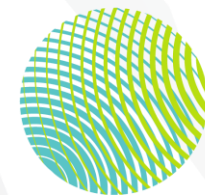


**Sales Presentation**  
**Nanogate CEE Fohnsdorf**  
**“SKINLINE”**

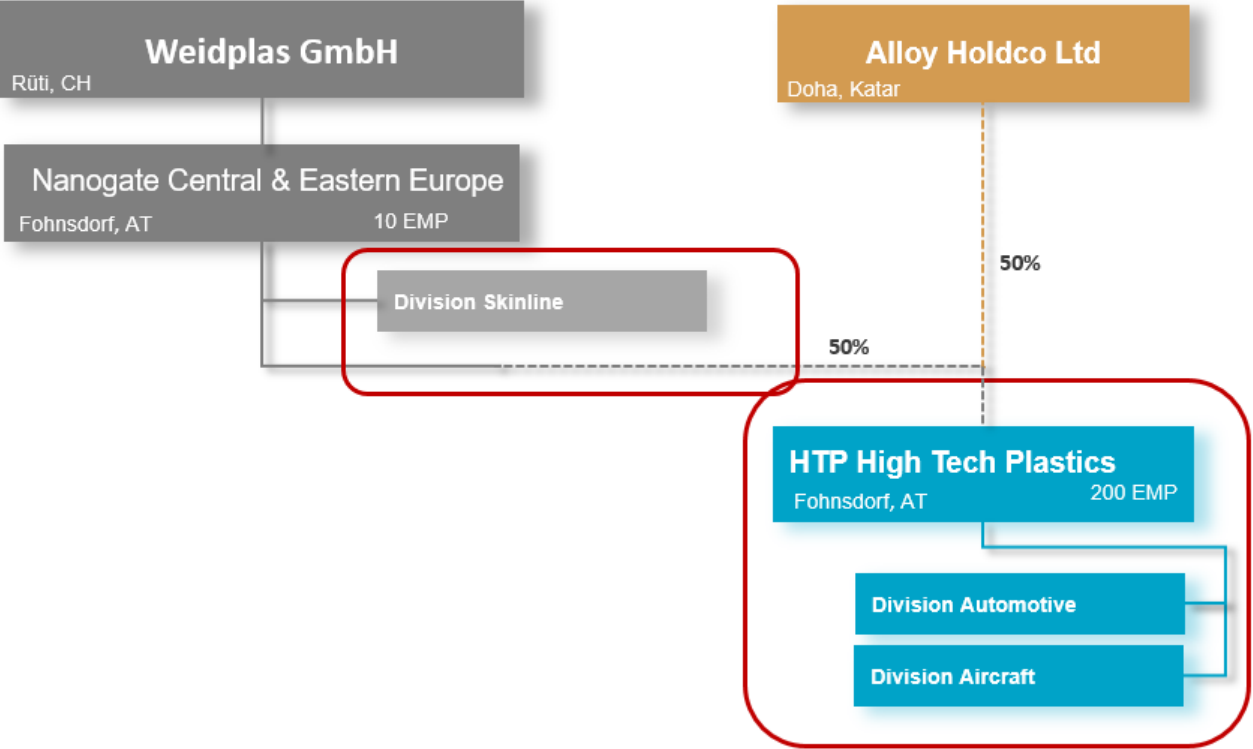
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January 2023



**Techniplas**  
Destination: ne>>xt level

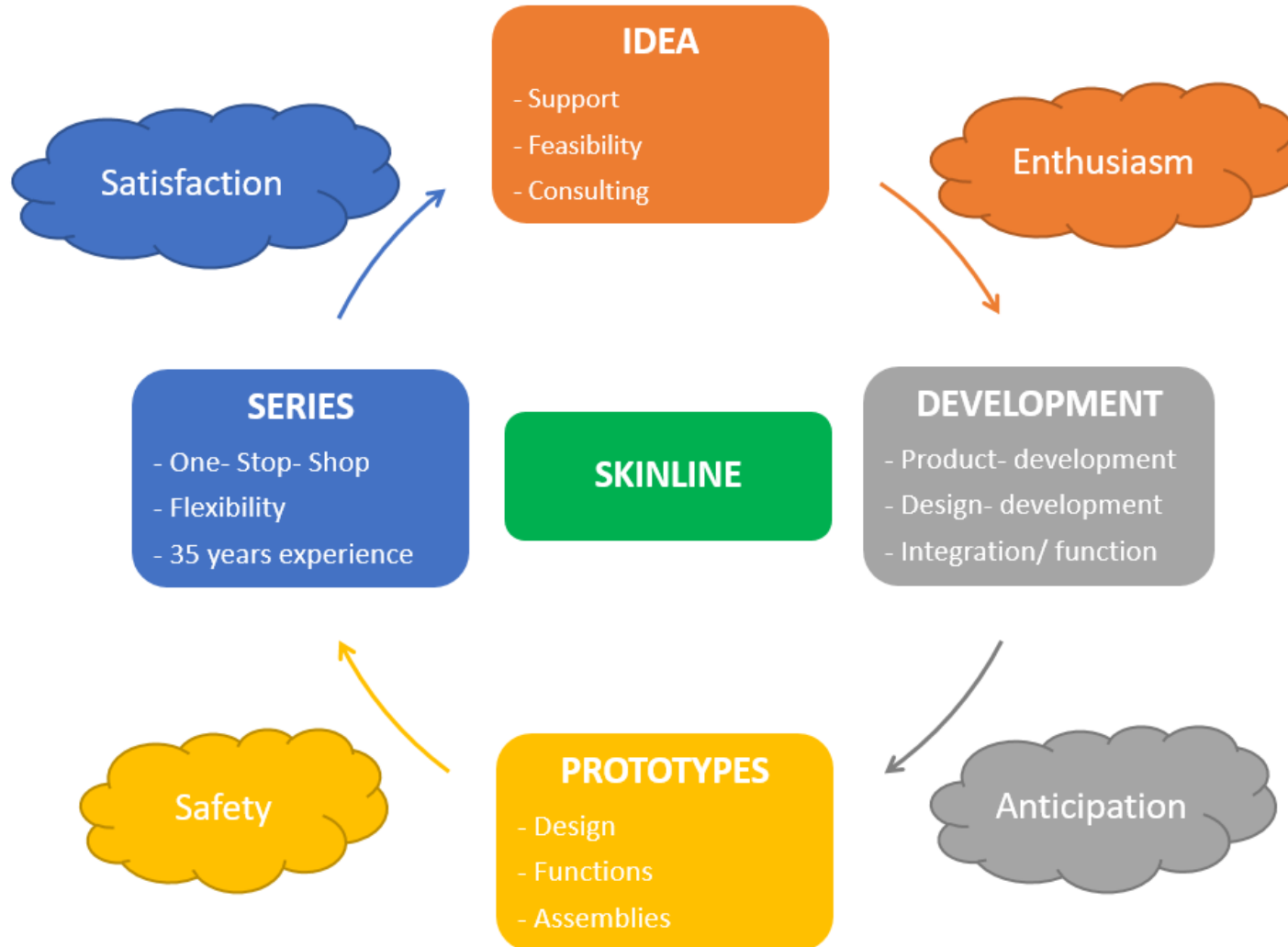
# FOHNSDORF



# Key Figures – Status 2023

- Production launch: In Fohnsdorf 1977 as “Eumig”
- Customer: 800 Porsche, Likum (former Flex), S&W, SCOTT, Delta Plastic...
- Number of employees: 8
- Turnover: EUR 1,2 Mio
- Manufacturing Process SKINLINE: Screen printing, high pressure forming, SMT, ACF- Bonding, foil cutting
- Manufacturing Process (with HTP): FIM (film insert molding), IMSE (In-Mold Structural Electronics), injection molding, lacquering, assembling...
- Possible shifts: 16 (currently 5)

# VISION – One stop shop





# SKINLINE COMPETENCES



# Skinline – 35 years FIM experience

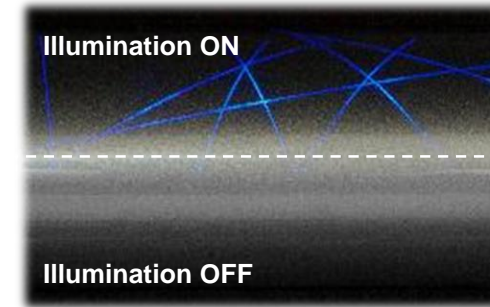
## Skinline™ is one of the FIM pioneers

📍 35 years experience in Film Insert Molding (FIM):

- 📍 Swatch
- 📍 Nokia
- 📍 Microsoft Xbox
- 📍 Marker, Fischer, Atomic
- 📍 BSH Home Appliance
- 📍 Electrolux

📍 **Manufacturing of 2D and 3D formed FIM foils for:**

- 📍 Electronics
- 📍 Home appliance
- 📍 Medical applications
- 📍 Sports
- 📍 Automotive



# Products – Automotive (together with HTP)

## Porsche 992:

- 📍 Middle console
- 📍 „UV- Hardcoat“ Foils
- 📍 Highgloss black





# Products – Automotive (together with HTP):

## VW Passat:

- 📍 Hazard button
- 📍 2K- Mold
- 📍 „Back glass effect“





# Products – Non Automotive

## Current projects:

- 📍 Door Lock Cover
- 📍 Housing parts
- 📍 Medical devices
- 📍 Printed antennas



## And in a joint venture with a local partner:

- 📍 Digital printing
- 📍 Offset printing
- 📍 Cutting plotter



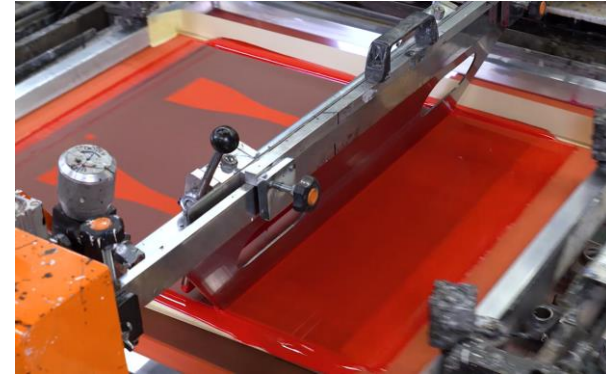
# SKINLINE PROCESS



# Processes – Screen Printing

## 2x Sakurai cylinder screen printing machines

- 📍 Max. sheetsize **700x500mm**
- 📍 With attached drying tunnel





# Processes – Forming

## High pressure forming

- 📍 Working pressure 100 bar
- 📍 „Niebling principle“
- 📍 UV- hardening station
- 📍 Contactless forming



## 2x „Hy-tech“

- 📍 Working pressure 40 bar
- 📍 Contact heating

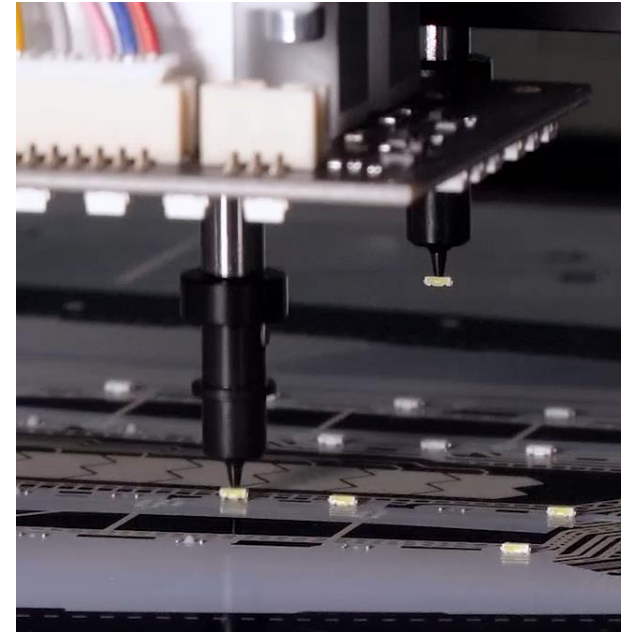




# Processes – Electronics

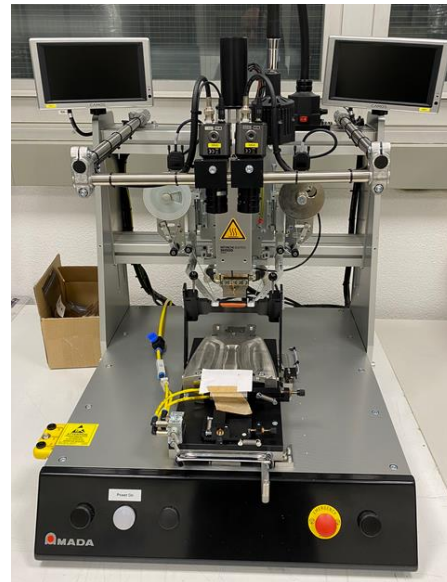
## SMT – Surface Mount Technology

- 📍 Essemtec Puma 2
- 📍 Dispensing + Jetting
- 📍 Up to 18.000 elements per hour



## ACF Bonding

- 📍 Prebonding
- 📍 Finishbonding



# Processes – Quality

## Automated Testers

- 📍 Electrical Tester
- 📍 End of Line Tester
- 📍 Electrical properties
- 📍 Tactile finger (sensor switches)
- 📍 Camera based testing



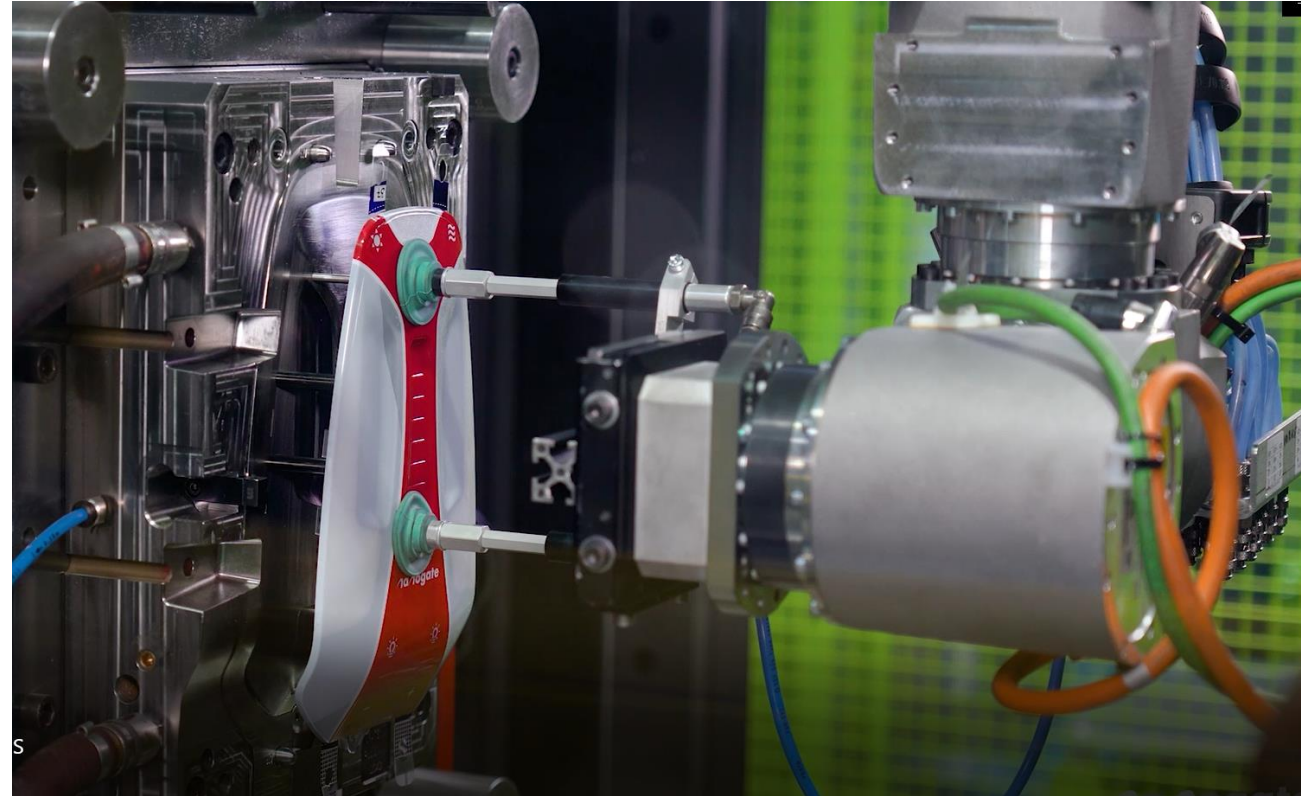
# Processes – Molding

## **FIM- molding cell:**

- 📍 400to clamping force
- 📍 Fully automated handling
- 📍 Cell with flowbox

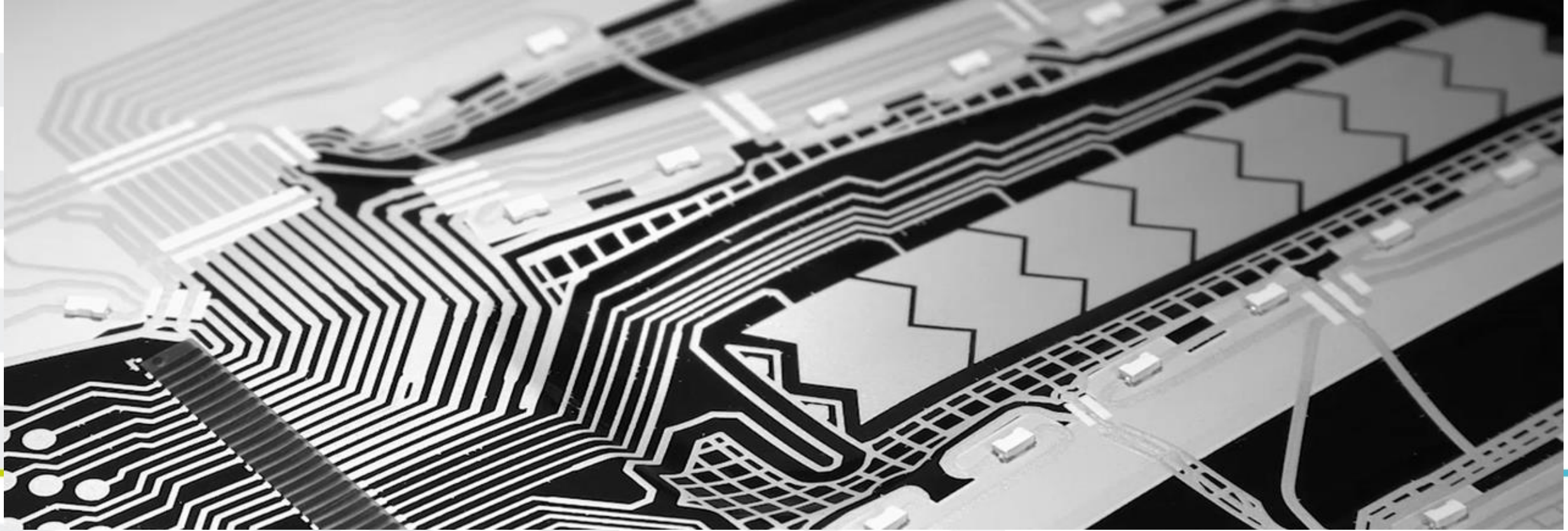
## **HTP:**

- 📍 25 molding machines
- 📍 25to – 1.350to clamping force
- 📍 1K/ 2K thermoplastic molding
- 📍 High temperature aggregates





# NEW TECHNOLOGY





# IMSE® Technology

## Sensors:

- 📍 Capacitive touch buttons
- 📍 Proximity sensors
- 📍 Printed antennas



## Lighting

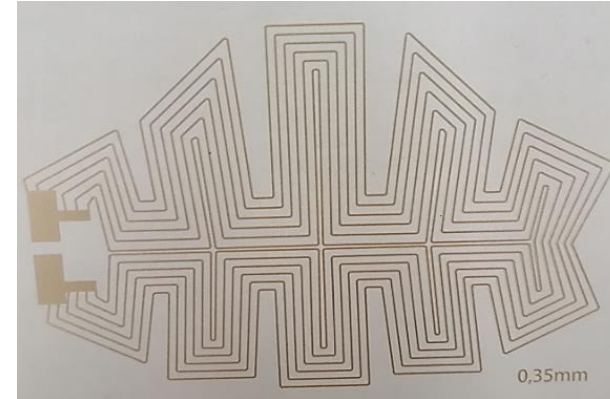
- 📍 High power LEDs
- 📍 RGB LEDs
- 📍 Backlighting
- 📍 „Hidden till lit“



# Heating solutions

## Printed tracks

- 📍 Printed silver traces
- 📍 Deicing for radomes
- 📍 Contact heating



## Alpha Mask®

- 📍 Together with our customer Edera Safety
- 📍 Coatings for heated FFP2- Mask
- 📍 Defogging for reading lips



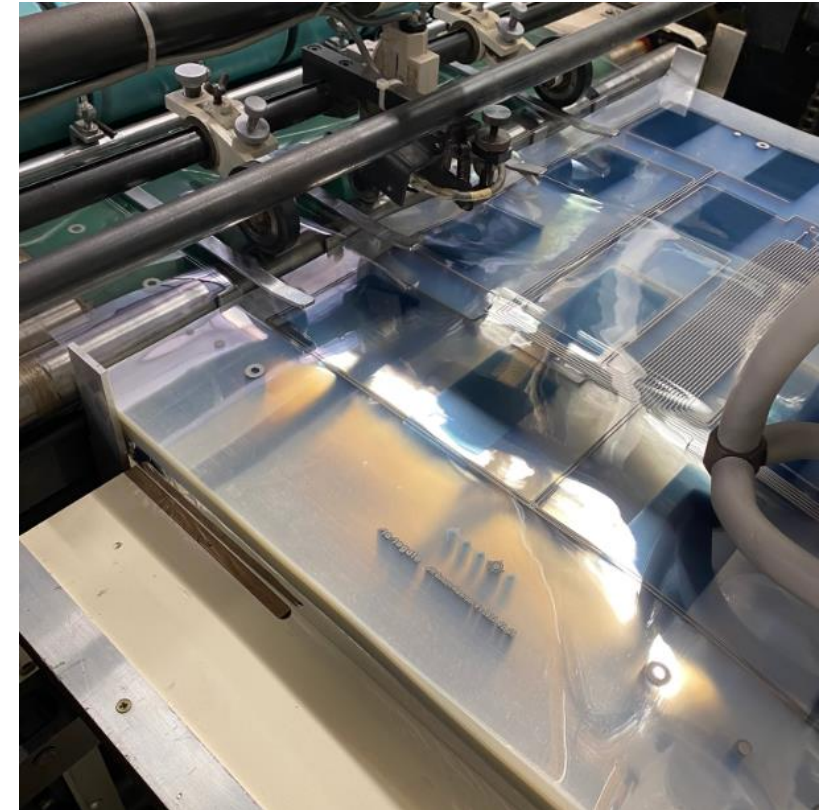
# Piezoelectric sensors

## Advantages

- 📍 Buttons react on pressure
- 📍 Can be used with gloves and in wet environment
- 📍 No energy needed

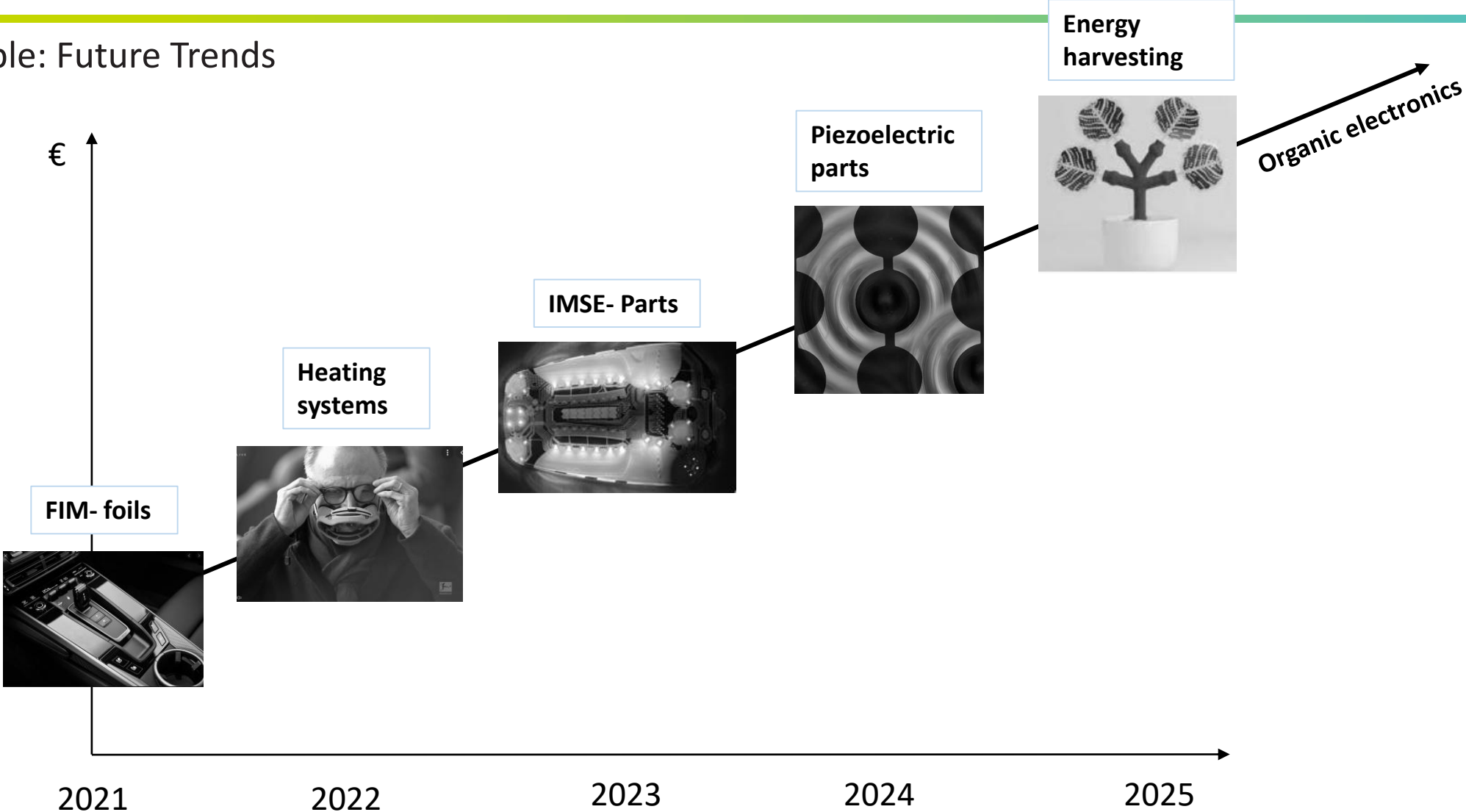
## Applications

- 📍 Piezoelectric sensing
- 📍 Pyroelectric sensing
- 📍 Vibroacoustic sensing
- 📍 Energy Harvesting



# Predevelopment CEE "SKINLINE"

Example: Future Trends





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**SKINLINE** Contact