

LET'S MAKE FOOD SAFER
TOGETHER

FactoryClean★



Challenges to quality management systems now and in the future ?

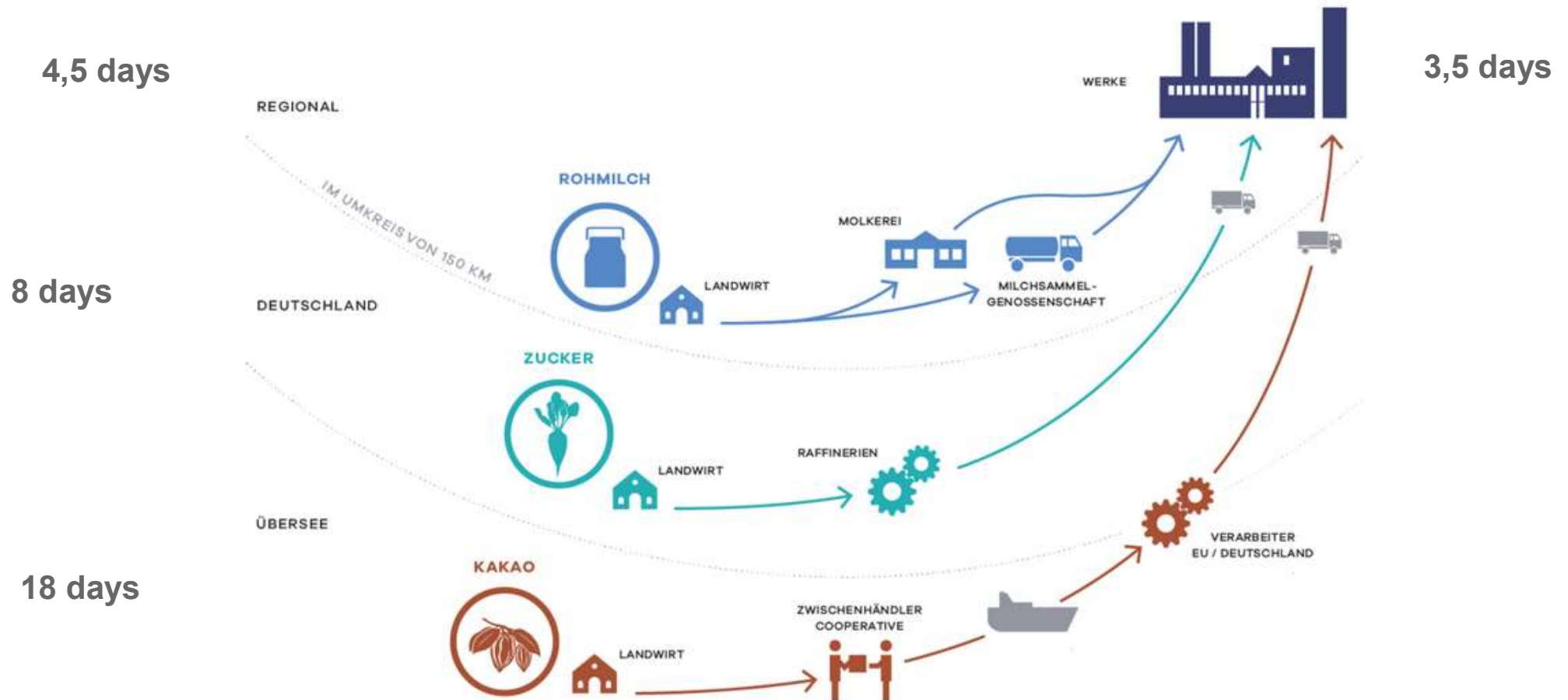


WEEKLY CLEANING SCHEDULE
PRODUCTION AREA
 W/C: _____

ITEM/EQUIPMENT	M	T	W	T	F	S	S	S	PRODUCT	COMMENTS
FLOORS	✓	✓	✓	✓	✓	✓	✓		TIGER RED	
WALLS	✓		✓				✓		ASCEPTOPOL	
CEILING							✓		ASCEPTOPOL	
GRILL & SHELVES							✓		ASCEPTOPOL	
STOVE & SHELVES	✓	✓	✓	✓	✓	✓	✓		ASCEPTOPOL	
OVENS							✓		ASCEPTOPOL	
TABLE	✓	✓	✓	✓	✓	✓	✓		ASCEPTOPOL	
FRYER	✓	✓	✓	✓	✓	✓	✓		ASCEPTOPOL/ DETTOX	
MWAVE & SHELVES			✓			✓	✓		ASCEPTOPOL/ DETTOX	
SINKS & SHELVES				✓		✓	✓		ASCEPTOPOL	
G F SLICER				✓		✓	✓		ASCEPTOPOL	
WALL SHELVES							✓		ASCEPTOPOL/ DETTOX	
TABLE & SHELVES					✓	✓	✓		ASCEPTOPOL/ DETTOX	
SINKS & SHELVES	✓	✓	✓	✓	✓	✓	✓		ASCEPTOPOL	
DISHWASHER	✓	✓	✓	✓	✓	✓	✓		ASCEPTOPOL	DISHWASH & RINSE AID
CROCKERY SHELVES						✓			ASCEPTOPOL	
DIRTIES RACK	✓		✓		✓	✓	✓		ASCEPTOPOL	
FRIDGE							✓	✓	ASCEPTOPOL	
FREEZER							✓	✓	ASCEPTOPOL	
BENCH & SHELVES	✓	✓	✓	✓	✓	✓	✓		ASCEPTOPOL/ DETTOX	
BENCH & CUPBOARD	✓	✓	✓	✓	✓	✓	✓		ASCEPTOPOL/ DETTOX	
HOT PLATE	✓	✓	✓	✓	✓	✓	✓		ASCEPTOPOL	
BENCH & SHELVES	✓	✓	✓	✓	✓	✓	✓		ASCEPTOPOL/ DETTOX	

Manual review of all HACCP documentation
and cleaning plants

Tracability and supplier management



OFFICIAL STATEMENT



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WINGMEN

1.395.955 Erreichte Personen

202.520 Videoaufrufe

6930 Reaktionen, Kommentare und geteilte Inhalte

4651
Gefällt mir

4085
Zu einem Beitrag

566
Zu geteilten
Inhalten

Results after several days of research



FactoryClean[✦]



FactoryClean Paperless Quality Management System



Organisiert und Audit bereit

VS



FactoryClean[★]

FactoryClean Use on Smartphone and Tablets



Factory Clean - all in one



Document Storage



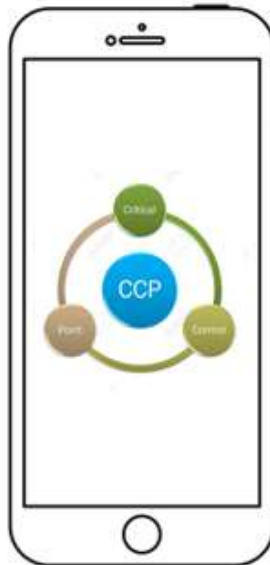
- ✓ certificates
- ✓ Lab results
- ✓ Employee Trainings

Measuring & Control



- ✓ Temperature
- ✓ Humidity
- ✓ Kamera
- ✓ Air quality
- ✓ ...

CCP Management



- ✓ Dokumentation CCPs

Cleaning



- ✓ Instructions
- ✓ Cleaning
- ✓ Documentation

Safety and work instructions



Additional Moduls

- ✓ Pest control management
- ✓ Benchmark System
- ✓ Food Safety Newsletter
- ✓ Alarm Function
- ✓ SAP Connection
- ✓ Food Safety Index
- ✓ Audit ready
- ✓ Traceability
- ✓ Food safety KPIs
- ✓ Training Mode
- ✓ And much more

Factory Clean - all in one



Document Storage



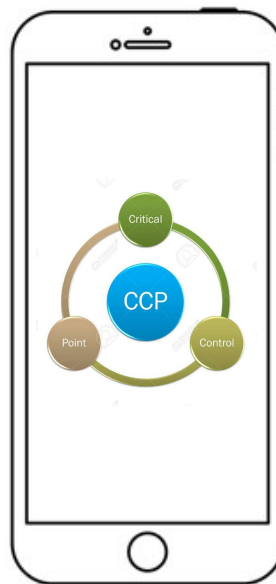
- ✓ certificates
- ✓ Lab results
- ✓ Employee Trainings

Measuring & Control



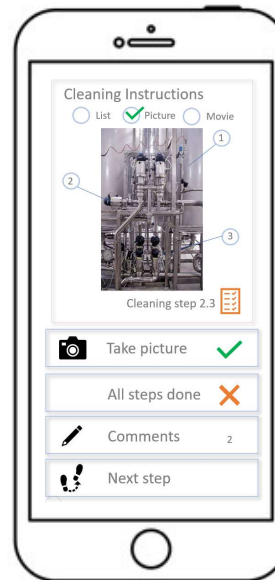
- ✓ Temperature
- ✓ Humidity
- ✓ Kamera
- ✓ Air quality
- ✓ NIR systems

CCP Management



- ✓ Dokumentation CCPs

Cleaning



- ✓ Instructions
- ✓ Cleaning Documentation

Safety and work instructions



Additional Moduls

- ✓ Pest control management
- ✓ Benchmark System
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- ✓ And much more

Intelligent cleaning process optimization



Climate conditions



Datas Controlsystem



Sensor datas

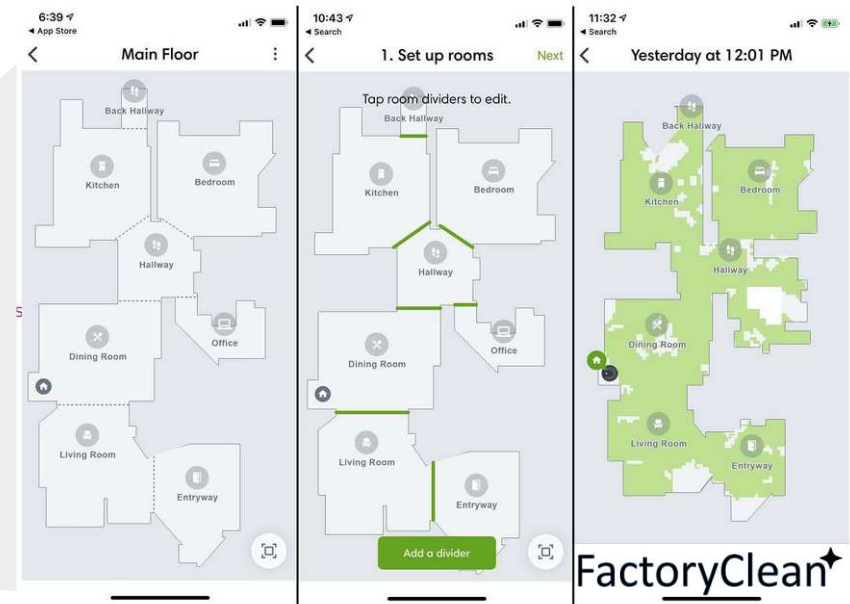


Pest Control Management



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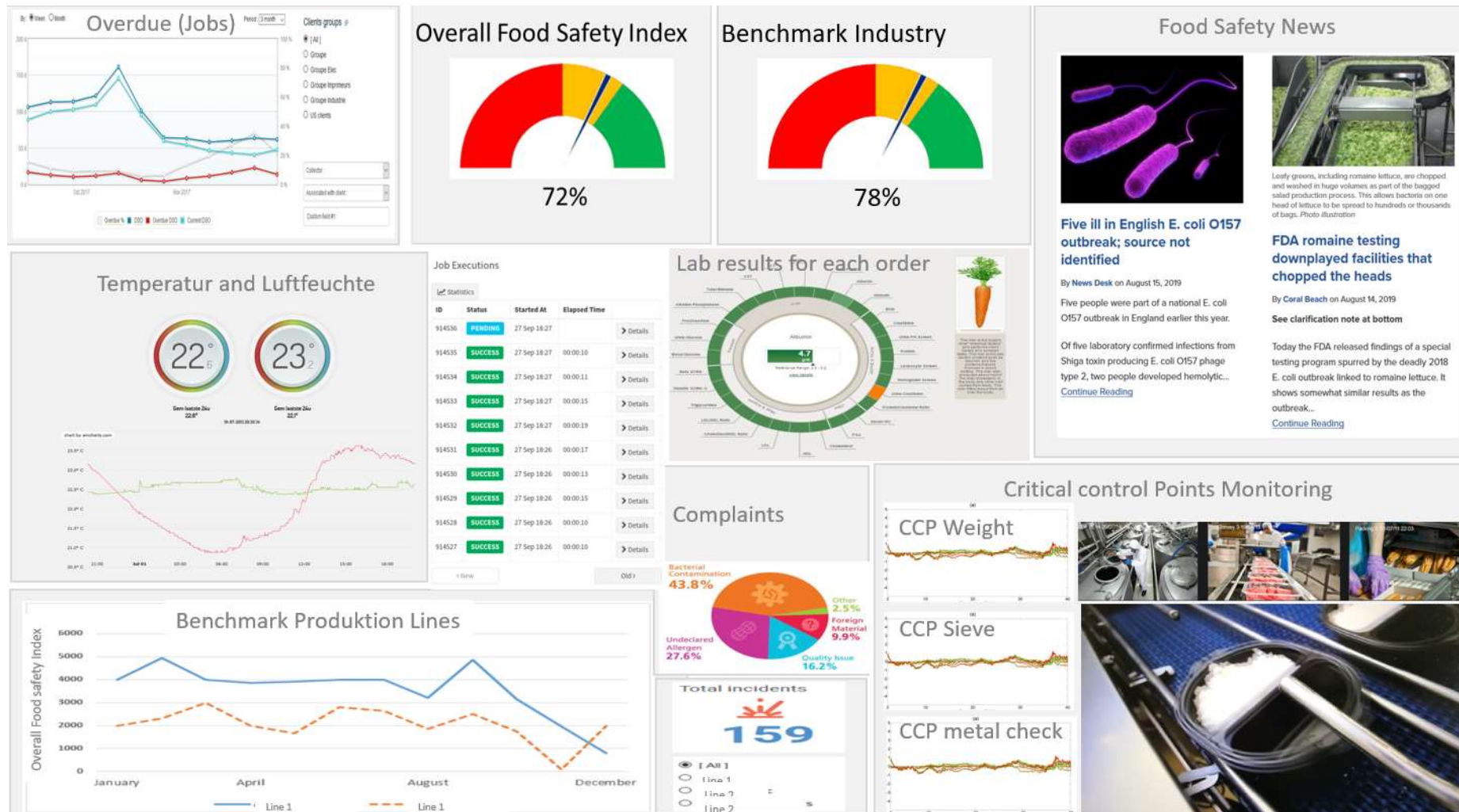
Integration cleaning robots



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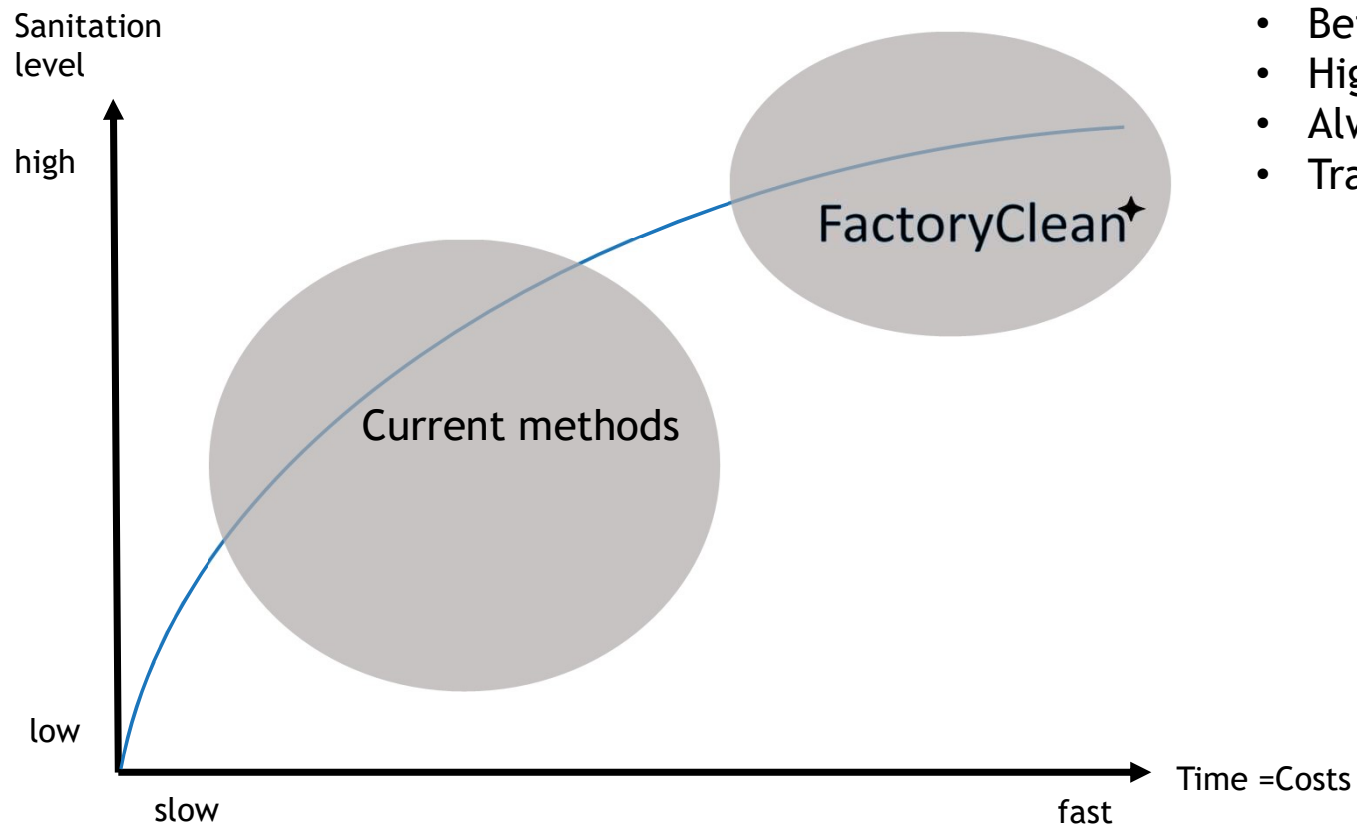
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Automatic review function with dashboard



FactoryClean

Makes the difference



- Better hygiene
- Higher efficiency
- Always transparent
- Tracable at any time

A blue-tinted photograph of a group of people in a meeting. In the foreground, a man with glasses is looking towards the right. Behind him, a woman is smiling. To the left, another man is looking at a laptop. The background shows other people in a meeting setting. The text "Practical examples" is overlaid in white in the center of the image.

Practical examples

Automatic Cleaning Robots

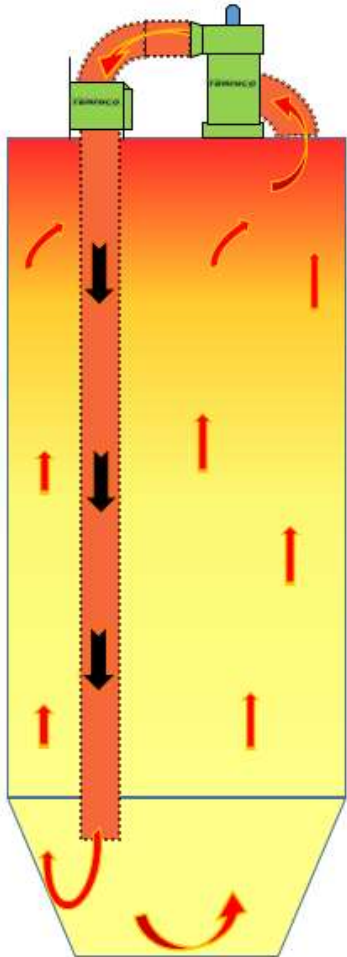


swissmill
Die Schweizer Getreidemühle.

Name: Kari

Since 3
months in
operation in
Swissmill in
Zürich

Heat Treatment for flour silos



Advantages:

- 100 % free of poison
- No official permission required
- No annual trainings required
- Flexible for each silos size
- One treatment for all development stages
- No product contamination
- Higher uptime, treatment completed in 12-48 hours



**Connection of
flexible duct**



Man hole cover



Heater Placement

Installation Process

Silo THT in Operation



Treatment duration 6-48 hours



Results





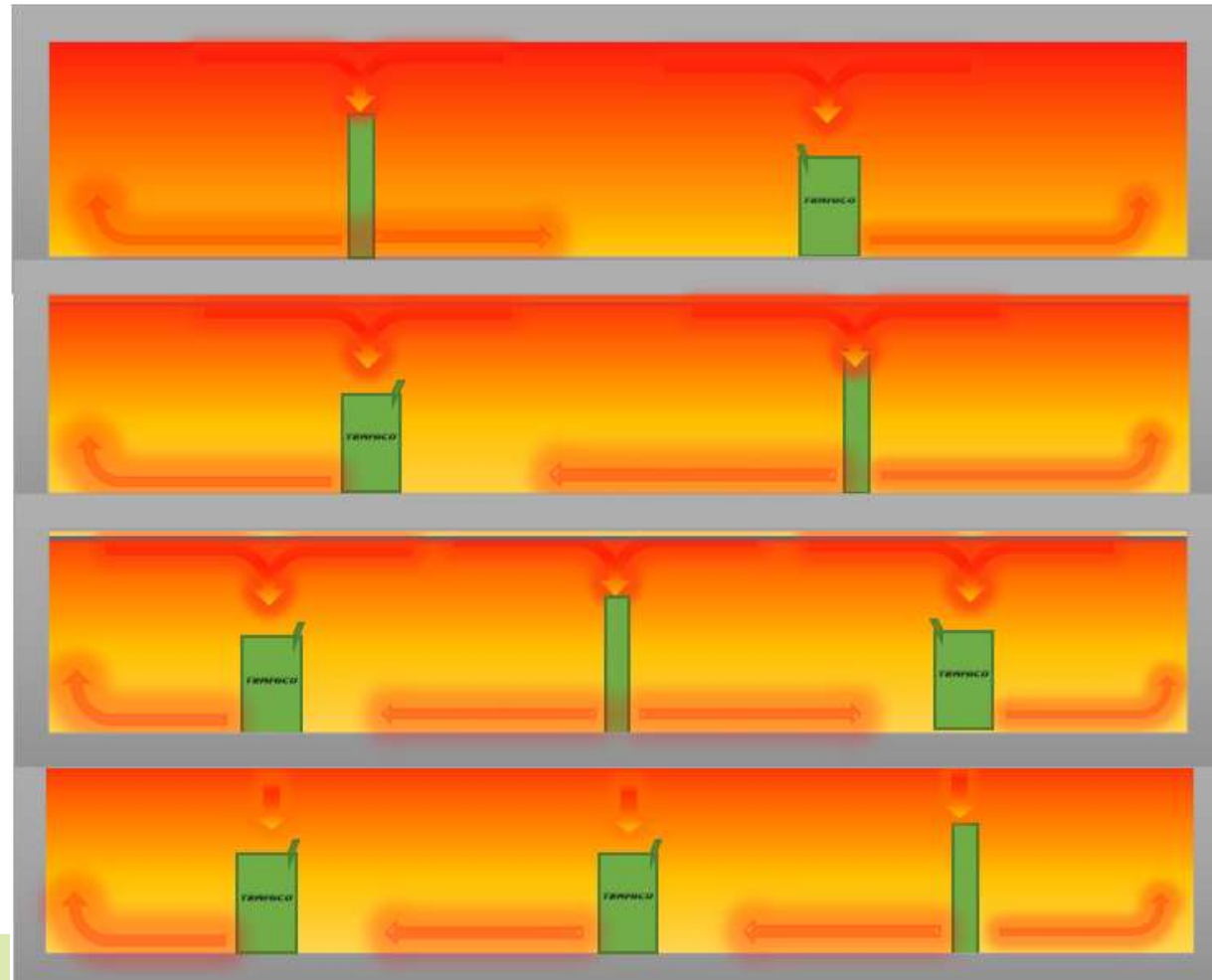
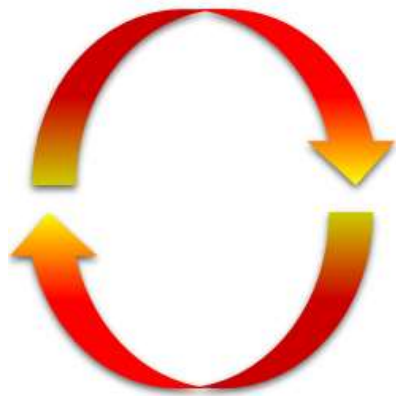
Heat Treatment Services

Follow us:   

Recirculation air method

Advantage:

Approx. 3 lower energy costs compare with Pressurized method



Practical Case



Initial Stage

- Room temperature: 35°C



Practical Case



After 48 hours

- Room temperature: 55°C



All pests in the plant are Dead



Practical Case



After 48 hours

■ Room temperature: 55°C



All pests in the plant are Dead



Practical Results after 48 hours





Wingmen Energy Consulting

Strategic Partnership Announcement for energy consulting



- Global process experts in the milling industry.
 - Hands on process experience
 - Wide network the global milling industry
- Wide range of industrial reference industries
 - Over 1000 energy improvement projects
 - Certified auditors for ISO 50001
 - 60 employees in 5 countries

First Energy consulting alliance specifically for the flour milling industry

What are we offering ?

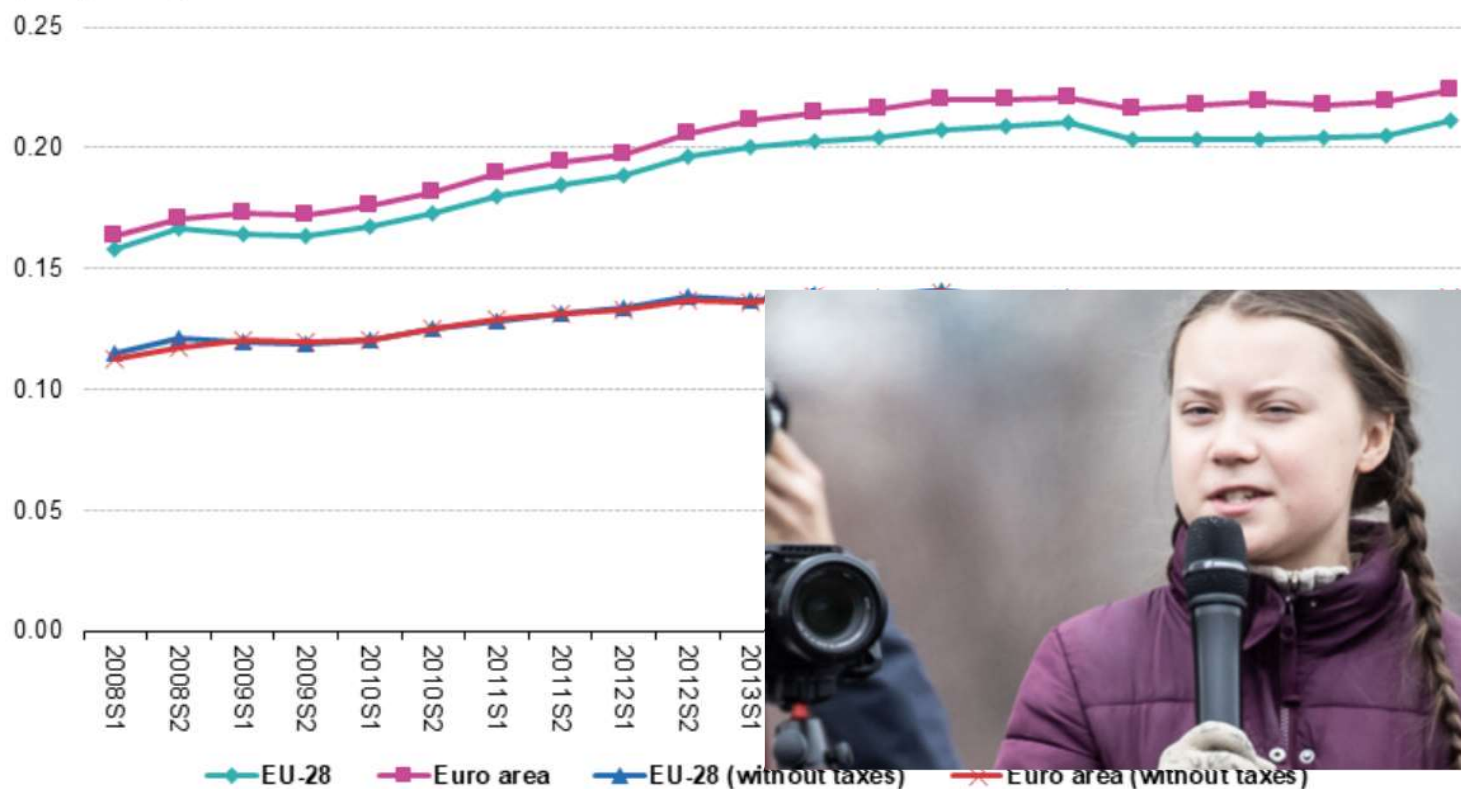
- Consulting for energy optimization of new plants
- Optimization and auditing of existing plants
- Improvement proposals with ROI calculation



Electricity Price development within 10 years

Development of electricity prices for household consumers, EU-28 and EA, 2008-2018

(EUR per kWh)



34 % increase in 10 years



What can I save with an initial project consultation?

- Example:
- Greenfield flour mill with a capacity of 500 tons per day
- 220 Operation days per year
- Electricity cost 0,10 USD per KW/h
- Power consumption per ton of wheat: 70KW/h
- Power consumption after project review: 66 KW/h



Annual Savings:

44.000,- USD

Load profile analysis

Typical load profile

LIMÓN®



Load peaks

Mill Pneumatic Optimization



The mill pneumatic is one of the biggest power consumers in a flour milling plant. Most the pneumatic systems are already equipped with a frequency converter control and no additional investment is therefore required.

With our Wingmengroup energy adjustments flour mills can save up to 30% energy.

Practical result of a 250 ton flour mill in Thailand



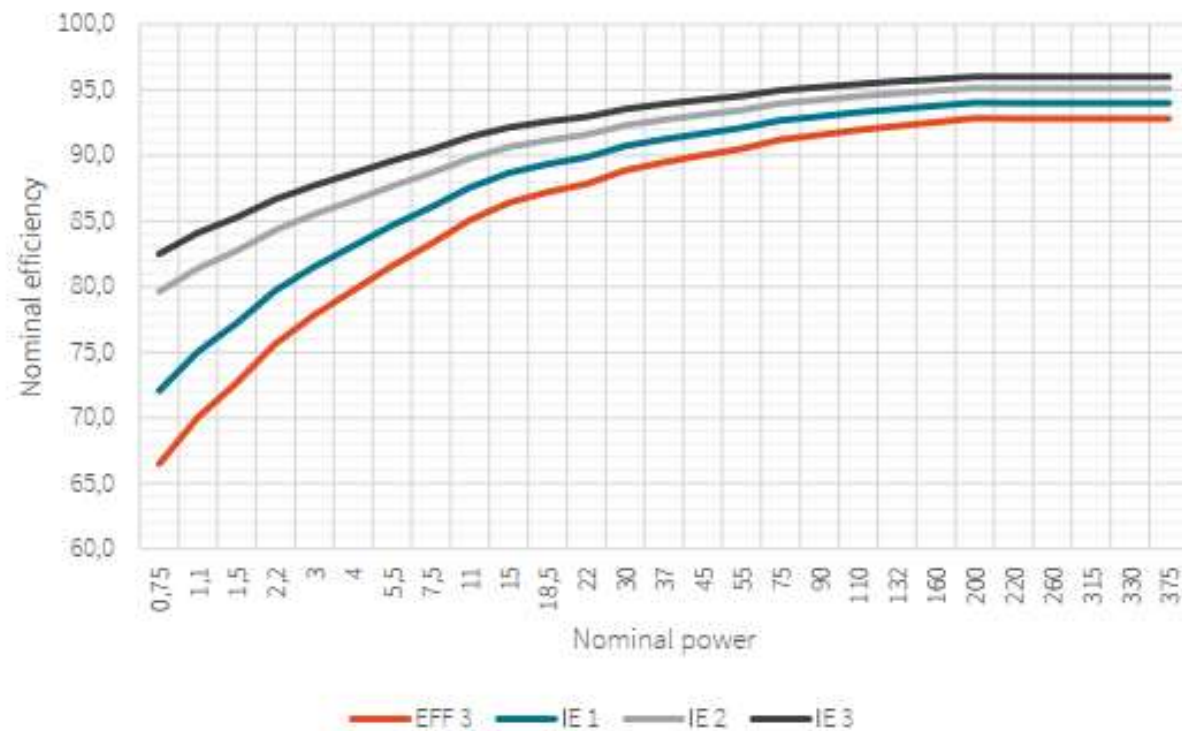
	Motor load	KW/h	Savings in %
Initial Condition	178,5 Ampere	92,7KW	
Best Condition	129 Ampere	67,3 KW	37,6%
Final Adjustment	138 Ampere	71,7 KW	33,5%

Electricity Cost per KW/h: 0,12 USD

Annual Savings: 17.800,- USD
Reduction of 1.6KW per ton of processed wheat

Motor loads and efficiency classes

- Efficiency of four different types of electric drives



Leakage diameter	Energy consumption	Costs
mm	kW/h	USD/a
0,5	680	102
0,75	1.543	231
1,13	3.507	526
1,5	6.102	915
3	24.548	3.682

Compressed Air, cost through air leakages

Contact Details



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Thank you

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