



PrintPromotion Tour Asia Pacific 2019

Latest Light Emitting Equipment Trends
Rudy Bienert



Thomas Gohl, Sales Director

Agenda



- Company Introduction
- Industry 4.0 - Data usage and handling of a UV System
- Excimer Technology

The companies of the IST METZ Group



Head Office:

IST METZ GmbH

Subsidiaries:

eta plus electronic gmbh

S1 Optics GmbH

IST France sarl

IST (UK) Limited

IST America Corp.

IST Italia S.r.l.

IST Benelux B.V.

IST METZ UV Equipment China Ltd. Co.

UV-IST Ibérica SL

IST Nordic AB

IST METZ SEA Co., Ltd.

IST IST East Asia K.K.

Integration Technology Ltd. (ITL)

IST METZ in numbers



1977

founding year

13

companies

13381

systems sold

550+

employees worldwide

92

exports 2018 in %

ENERGY IN LIGHT – Our spectrum



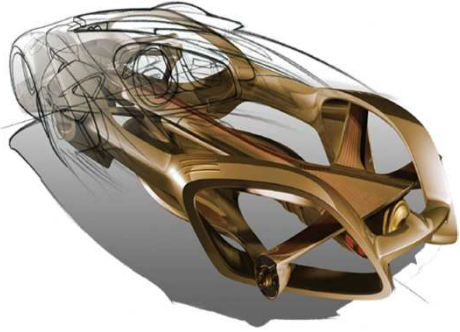
PRINT



INDUSTRIAL



SERVICES



UV Application in the graphic art industry



Web Printing

Narrow web Applications

Metal decorating

Sheetfed Offset

Digital printing





uvv

Industry 4.0



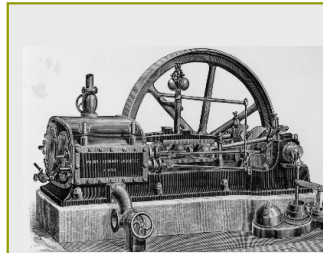
Industry 4.0 - Possibilities for IST Systems



Industry 4.0

- Cyber physical systems
- Internet of Things
- Networks

- 4th industrial revolution
- Digitalization of industrial production
- Data use to get output benefits
- Self organized production



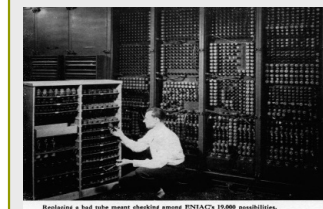
Industry 1.0

- Mechanisation
- Steam power
- Weaving loom



Industry 2.0

- Mass production
- Assembly line
- Electro energy

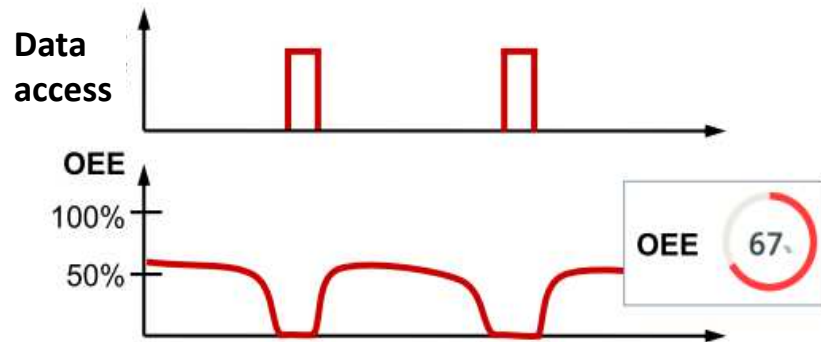
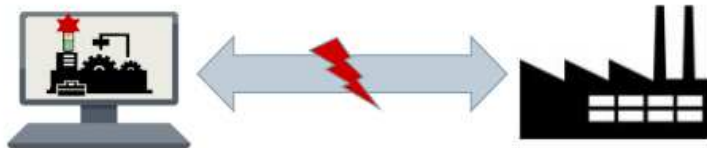


Industry 3.0

- Automatization
- Computer and electronic

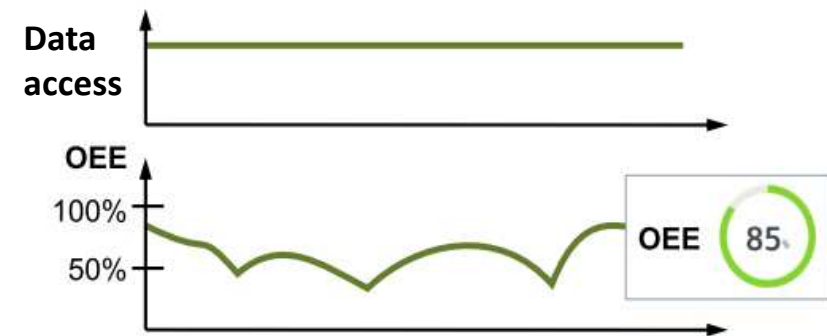
So far:

- Temporary access for individual trouble shooting



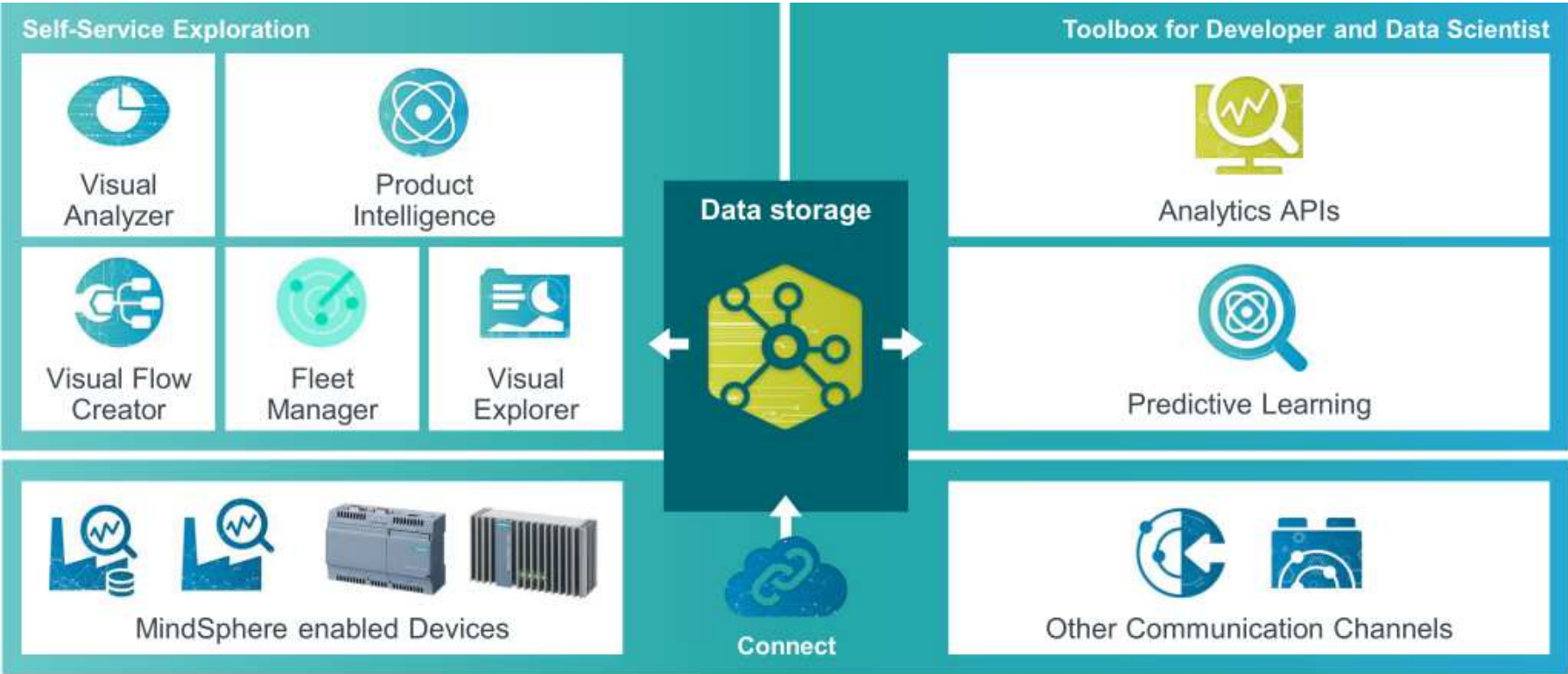
In future:

- Continuous data storage and analysis



Source: Siemens

Mindsphere Analytics



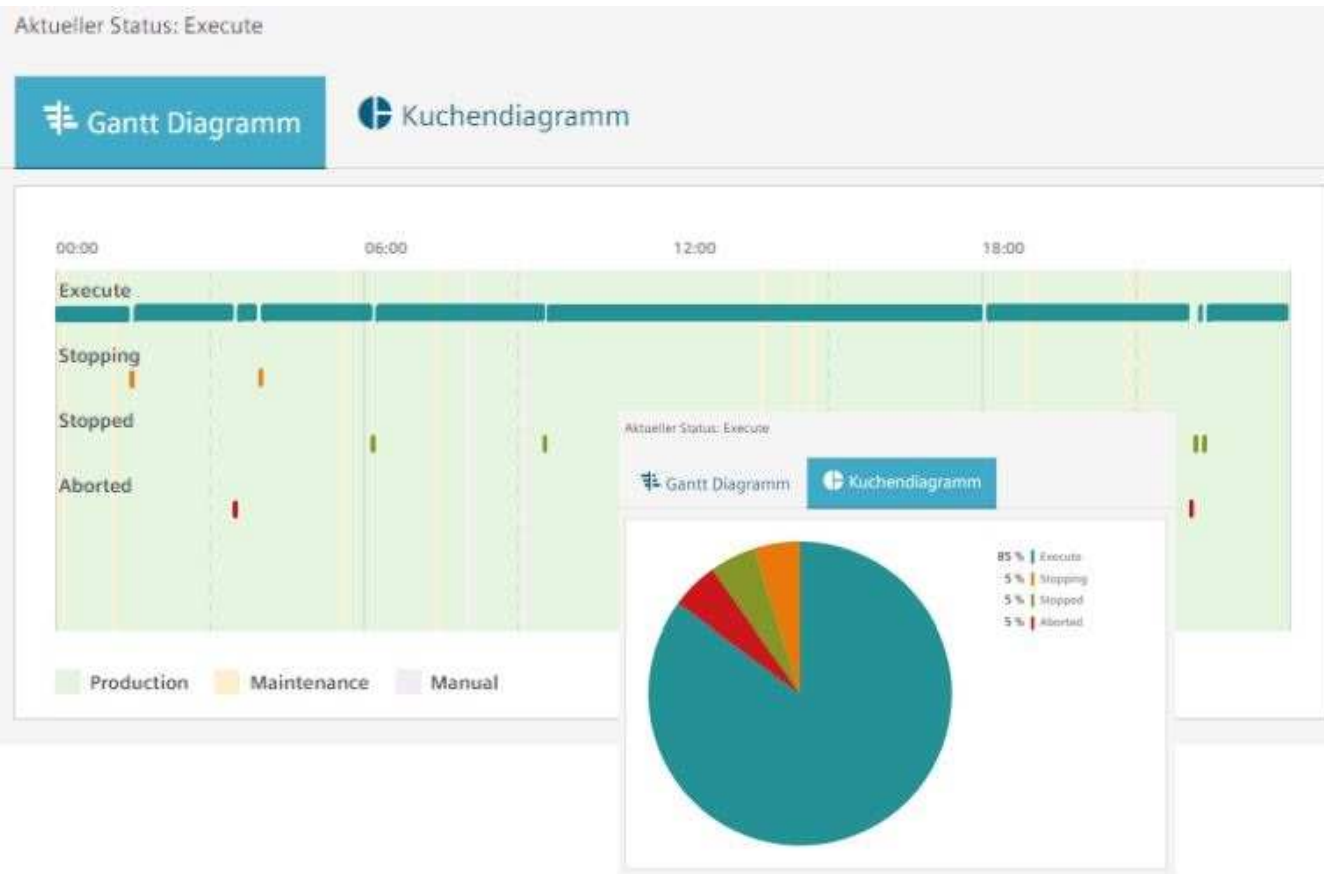
Source: Siemens

Productivity at a glance



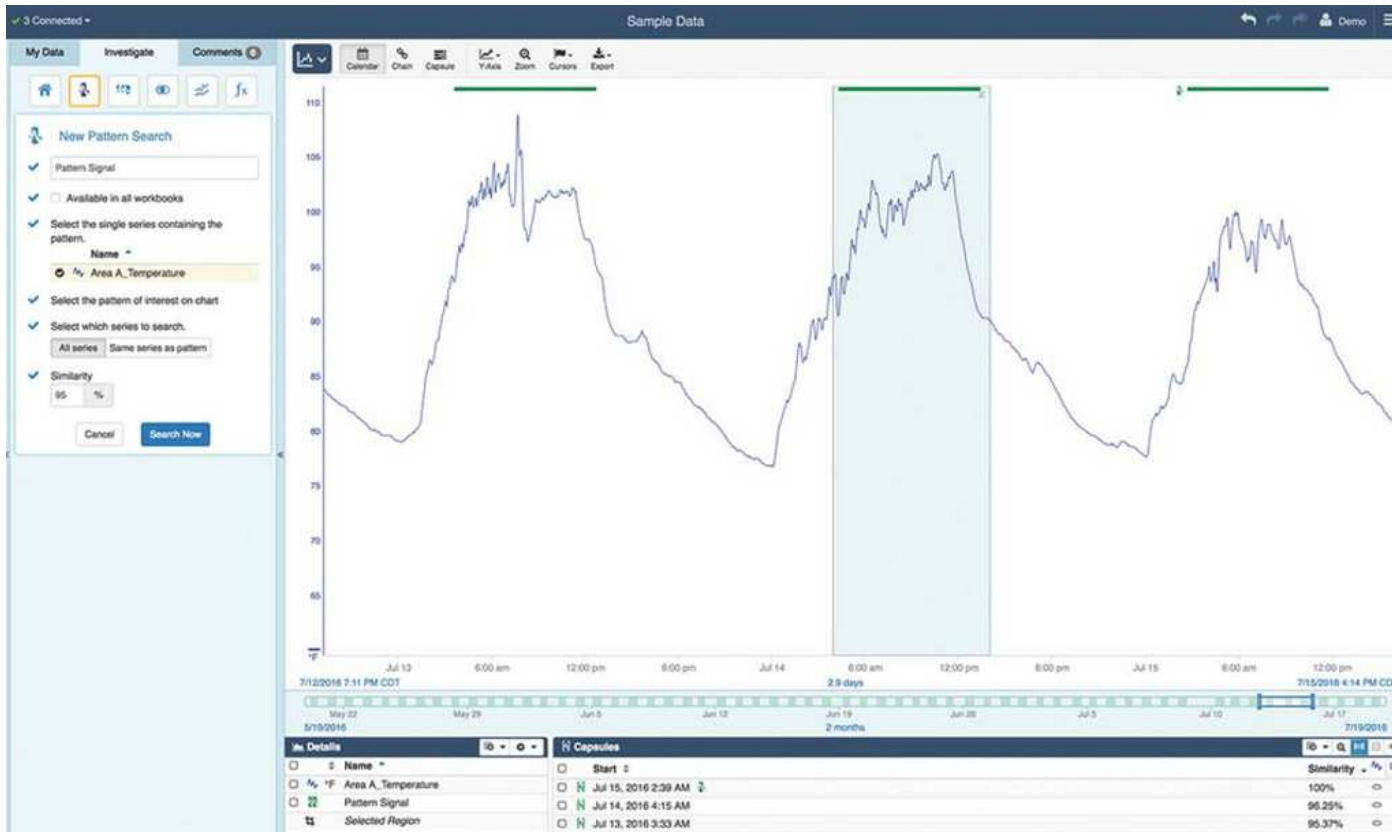
Source: Siemens

Visualisation of operation conditions



Source: Siemens

Operating costs/consumption



Source: Siemens



UV

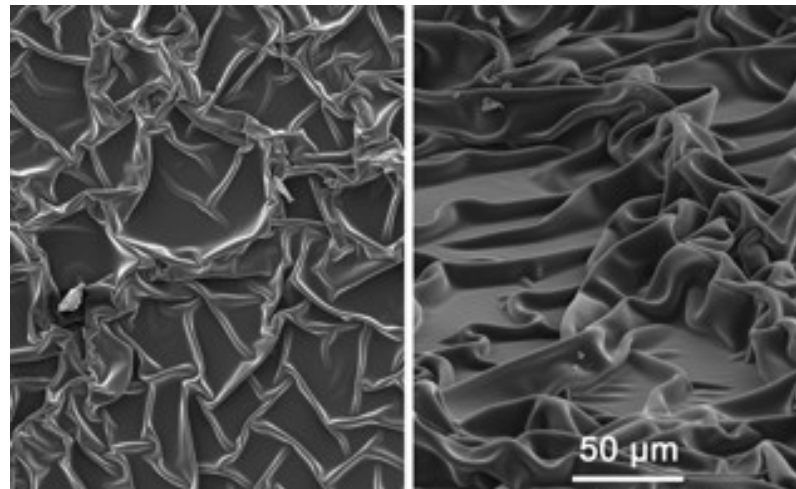
Excimer Technology



Excimer application: Matting of lacquered surfaces



- Advantages through Excimer technology in matting of lacquered surfaces:
- Exceptional high chemical & mechanical resistances compared to use of matte lacquer
- Very mat surfaces achievable (under 2 GU @ 60°)
- No need to use special lacquer with matting agents, no need to switch lacquer when running high gloss/mat production, therewith higher productivity of machine



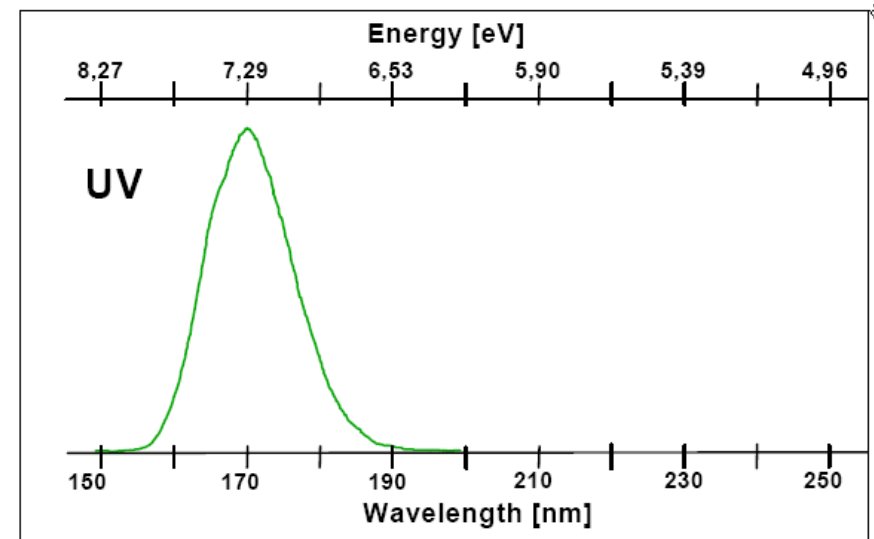
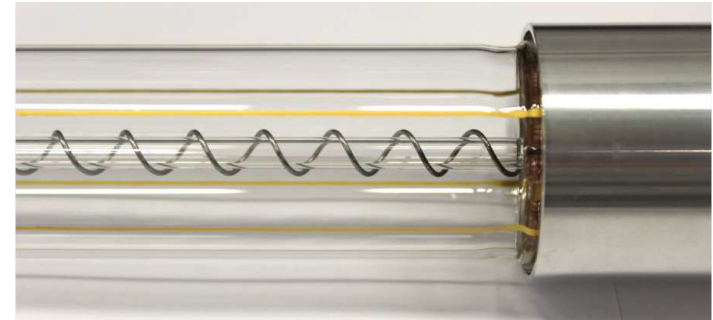
Excimer + UV

- Matting PVC flooring
- Matting foils for labels

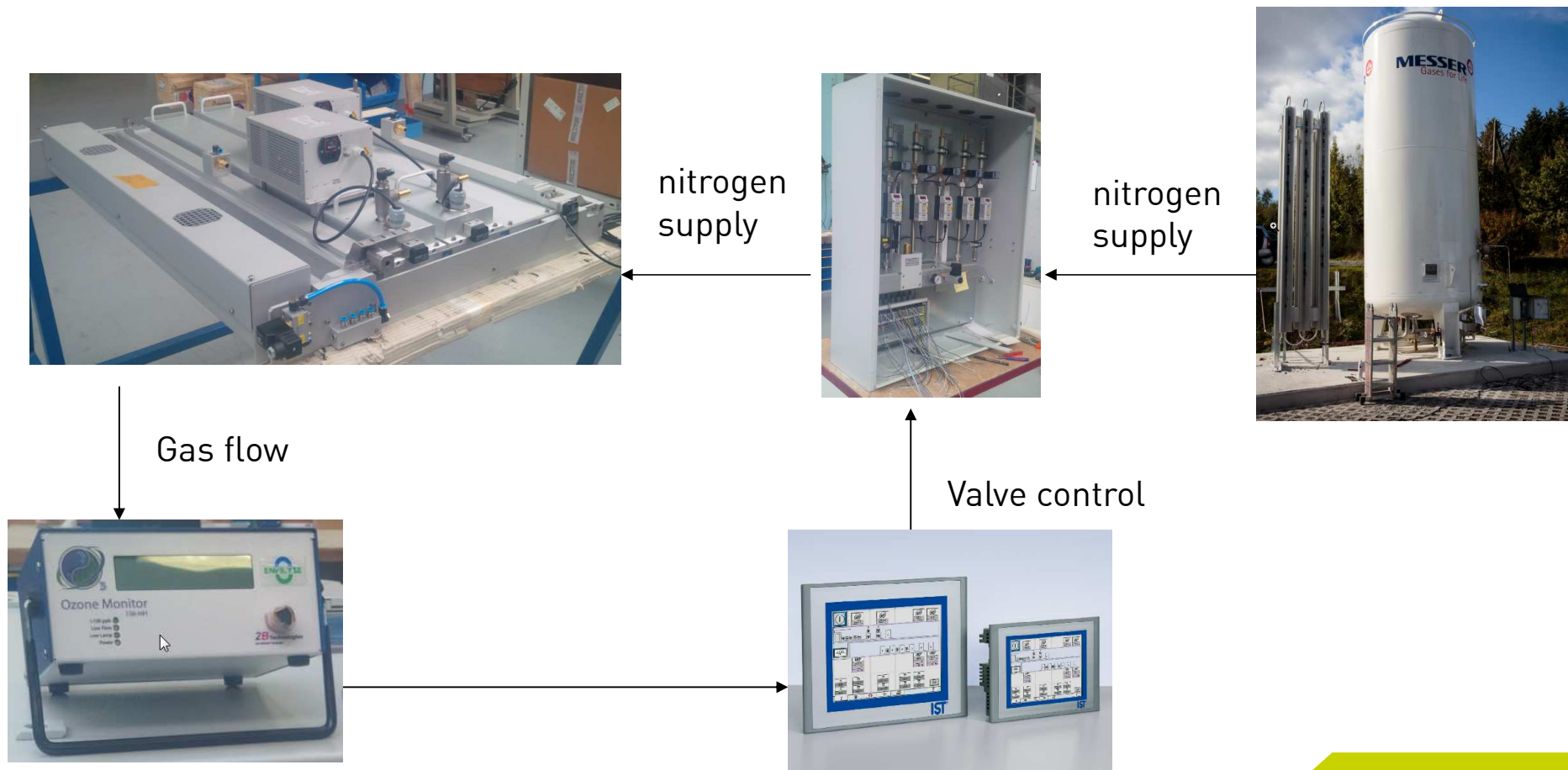


Excimer UV

- Lamp length: 120 mm – 2300 mm
- Power: approx. 5 W/cm, max. 1 KW, 20-100% power adjustment
- Homogeneity over lamp length: > 95%
- Run-up time: approx. 30 s
- Wavelength: 172 nm



Excimer – Nitrogen



Example: Excimer + UV curing BLK7

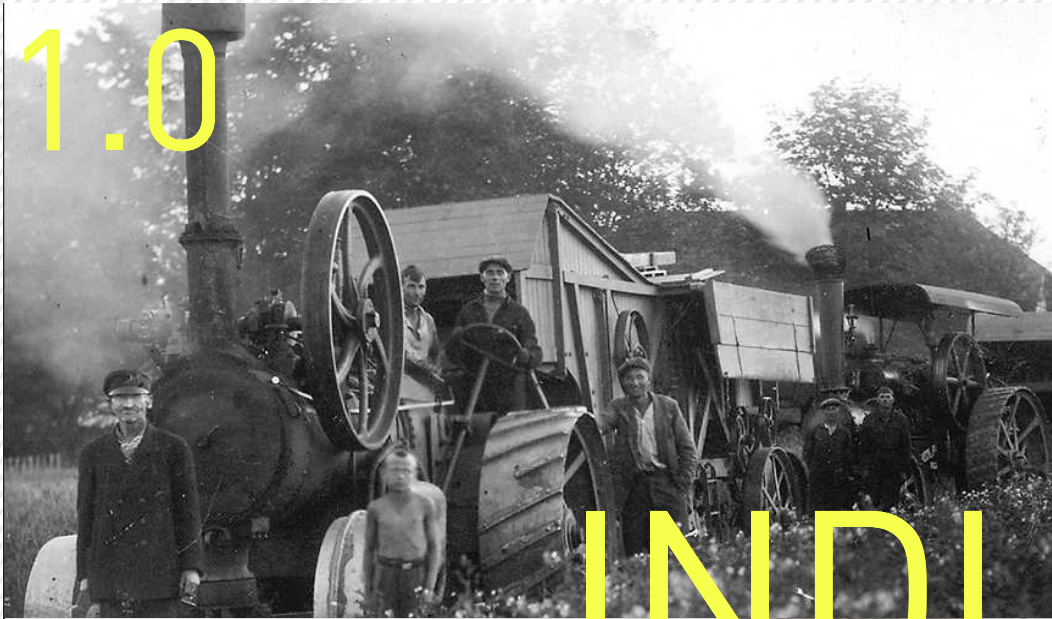


UV

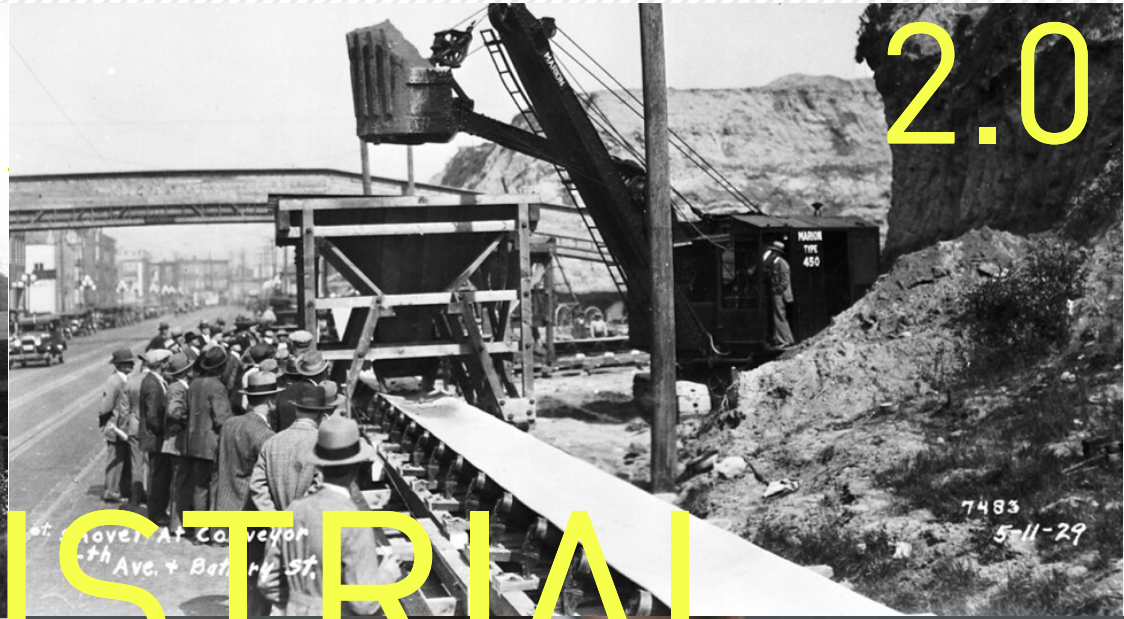
Summary



1.0



2.0



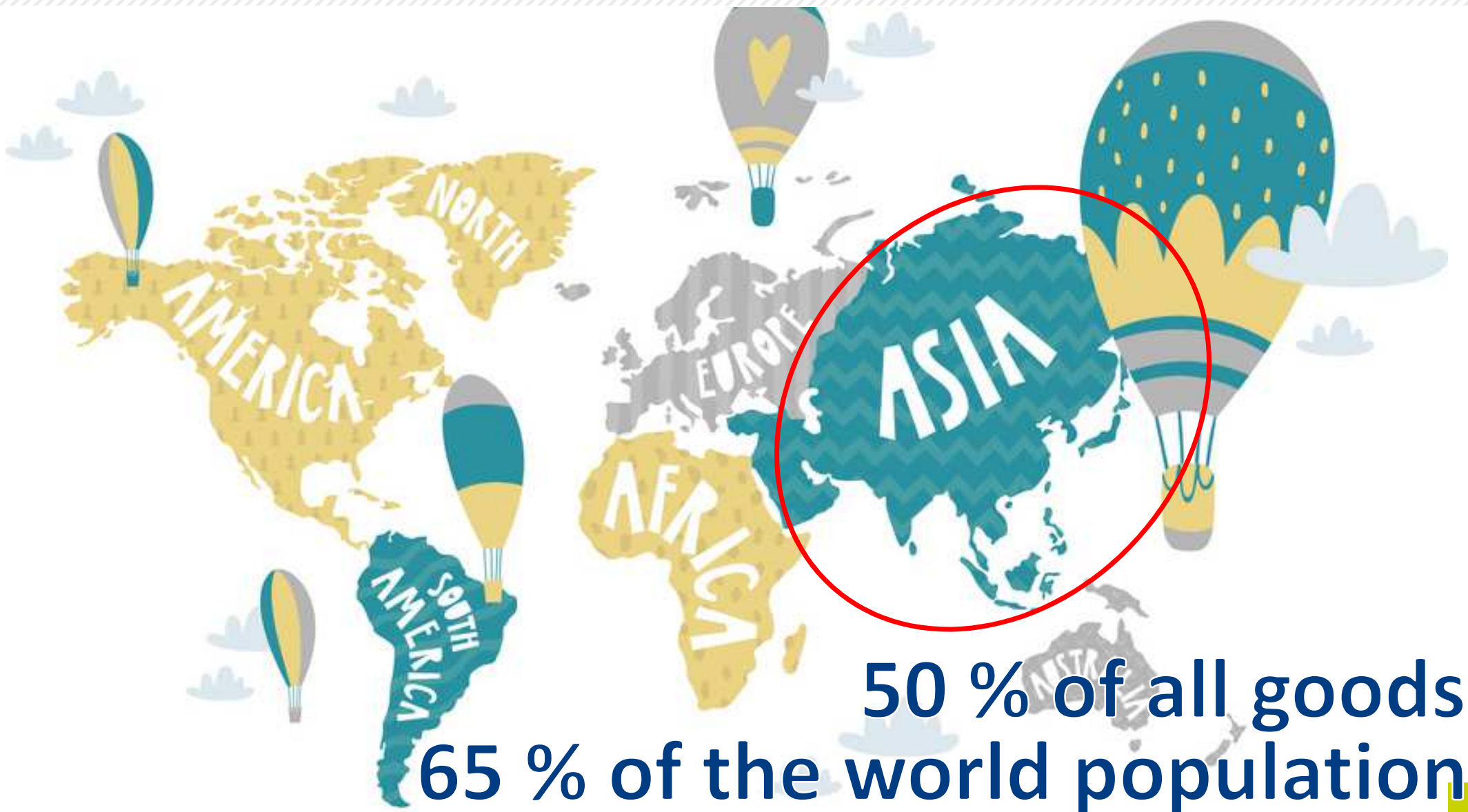
INDUSTRIAL development

3.0



4.0







Thank you very much for
your kind attention