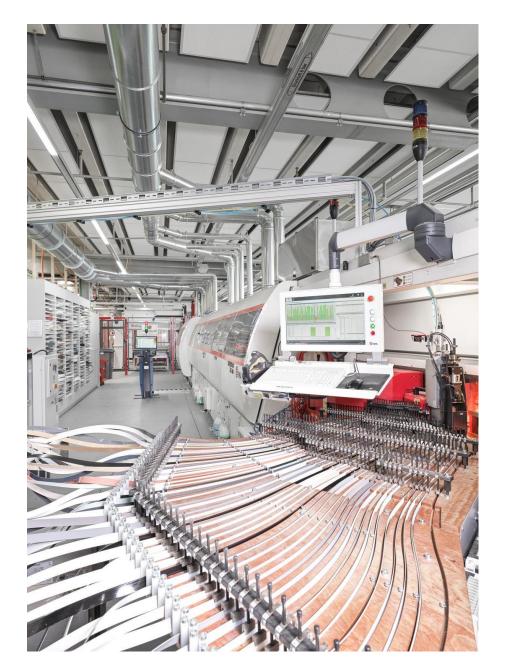


KANTENSYMPOSIUM 2024



THE LASER PROCESS IN CONJUNCTION WITH DIGITAL PROCESS CONTROL

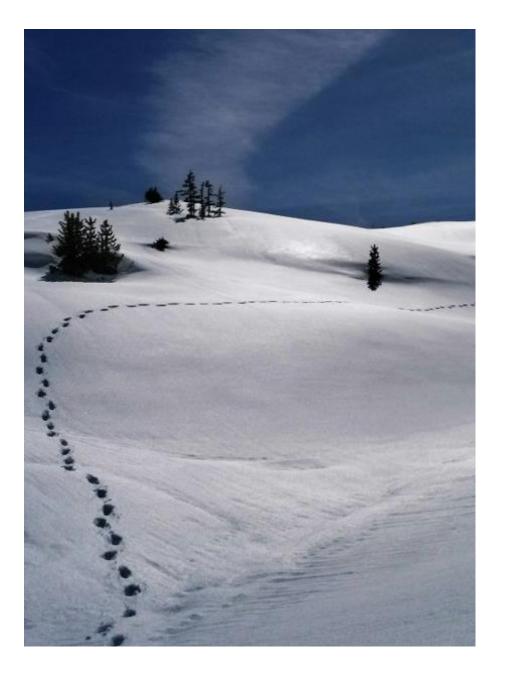
//



VERISET – WHO WE ARE

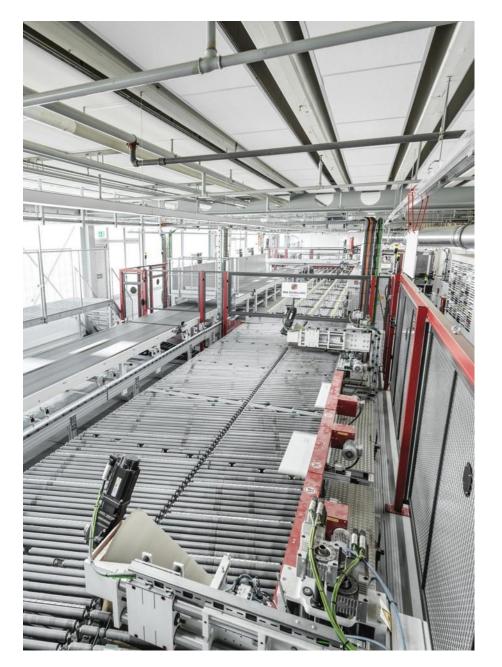
- Family firm in 2nd generation
- Largest Swiss kitchen manufacturer
- 350 employees
- Complete value creation
- 20,000 high-quality kitchens
- 3 production plants
- Kitchens in batch size 1
- 80 décors & special colours





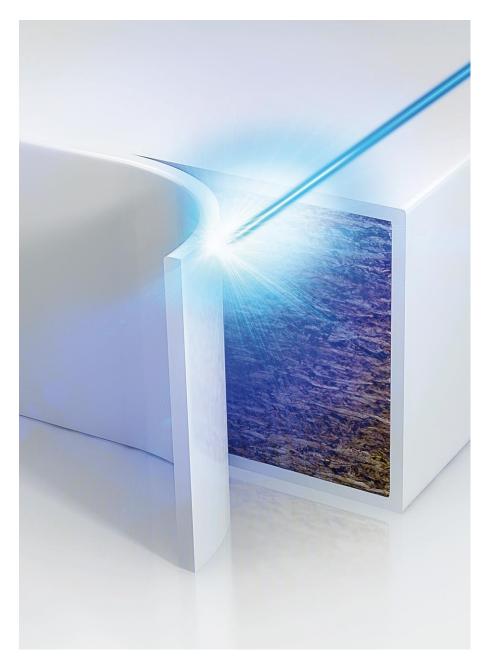
STEPS TO THE PERFECT COMPONENT

- 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

	90	90	90	U	90
	000000733300026	000000733300013	000000733300008	00000733300066	3300002
	000000733300025	000000733300012	000000733300007	000000733300065	3300001
	0000007333	0000007333	0000007333	0000007333	0007333
	0000007333_001	0000007333_001	0000007333_001	0000007333_001	333_001
	02	02	02	02	02
	0	0	0	0	0
	2035337138	2035337125	2035337120	2035308422	5337114
	Auszug 347	Auszug 115	Auszug 207	Seite FF links 766	Auszug 347
	400	600	600	577	600
	343	111	203	762	343
	396	596	596	573	596
	19	19	19	19	19
	120201	120201	120201	120201	120201
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	Ŭ,
	0	0	0	0	0
	30.11.2021	01.12.2021	30.11.2021	29.11.2021).11.2021
	0	0	0	0	0
	0	0	0	0	0
	150	150	150	150	150
	370	370	370	370	370
	1-000007333_001	1-0000007333_001	1-0000007333_001	1-0000007333_001	333_001
	0	0	0	0	0
	1	1	1	1	1
	1	1	1	1	1
	0	0	0	0	0
	1110	1110	1110	1110	1110
	R10-R10-2-0	R10-R10-2-0	R10-R10-2-0	R10-R10-2-0	I-R10-2-0
1.	11-000-000-000-000-000	11-000-000-000-000-000	11-000-000-000-000-000	11-000-000-000-000-000	-000-000
0-1	0-000-00000-0000-0000	0-000-00000-0000-0000	0-000-00000-0000-0000	1-045-200080-0000-0000	000-0000
	0	0	0	0	0
	3	3	3	3	3
	191201N	191201N	191201N	191201N	191201N
	1	100	100	100	100
	180 1110	180 1110		180 1110	180
	R10-R10-2-0	R10-R10-2-0	R10-R10-2-0	R10-R10-2-0	I-R10-2-0
1.	11-000-000-000-000-000	11-000-000-000-000-000	11-000-000-000-000-000	11-000-000-000-000-000	-000-000
0-1	0-000-000000-0000-0000	0-000-000000-0000-0000	0-000-000000-0000-0000	0-000-000000-0000-0000	2000-000
0-1	0	0	0	0	00000000
	3	3	3	3	3
	191201N	191201N	191201N	191201N	191201N
	1	1	1	1	1
	270	90	270	90	270
	1110	1110	1110	1110	1110
	R10-R10-2-0	R10-R10-2-0	R10-R10-2-0	R10-R10-2-0	I-R10-2-0
11-	11-R10-R10-R10-R10-R10	11-R10-R10-R10-R10-R10	11-R10-R10-R10-R10-R10	11-R10-R10-R10-R10-R10	R10-R10
0-1	0-000-000000-0000-0000	0-000-000000-0000-0000	3-037-170080-2005-2005	0-000-000000-0000-0000	000-0000
	0	0	0	0	0
	3	3	3	3	3
	191201N	191201N	191201N	191201N	191201N
	1	1	1	1	1
	90	270	90	270	90
	1110	1110	1110	1110	1110
	R10-R10-2-0	R10-R10-2-0	R10-R10-2-0	R10-R10-2-0	I-R10-2-0
11-	11-R10-R10-R10-R10-R10	11-R10-R10-R10-R10-R10	11-R10-R10-R10-R10-R10	11-R10-R10-R10-R10-R10	R10-R10
3-	3-037-170080-2005-2005	3-037-170080-2005-2005	3-037-170080-2005-2005	0-000-000000-0000-0000	005-2005
	0	0	0	0	0
	3	3	3	3	3
				191201N	191201N
	191201N 0	191201N 0	191201N 0	0	0

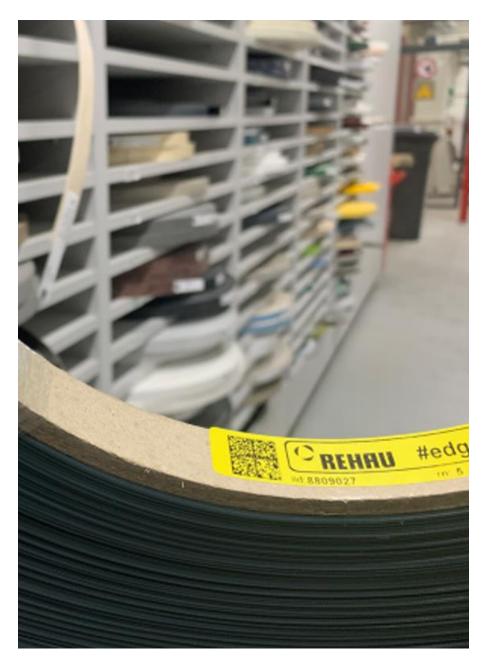
PRODUCTION DATA

- >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



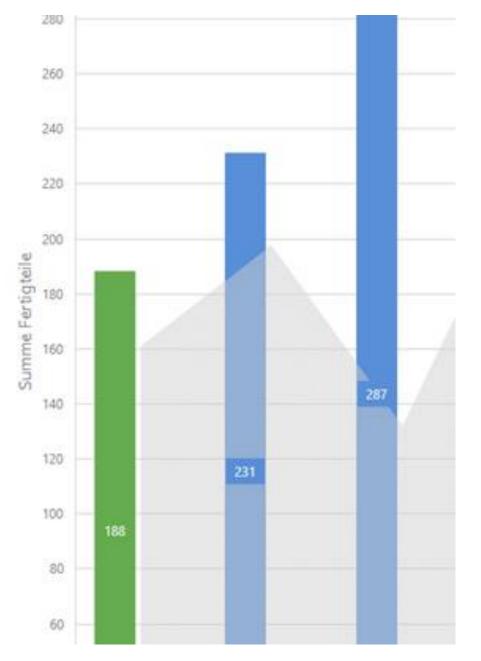
#EDGE IS DIGITAL

- 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

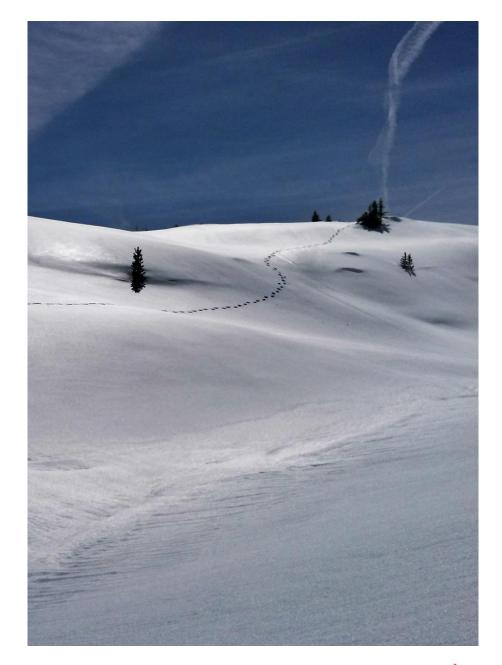
PREREQUISITE FOR OUR SUCCESS



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

	1-0000007333_001	1-0000007333_001	Fertigungslos
			Abstacelolatz
			Zuschnittdatum
			letzte Drehung
	0	0	
	1	1	el oder Handenthahme
	1	1	Bearbeitung
	0	0	Einlauf Rotation
	1110	1110	Vorträsen / Fromatieren
	R10-R10-2-0	R10-R10-2-0	tle, Radius und Leimart
11-0	11-000-000-000-000-000	11-000-000-000-000-000	/erputzten und Runden
0-00	1-045-200080-0000-0000	0-000-000000-0000-0000	Nuten und Fälzen
	0	0	
	3	3	Hydrophobieren
	191201N	191201N	Arbiteinummer Kante
	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
```

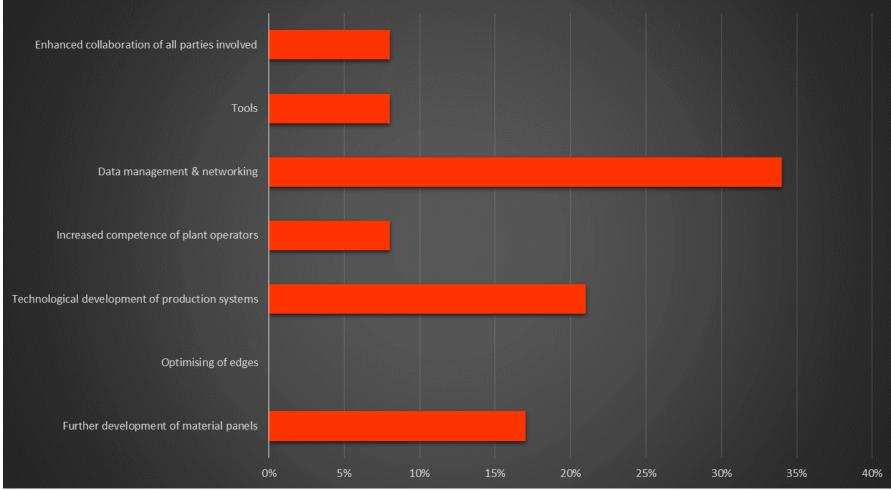
- Industry standards
- Defined & open interfaces
- Data transmission as of value creation
- Data for efficient production control
- Connection of production plants



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



//

THANK YOU FOR YOUR ATTENTION.

WE LOOK FORWARD TO MEETING YOU PERSONALLY.

"

Veriset AG Oberfeld 8 CH-6037 Root / Switzerland www.veriset.ch

Christian Kramis, Head of Production & Logistics, Member of the Executive Board +41 41 455 46 79 | +41 79 628 68 45 | christian.kramis@veriset.ch

Andreas Häni, Head of Engineering and Co-Head of AVOR/PPS +41 41 455 46 35 | andreas.haeni@veriset.ch