

# aroja xorfex

d i g i t a l   s o l u t i o n s

*from idea to product ...*

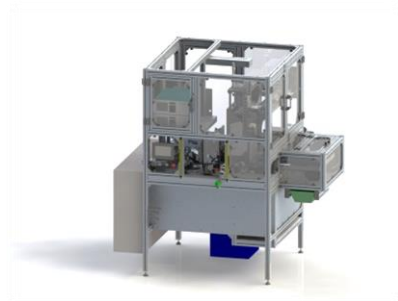
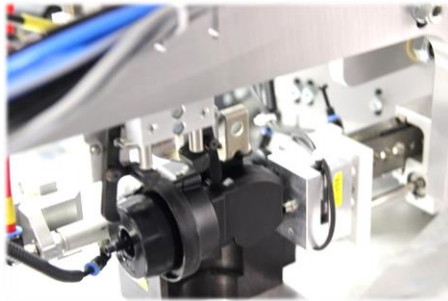
## Core Technologies

- Digital inkjet units
- Flat inkjet printing
- Rotary inkjet printing
- 3D printers
- Industrial machinery solutions

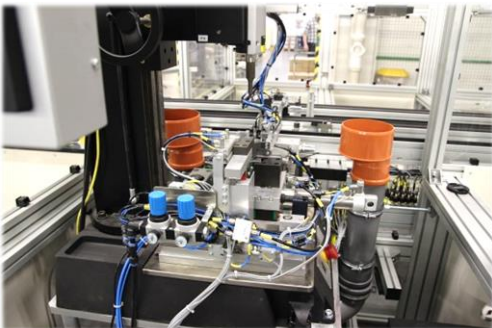
## Company Overview

- Established 2005
- Development and production of 3D printers and special machinery — primarily for the automotive industry
- ISO 9001 certified: manufacturing, research and development

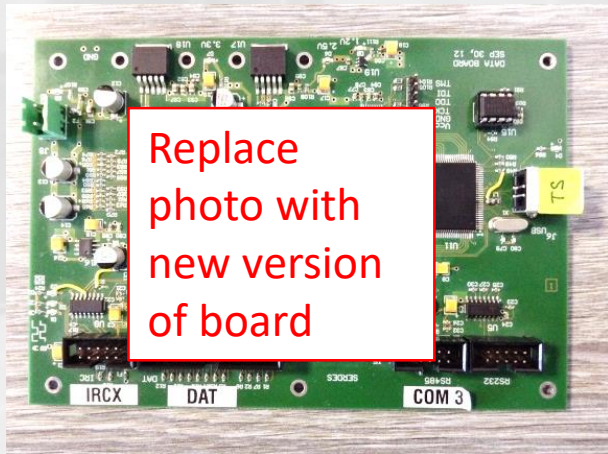
Inspection station STV WOCO for Mercedes-Benz cooling pumps  
Machine cycle: 28 seconds      Annual production: 850.000 pcs



Production line assembled from 10 components with  
2 ultrasonic welding stations for VW / Audi  
Production cycle: 8 seconds      Annual production: 2.500.000 pcs

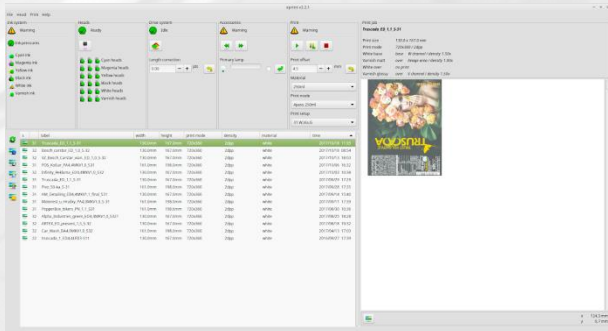


## Electronics for inkjet



- Specialist in inkjet technology
- Expert in construction of industrial digital applications
- Expert in development of electronics and software

## Control software for inkjet



Printhead and line for printing rubber boats by separator for Gumotex a.s.





## A. Core Business Activities

- Development and production of digital inkjet printing machines
- Development and production of 3D printers

## B. Support Activities

- CNC machining of metal products
- Mechanical and electrotechnical assemblies for customers
- Programming and development of printed circuit boards (PCBs)

## C. Production Facilities



## D. About Us

- Small and friendly company
- Our mission: be a stable, reliable and honest partner

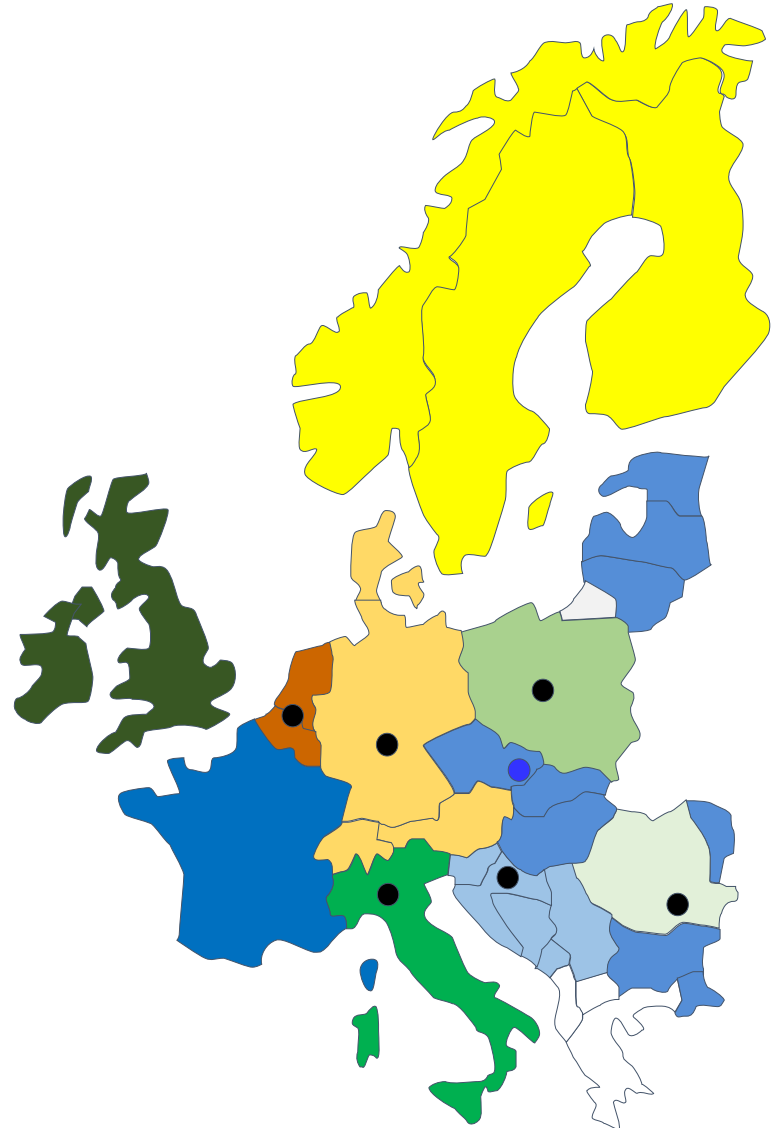
## E. Employees and Staff

- 17 employees
- 4 external colleagues

## F. European Representatives ●

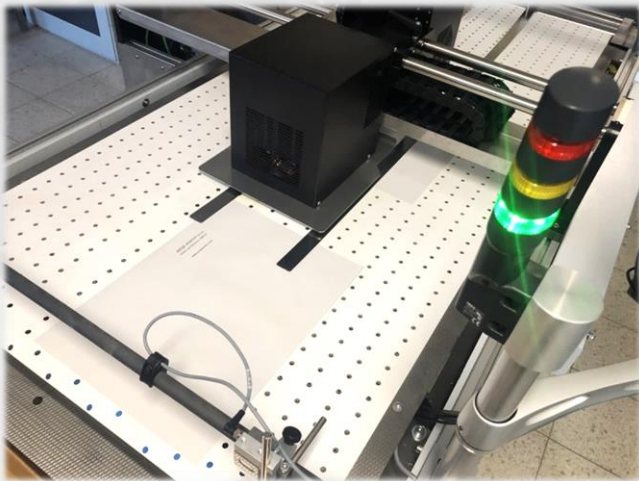
- Benelux
- Germany, Austria, Switzerland
- Poland
- Italy
- Romania
- France (planned for 2020)
- UK (planned for 2020)

## G. Aroja Xorfex s.r.o. ●

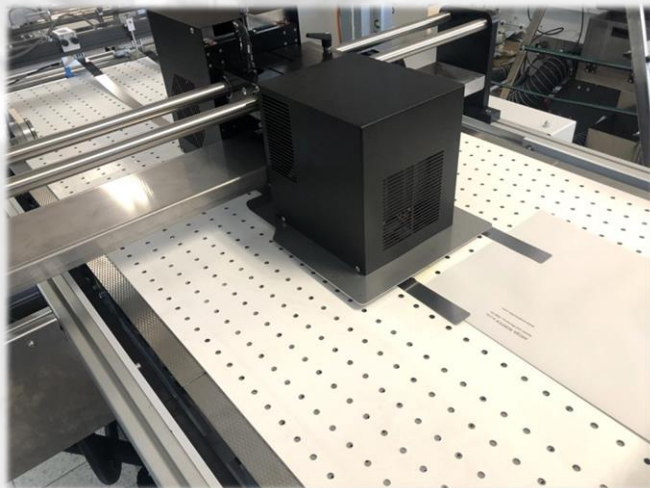


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## Digital inkjet printing unit PU800-1CLUV



- **Personalized digital printing – each print different**
- Average speed of one color printing: **130 lm / min**
- Standard print resolution: **360 x 360 dpi**
- Dimensions of printed objects: **800 x 1200 mm**  
(dimensions adjustable according to customer requirements)
- Electric energy consumption: **5.7 kWh**
- Ink activation: **UV LED lamp / final UV lamp**
- Special operating software AXprint:
  - Sources data in almost any format from customer's database, information system, website or Excel files
  - Controls text, fonts, barcodes, QR codes
  - Production data and information
  - Report generation for logistics management
- Optional quality control system: OCR (optical character recognition) checking by camera



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# Printing Unit - Video

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## Flat Printing Large Z-Axis Objects





## Technical Data

- Resolution: **360 x 360 dpi**
- Dimensions of objects: up to **700 x 1.200 x 200 mm**  
(dimensions adjustable according to customer requirements)
- Power consumption: **3.0 kWh**
- Ink activation: **UV lamp / LED UV unit**
- Adjustable printing height: **0 - 500 mm**
- Application: **vacuum table**
- Operating software: **AXprint**





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## Flat Printing





**Unique and very effective technology for printing flat products**

**Special lacquer surface treatment enables extended warranty for exterior use**













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Rotary Printing



## New technology for product personalization

- **Printing directly on the product**
- **Printing over the entire surface**
- **Amazing details**
- **High quality print with 3D effects**



## Printable Items

- Drink cans
- Flowerpots
- Beverage cups
- Bottles
- Candles
- Plastic tubes
- Other rotary coverings ....

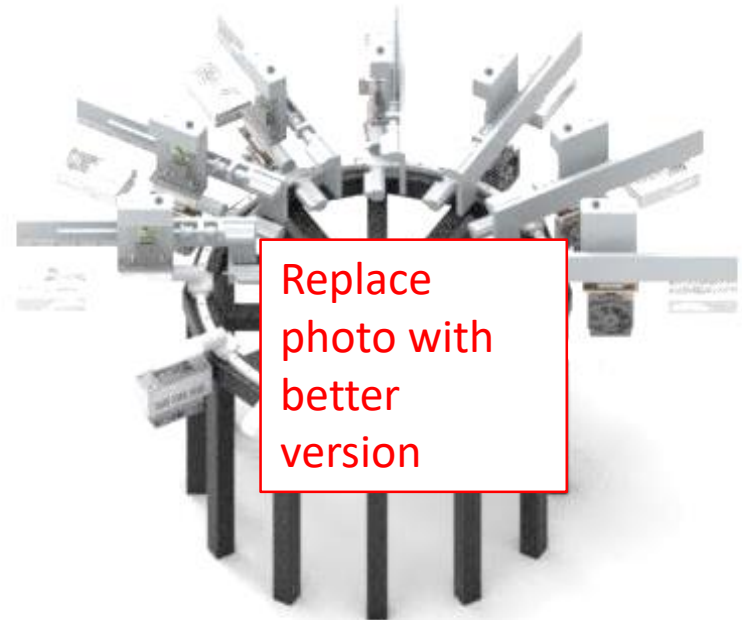
## Rotary Printing





## Rotary Printing Models

- **Small series RP model:**  
50 - 130 pcs / hour
  - Individual printing from 1 piece to batches
  - No costs for changing print themes
  - No additional costs for glues, foils or labels
- **Medium and large series KP model:**  
400 - 800 pcs / hour
  - Full automation
  - Up to 12 job positions



## Rotary Printing - Video

The screenshot displays the xprint v2.2.1 software interface. The left pane shows a list of print jobs with columns for label, width, height, print mode, density, material, and time. The right pane shows the print job details for 'Bosch, carstar\_EO\_1,0\_5-32'.

**Print job details:**

- Print size: 130.0 x 167.0 mm
- Print mode: 720x360 / 2dpp
- White base: base image area / density 1.50x
- Varnish matt: over image area / density 1.00x
- White over: no print
- Varnish glossy: over V channel / density 1.50x

**Print job list (partial):**

Label	width	height	print mode	density	material	time
31 Trusada_EO_1,1_5-31	130.0mm	167.0mm	720x360	2dpp	white	2017/10/18 11:35
32 Bosch, carstar_EO_1,0_5-32	130.0mm	167.0mm	720x360	2dpp	white	2017/10/18 11:35
33 PDS, Aulair_P44.00001,0_5-31	130.0mm	167.0mm	720x360	2dpp	white	2017/10/13 18:03
34 Indevy, Beliana_E04.00001,0_5-32	130.0mm	167.0mm	720x360	2dpp	white	2017/10/06 16:32
35 Trusada_EO_1,1_5-31	130.0mm	167.0mm	720x360	2dpp	white	2017/10/03 10:38
36 PDS_3044_5-31	130.0mm	167.0mm	720x360	2dpp	white	2017/09/28 17:29
37 Ait, Detsalov_E04.00001,1_0-5-31	130.0mm	167.0mm	720x360	2dpp	white	2017/09/14 15:40
38 Motorist, a-Hrady_P44.00001,0_5-31	130.0mm	167.0mm	720x360	2dpp	white	2017/09/11 17:39
39 Pepperflox, Beleri_PN_1,1_5-31	130.0mm	167.0mm	720x360	2dpp	white	2017/08/25 18:28
40 Alpha, Indevy, green_E04.00001,0_5-32	130.0mm	167.0mm	720x360	2dpp	white	2017/08/18 19:32
41 Car, Muthi_BA.00001,0_5-32	130.0mm	167.0mm	720x360	2dpp	white	2017/04/13 17:03
42 Trusada_EO_1,0_4/053-511	130.0mm	167.0mm	720x360	2dpp	white	2016/09/27 17:39

The right pane shows a preview of a Bosch Service Car Service poster. The poster features the Bosch logo, the text 'Bosch Service Car Service', and contact information for CARSTAR SERVICE s.r.o. in Bratislava. The poster also includes a QR code and a small image of a car.



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# Industrial Applications



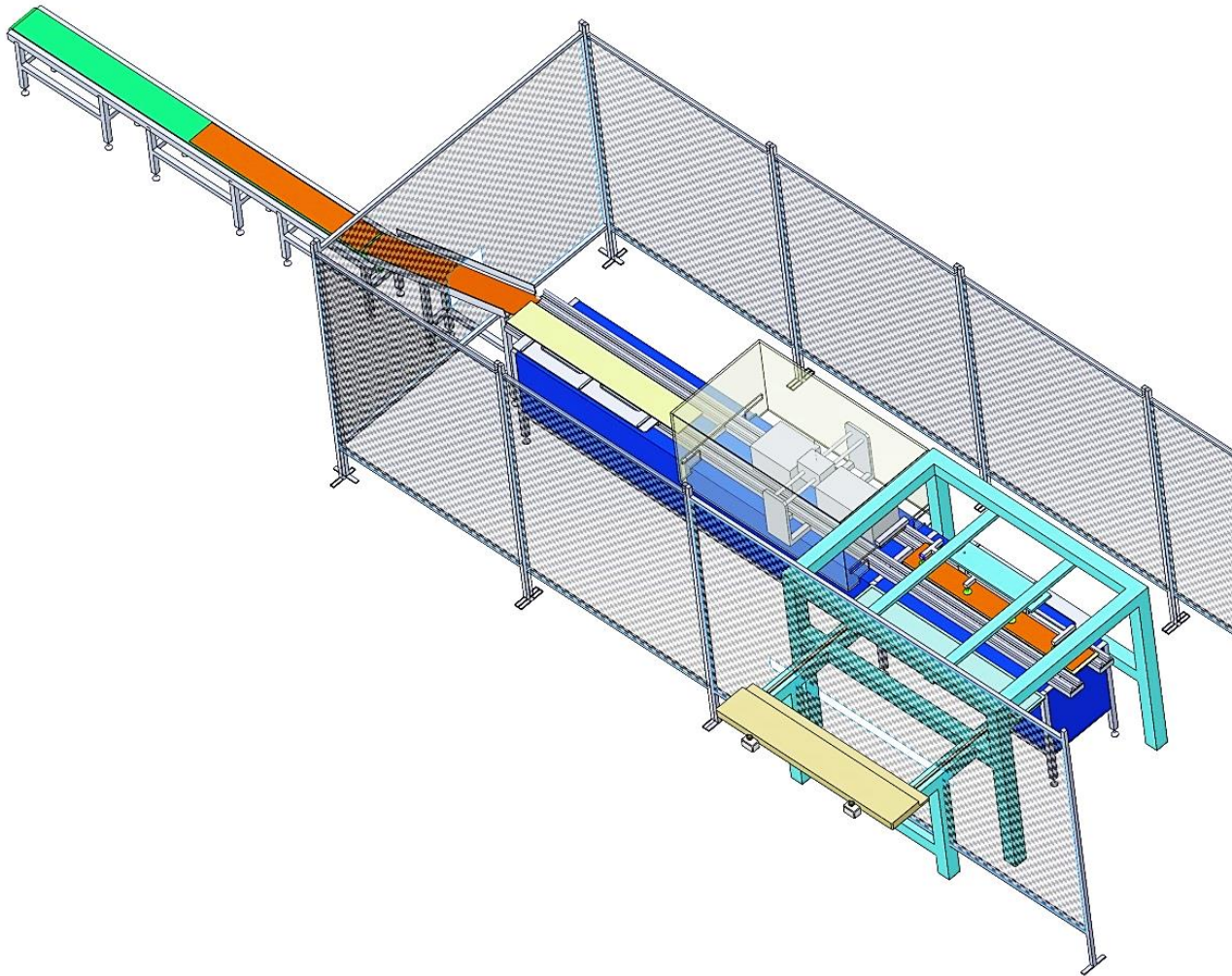
# Industrial Applications



Digital inkjet solution to prevent vulcanisation of rubber textiles for production of inflatable boats

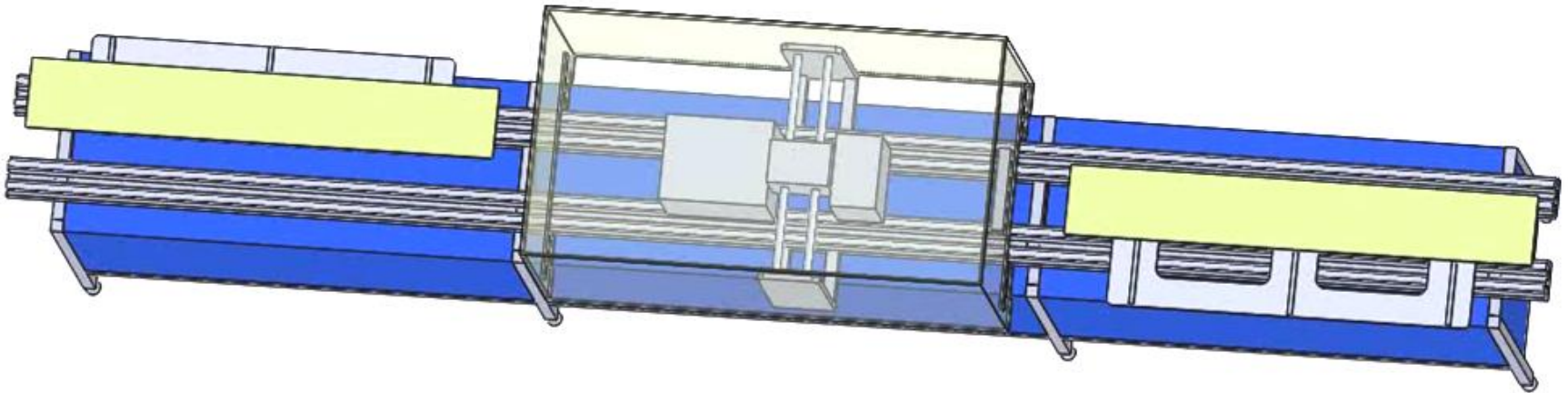


## Digital printing line for floor panels



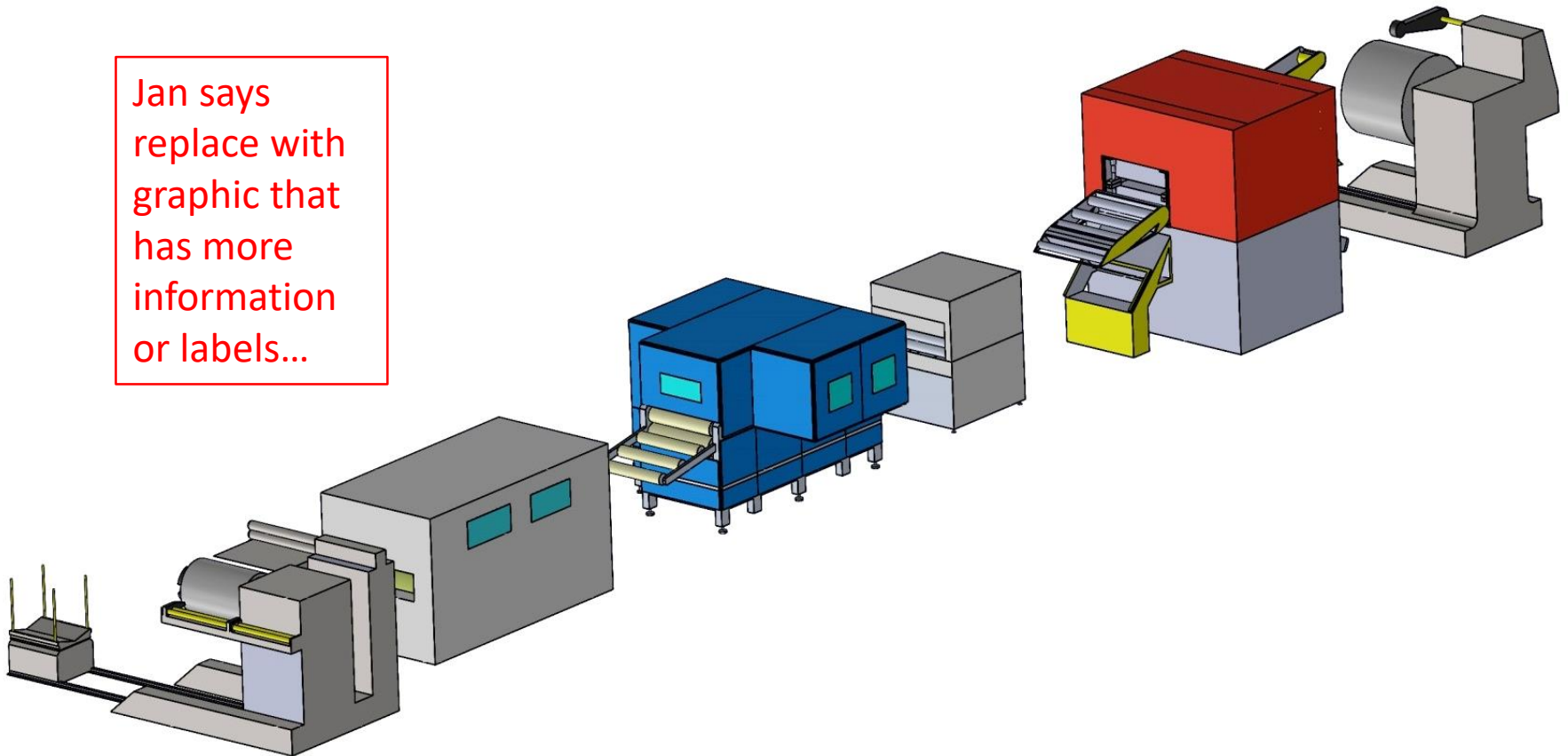


## Digital printing line for floor panels



## Coil to coil (roll to roll) digital printing solution

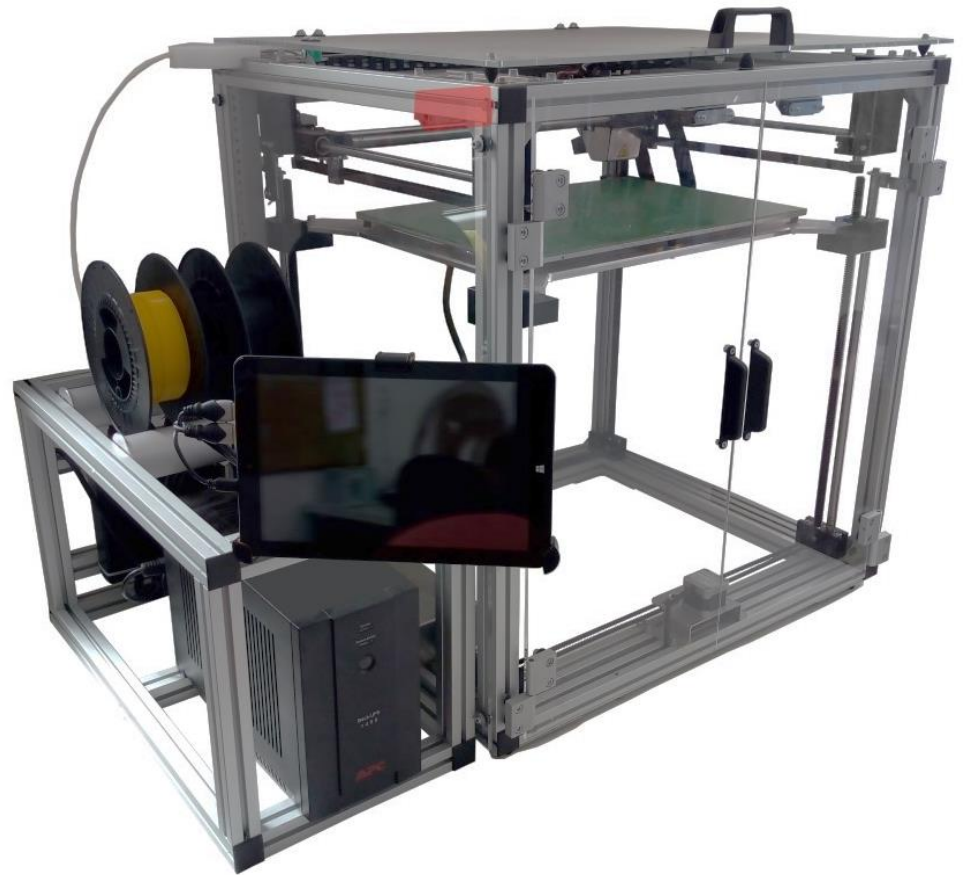
Jan says  
replace with  
graphic that  
has more  
information  
or labels...



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## 3D Printing



## 3D Printing Technologies

- **FFF (FDM): melting of fillament**
  - Very fast modeling
  - New design
  - High precision
- **Inkjet: ink printing**
  - New technology for printing on glass
  - Accuracy of 0,02 mm
- **FUVM: UV glue printing**
  - New UV curing technology for 3D printing
  - Unique solution





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