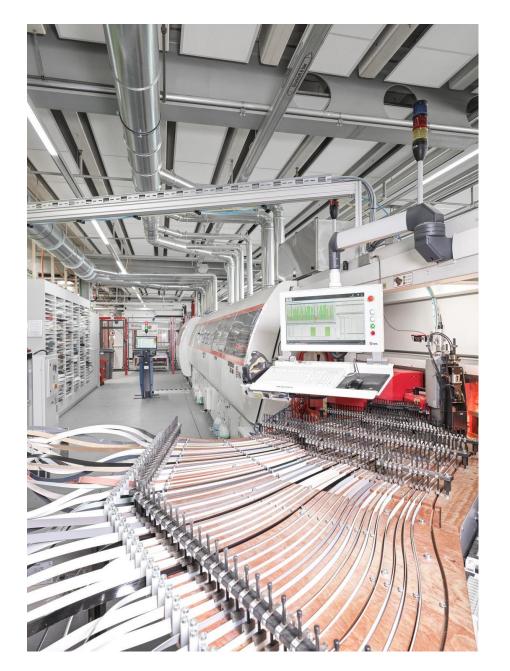


## **KANTENSYMPOSIUM 2024**



#### 

# THE LASER PROCESS IN CONJUNCTION WITH DIGITAL PROCESS CONTROL

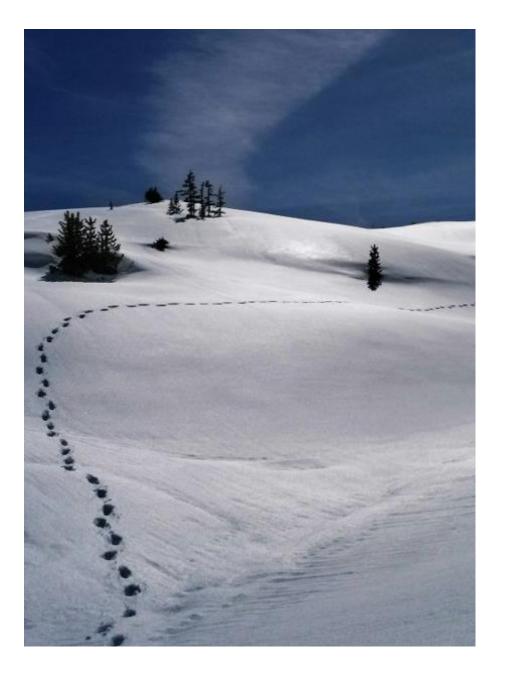
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#### VERISET – WHO WE ARE

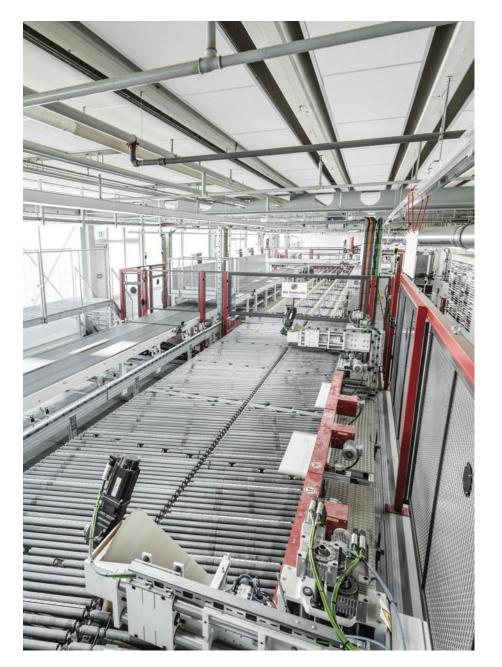
- Family firm in 2nd generation
- Largest Swiss kitchen manufacturer
- 350 employees
- Complete value creation
- 20,000 high-quality kitchens
- 3 production plants
- Kitchens in batch size 1
- 80 décors & special colours





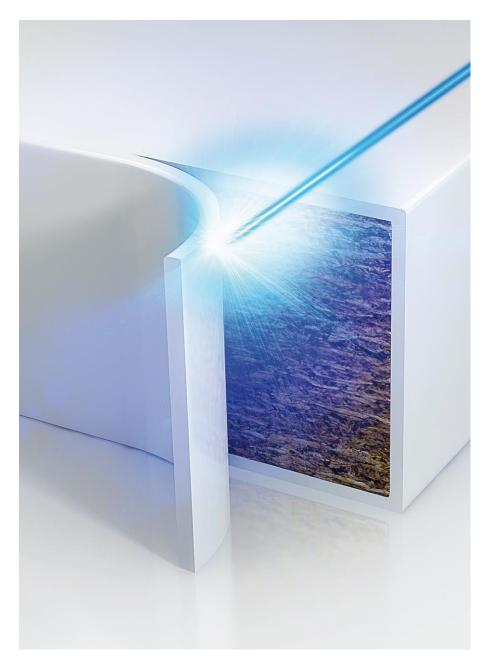
#### STEPS TO THE PERFECT COMPONENT

- 1. Customer needs
- 2. Plant and equipment
- 3. Laser technology
- 4. Production data
- 5. Quality
- 6. #edge is digital
- 7. Edge inspection
- 8. Production control



# INNOVATIVE PLANT & EQUIPMENT

- Long-term strategy
- High project expertise
- High automation level
- Excellent data
- Consistent staff training
- Strong partners



### LASER TECHNOLOGY

- Experience since 2011
- Major learning curve
- All front panels lasered
- HOMAG & IMA experience
- Preventive maintenance
- Laser performance test

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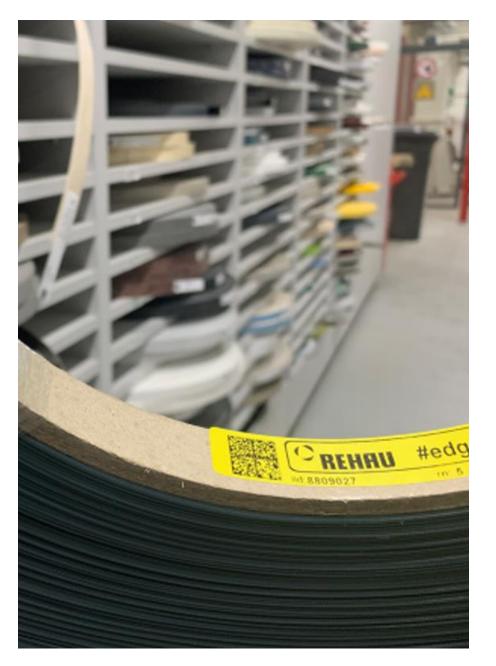
#### **PRODUCTION DATA**

- >500 data items per part
- Client-based network
- Consistent optimisation
- High data quality
- Max. availability
- Own experts



#### QUALITY

- Own test laboratory
- Data collection from 2014
- Systematic testing
- DIM cert. development
- Process & product testing
- Competent core group



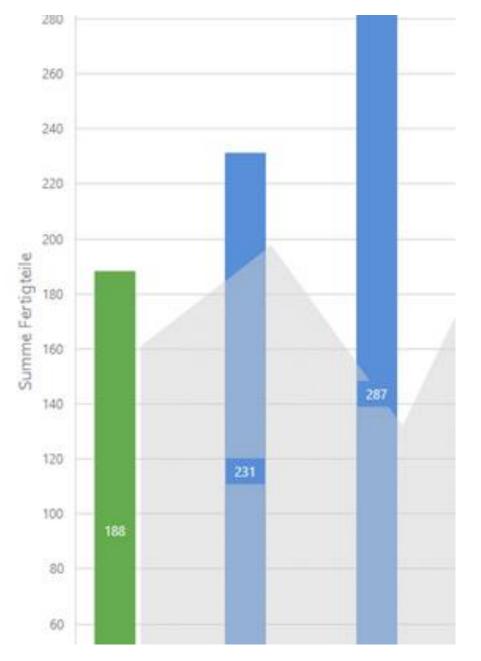
#### **#EDGE IS DIGITAL**

- Ease of use
- Clear identification
- Correct joule values
- All product parameters
- Batch tracing
- Residual edge management



#### **EDGE INSPECTION**

- Process monitoring
- Hit rate >98%
- Reduction in reproduction
- 170 parts in circulation
- Defined quality
- Assortment & special colours



#### DMAIC PRODUCTION CONTROL SYSTEM

- Centralised data logging
- Live data
- KPIs
- Quality data
- Delivery reliability of data
- Transparent & networked

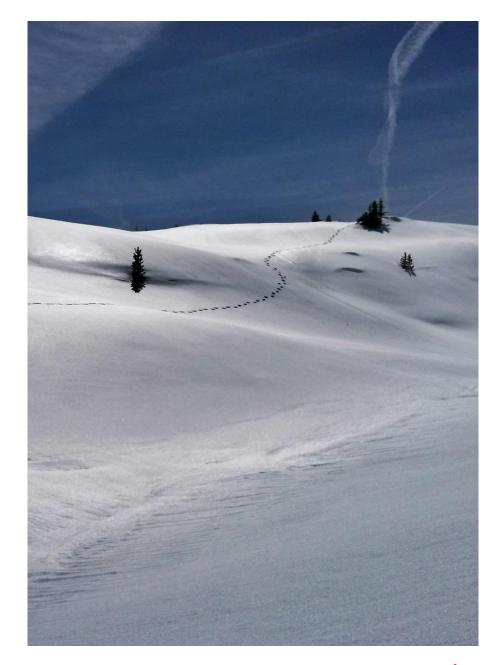
#### PREREQUISITE FOR OUR SUCCESS



13 **veriset** 

#### PRIORITY OF INDUSTRY?

- 1. Panels?
- 2. Edges?
- 3. Systems?
- 4. Expertise?
- 5. Data?
- 6. Tools?



#### NEXT STEPS TO THE PERFECT COMPONENT

- Identification of individual panels
- Uniform material thickness
- Quality label for high-grade panel products
- Digital transmission of identified panel errors
- High-grade front panels without protective film



**Panels** 

Edges

- "Loss-free" edge production
- Return of edge remnants
- Décor design on radius

#### NEXT STEPS TO THE PERFECT COMPONENT



Increase in technical availability

- Systems for continuous monitoring of production quality & availability
- Intuitive operation
- Spare parts supply



Expertise

- Standardised qualification & "driving licence"
- Competence development level of operators
- Training conducted through system suppliers
- Online training tools

#### NEXT STEPS TO THE PERFECT COMPONENT

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	3	3	Hydrophobieren
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	1	1	Bearbeitung
	180	180	Enlauf Rotation
	1110	1110	Vorträsen / Fromatieren
	R10-R10-2-0	R10-R10-2-0	tile, Radius und Leimart
11-0	11-000-000-000-000-000	11-000-000-000-000-000	(erputzten und Runden

```
Data
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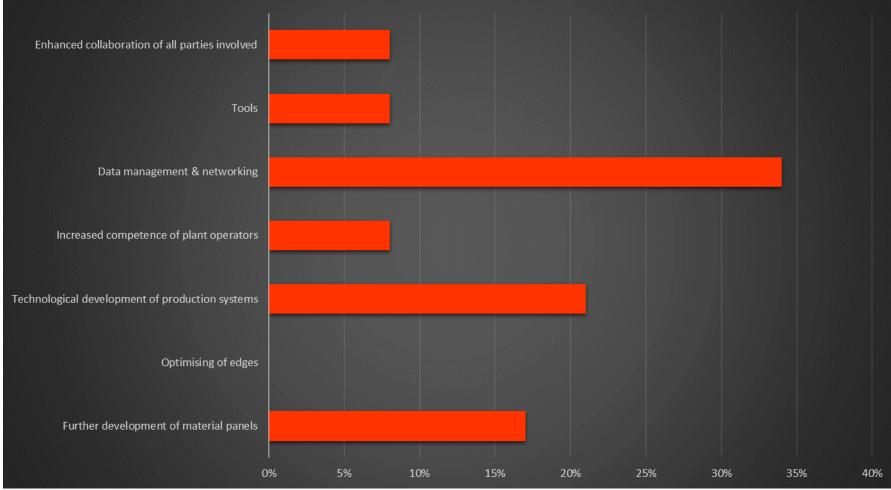
- Industry standards
- Defined & open interfaces
- Data transmission as of value creation
- Data for efficient production control
- Connection of production plants



Tools

- Downtime management
- Identification
- Transmission of measurement parameters
- Detection of defective tools in process

#### SURVEY RESULTS



Response from 12 participants at the Edge Symposium on 14 March 2024

#### 14.03.2024 / Christian Kramis

18 veriset



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#### THANK YOU FOR YOUR ATTENTION.

#### WE LOOK FORWARD TO MEETING YOU PERSONALLY.

"

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