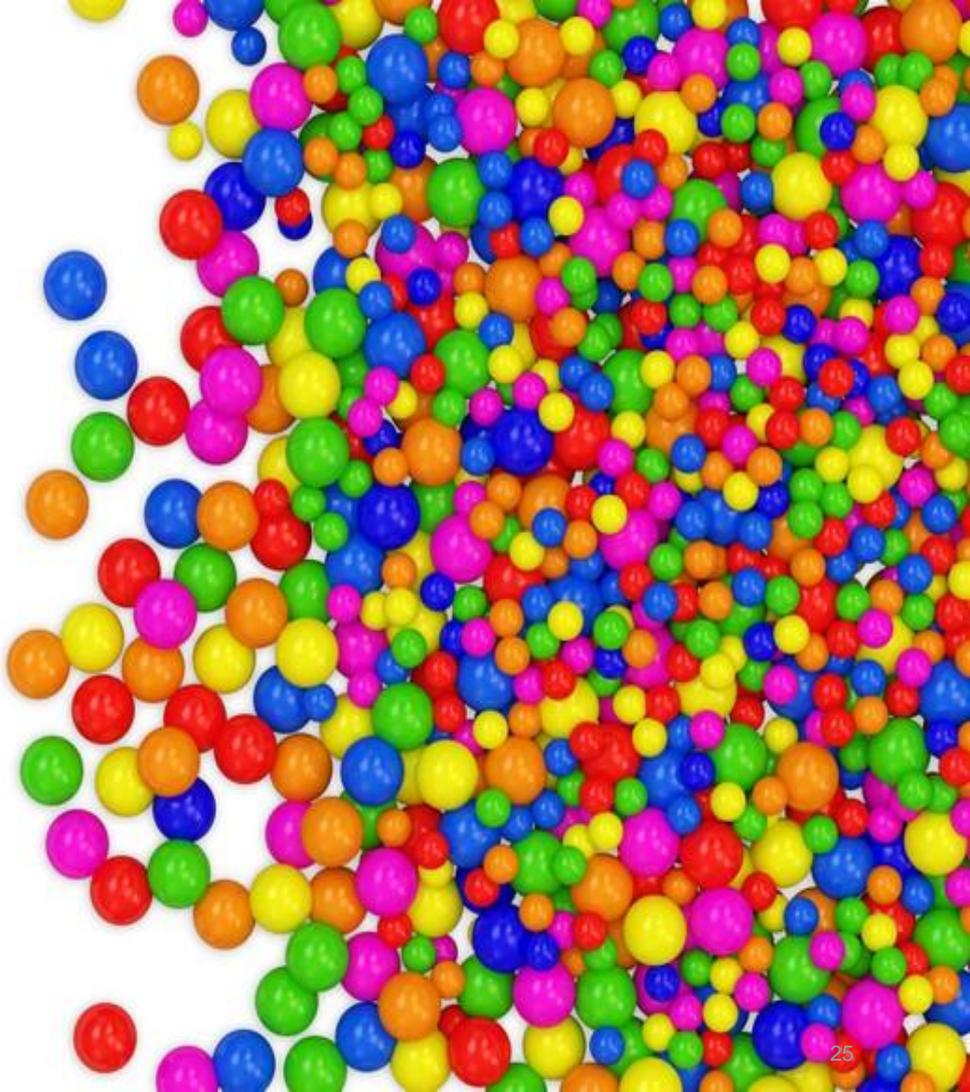


PROBLEM 3 – Bad Film Formation



GENERAL PROBLEM INKJET TECHNOLOGY

GENERINK





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GENERINK: TARGETS

GENERINK TARGETS

**Find a Generic ink be suitable to be printed
in two different kinds of plastics
having at least 80 % of the formula in common**

PROBLEM 1 – Image resolution

PROBLEM 2 – Alcohol Derivates Resistance

PROBLEM 3 – Bad Film Formation





Brainstorming

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