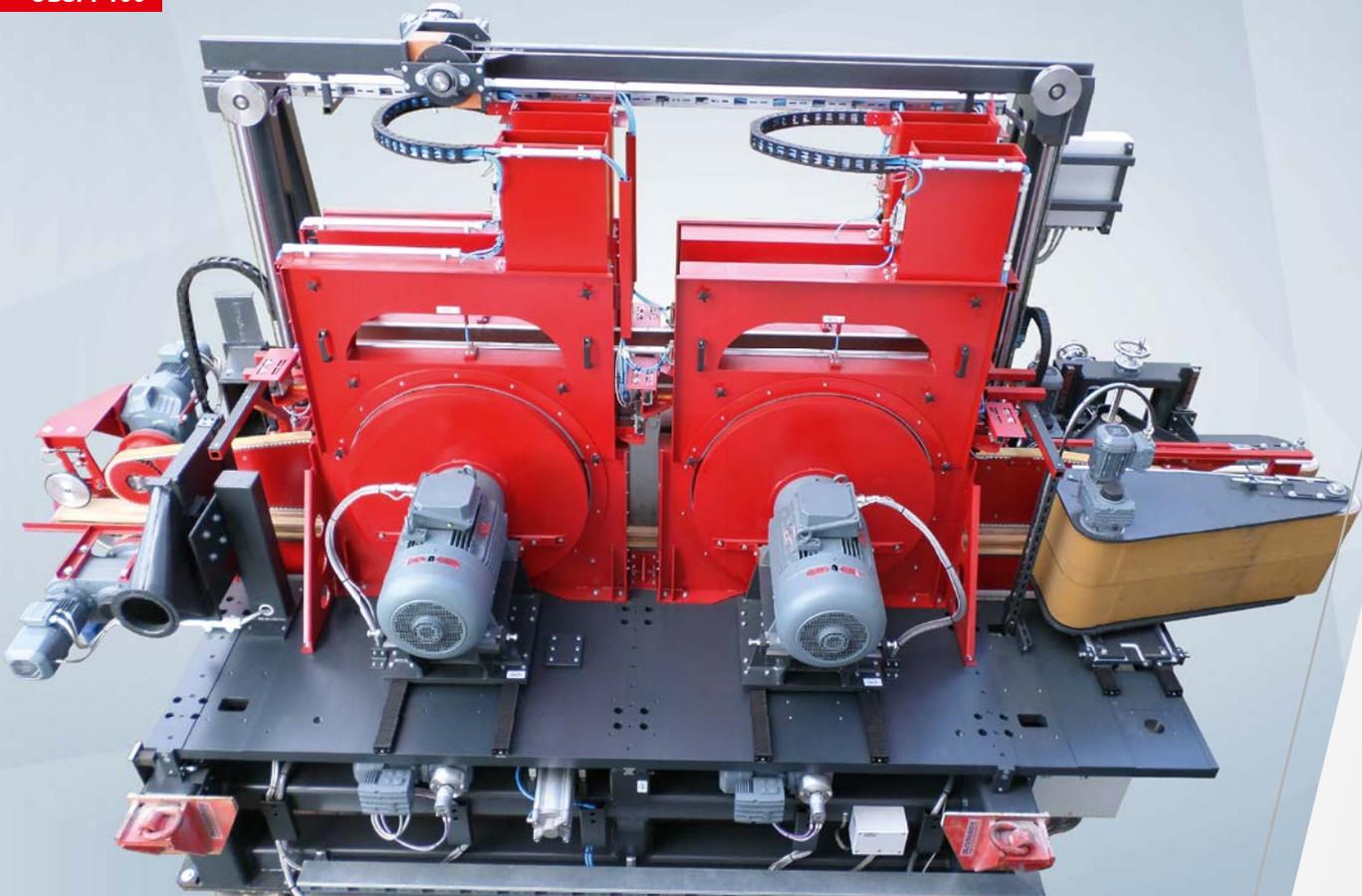


KELLER

intelligent
clay
solutions

ICS

OBSM-100

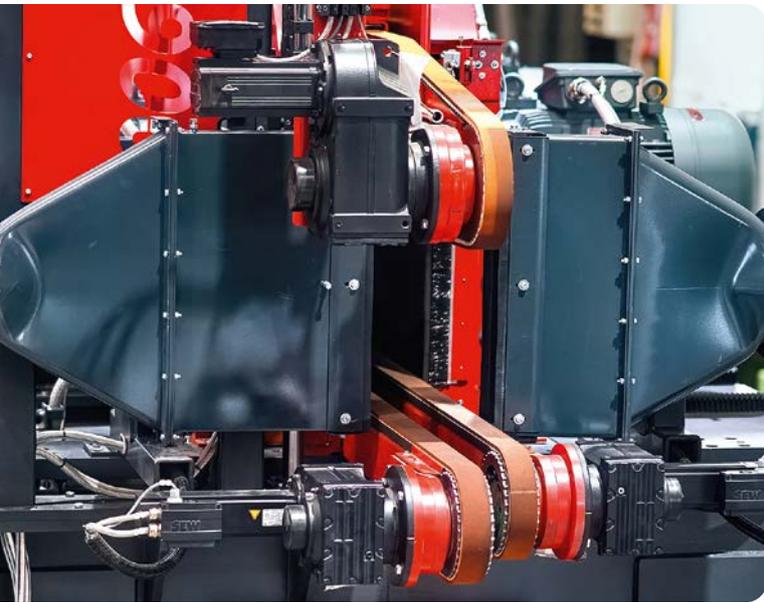


900air

Modular configurable grinding machine
for XXL products



Grinding machine 900air



Essential advantages of the 900air

- Simple modular design
- Highly efficient
- Durable and low maintenance
- Excellent accuracy
- Suitable for XXL products

Innovative KELLER grinding technology

The KELLER grinding technology is continuously being developed and we are constantly facing up to the challenges of the market. The targets and needs of our customers are the driving force for our work.

Our task

As manufacturer of machines and plants, we are challenged to respond to the changes of the times with solutions that secure our customers' competitiveness through optimized production technology.

Our answer

The 900air brick grinding machine is our answer to the demands of our customers handling with XXL products in the area of plane brick production. With its configurable equipment, it is the solution for oversized products.

System configuration for 900air

Standard/Professional/Premium-Technologie

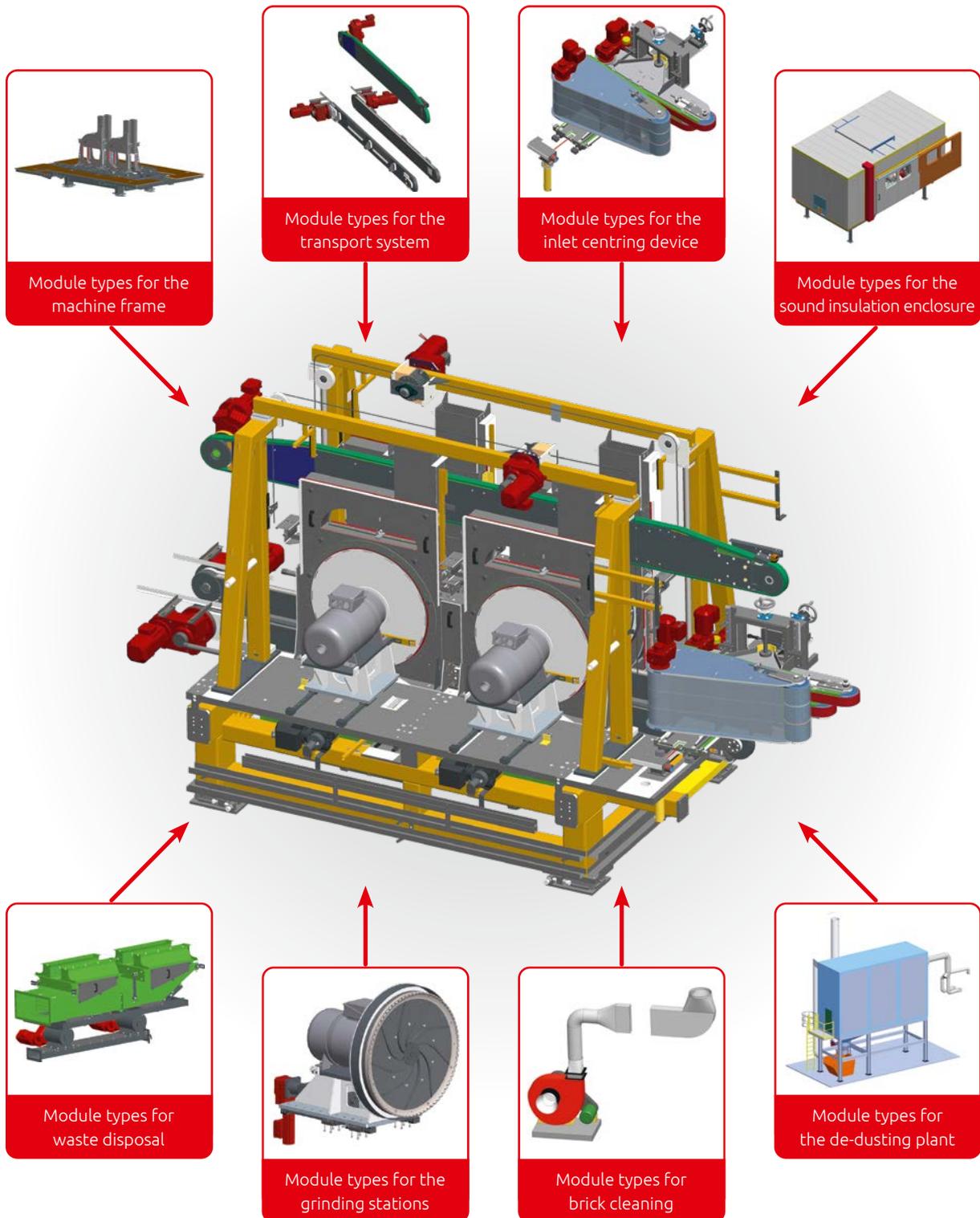
The machine allows the easy project-specific machine configuration and the combination of individual customer requirements with a balanced cost-effectiveness.

To achieve this, the system of the 900air is divided into **modules**. Each module is available for configuration in different technological versions: **Standard, Professional and Premium**. If, despite the secured possibilities, additional customer wishes should exist, the modules can be adapted individually.



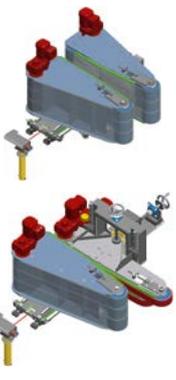
Overview of modules **Standard/Professional/Premium Technology**

The modular design of the grinding system offers a project-specific machine configuration with high process reliability thanks to proven technology.

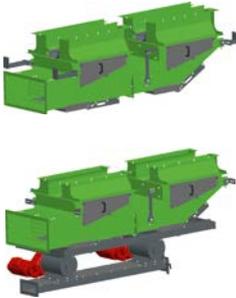
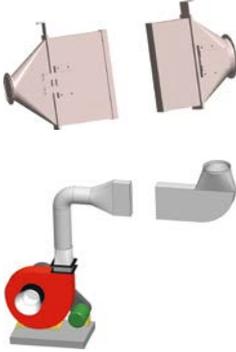
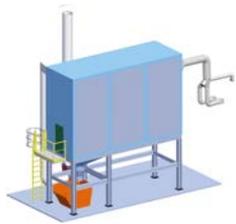


Grinding machine 900air

Module types **Standard**/**Professional**/**Premium Technology**

Module	Illustration	Application
Machine frame Depending on the equipment, the machine frame offers different degrees for the grinding width adjustment.	 <p>incl. machine wear measurement (laser system)</p>	<p>Type: Pneumatic 2-point width adjustment for +/- 0.2 mm grinding tolerance</p> <ul style="list-style-type: none"> • 2 Brick grinding widths: can be fixed between 124 – 700 mm when ordering <hr/> <p>Type: Motorised width adjustment for +/- 0.2 mm grinding tolerance</p> <ul style="list-style-type: none"> • Freely adjustable brick grinding widths: between 124 - 700 mm <hr/> <p>Type: Motorised width adjustment with 4-point fixing for +/- 0.1 mm grinding tolerance</p> <ul style="list-style-type: none"> • Freely adjustable brick grinding widths: between 124 - 700 mm
Transport system The transport system is available in different versions in order to provide optimum equipment depending on the requirements.	 <p>incl. pneumatic pressure tappets with tolerance compensation +/- 5 mm</p>	<p>Type: Brick grinding widths between 124 – 330 mm</p> <ul style="list-style-type: none"> • One-/two-layer grinding <hr/> <p>Type: Brick grinding widths between 124 – 700 mm</p> <ul style="list-style-type: none"> • One-/two-layer grinding
Inlet centring device The different feeding devices of the infeed adjustment adjust and centre the passing bricks before the grinding process and transfer them to the further transport system.	 <p>incl. manual swivel unit for right-angled grinding for diamond cutting</p>	<p>Type: 2-belt system for one-layer grinding</p> <ul style="list-style-type: none"> • Automatic grinding width adjustment: between 124 – 700 mm • One-layer grinding • Grinding channel height: 40 - 600 mm <hr/> <p>Type: 3-belt system for two-layer grinding</p> <ul style="list-style-type: none"> • Automatic grinding width adjustment: between 124 – 700 mm • Manual grinding height adjustment: between 40 - 600 mm • One-/two-layer grinding • Grinding channel height: 40 - 600 mm <hr/> <p>Type: 3-belt system for two-layer grinding, adjustable by motor</p> <ul style="list-style-type: none"> • Automatic grinding width adjustment: between 124 – 700 mm • Automatic grinding height adjustment: between 40 – 600 mm • One-/two-layer grinding • Grinding channel height: 40 - 600 mm
Sound insulation enclosure Noise protection is for the safety of employees, we offer your optimum noise protection enclosure.		<p>Type: Cabin with 1 level, open at the bottom</p> <ul style="list-style-type: none"> • Sound insulation control panel < 80 dB / Access to 1 level at a distance of > 4 m to the grinding cabin • Inspection access: 1 Revolving door (passage: 900 x 2000) • Repair access: 1 Sliding door (passage: 3000 x 2000) <hr/> <p>Type: Cabin with 2 levels, closed at the bottom, 3 accesses</p> <ul style="list-style-type: none"> • Sound insulation control panel < 80 dB / Access to 2 levels at a distance of > 4 m to the grinding cabin • Inspection access: 1 Revolving door (passage: 900 x 2000) • Repair access: 2 Sliding doors (passage: 3000 x 2000) <hr/> <p>Type: Cabin with 2 levels, closed at the bottom, 4 accesses</p> <ul style="list-style-type: none"> • Sound insulation control panel < 80 dB / Access to 2 levels at a distance of > 4 m to the grinding cabin • Inspection access: 2 Revolving doors (passage: 900 x 2000) • Repair access: 2 Sliding doors (passage: 3000 x 2000)

Module types Standard/Professional/Premium Technology

Module	Illustration	Application
Waste disposal The removal of grinding dust and fragments is ensured by the disposal system. The extraction system provides for the removal of the accumulating grinding dust. If required, larger fragments are crushed by the crusher.		Type: Container sluice <ul style="list-style-type: none"> Disposal of grinding residues / without treatment: dust particles are sucked off directly Change of containers filled with solid material with machine downtime
		Type: Container sluice with belt system <ul style="list-style-type: none"> Disposal of grinding residues / without treatment: dust particles are sucked off directly Change of containers filled with solid material without machine downtime
		Type: Container sluice with crusher and suction unit <ul style="list-style-type: none"> Disposal of grinding residues / with treatment: dust particles are sucked off directly Pulverisation of solid material (with crusher) without machine downtime
Grinding stations Precise removal is ensured by efficient grinding units. High-performance spindle drives are used to adjust and compensate for wear.	 <p>incl. patented ventilation system with 3D milling of the carrier disc to significantly increase the service life.</p>	Type: Aggregate air system 2x2 for grinding applications < 11 mm (15 - 25 kg/min.) <ul style="list-style-type: none"> Grinding height: between 40 – 600 mm Percentage of holes: 40 - 60 % Type of grinding: One-/two-layer grinding Grinding velocities: < 20 m/min Ventilated design Optional automatic central machine lubrication, 4 x motor, width adjustment and centring
Brick cleaning With this module, the grinding dust can be removed from the ground bricks by two cleaning methods.		Type: Suction without fan <ul style="list-style-type: none"> Removal of grinding residues / dust from ground products Degree of purity: Suction air cleaned, without separate fan Intended for connection to the de-dusting plant
		Type: Suction with fan <ul style="list-style-type: none"> Removal of grinding residues / dust from ground products Degree of purity: Air flow cleaned, particles, with separate fan Intended for connection to the de-dusting plant
De-dusting plant The design of the dust extraction system depends on the local requirements.		Type: Suction for all module types of the 900air <ul style="list-style-type: none"> Air output: 30,000 Bm³/h Grinding dust volume: < 0.54 m³/h 2 Connection points for extraction Option: Dust storage volume for 80 m³ < 80 h

Grinding machine 900air

Configuration example: 2-stage machine equipment Standard/Professional/Premium-Technologie



The exemplary modular grinding machine meets the requirements for grinding bricks of the same size in a cost-optimized way. It is characterised by the inlet centring device for both one-layer and two-layer grinding. The ventilated grinding wheels allow constantly high grinding speeds to be achieved and, thanks to the disposal system, large steps in waste disposal are automated.



Exemplary machine configuration 900air+

- 1) Machine frame:
 - Type: Motorised width adjustment for +/- 0.02 mm grinding tolerance
- 2) Transport system:
 - Type: Brick grinding widths: between 124 – 700 mm
- 3) Inlet centring device:
 - Type: 2-belt system for one-layer grinding
- 4) Sound insulation enclosure:
 - Type: Cabin with 1 level, open at the bottom
- 5) Waste disposal:
 - Type: Container sluice with belt system
- 6) Grinding stations:
 - Type: Aggregate air system 2x2 for grinding applications
- 7) Brick cleaning:
 - Type: Suction with fan
- 8) De-dusting plant (additional equipment):
 - Type: Suction for all module types of the 900air

900air - Technical Data

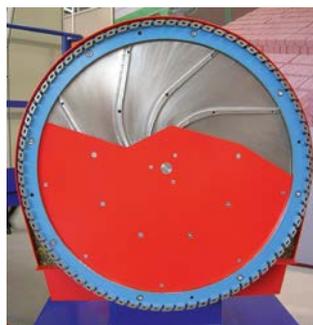
	Modules		
	Standard *	Professional *	Premium *
Grinding speed with products	≤ 20 m/min	≤ 20 m/min	≤ 22 m/min
Transport speed without products	≤ 30 m/min	≤ 30 m/min	≤ 30 m/min
Width adjustment	pneumatically	electrically without fixing	electrically with fixing
Grinding tolerance	+/- 0.2 mm	+/- 0.2 mm	+/- 0.1 mm
Grinding channel width opening #	SKB 124-330 mm	SKB 124-700 mm	SKB 124-700 mm
Grinding channel width grinding measure #	124-324 mm	124-694 mm	124-694 mm
Grinding channel height position	40-600 mm	124-600 mm	124-600 mm
Grinding ring diameter	900 mm	900 mm	900 mm
Max. outlet between grinding wheels	Brick width + 50 mm	Brick width + 50 mm	Brick width + 50 mm
Installed power without de-dusting plant	169-177 kW	169-177 kW	169-177 kW
Installed power with de-dusting plant	214-222 kW	214-222 kW	214-222 kW
Machine length without cabin	6,580 mm	6,580 mm	6,580 mm
Machine length with cabin	6,800 mm	6,800 mm	6,800 mm
Machine width without cabin	3,680 mm	3,680 mm	3,680 mm
Machine width with cabin	3,900 mm	3,900 mm	3,900 mm
Machine height without cabin	3,255 mm	3,255 mm	3,255 mm
Machine height with cabin	4,500-5,180 mm	4,500-5,180 mm	4,500-5,180 mm
Inlet belt height [TO Tunnel kiln] bottom edge of brick	985 mm	985 mm	985 mm
Total weight with full equipment	17-19 t	17-19 t	17-19 t

* depending on the shape of the material to be grinded [SKB = grinding channel width]

customised grinding channel widths possible on request

Service

KELLER is also available to you at any time as a competent partner for optimisation and modernisation of existing grinding systems.





High-tech solutions from tradition

KELLER

Creating Solutions

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