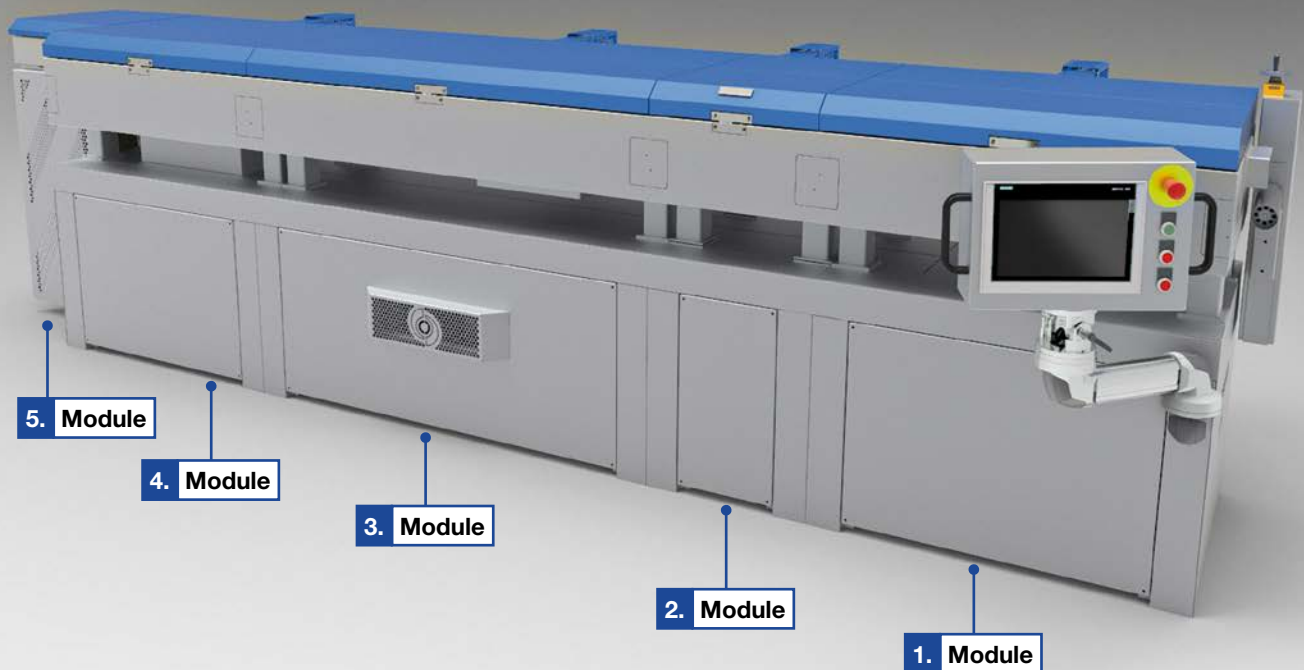


Vulcanization Technology

The new machine generation: flexible machine configuration through self-sufficient modules



Modular machine design:

1. Product infeed, 2. Microwave, 3. Heating, 4. Air outlet, 5. Belt drive and tension device

The machine exhibit represents the machine generation of the future.

Different scientific evaluations, tests and simulations that were carried out in the past time, led to fundamental changes in the machine design and the specific functions of each machine module.

The flexible configuration option of machine segments are particularly noteworthy. Their combination is always based on the most sensible vulcanization characteristics of the elastomer and the associated form of energy.

The constructive decoupling between product cavity and stand of the machine offers new potential for integration of customized solutions.

Essential machine features

- flexible choice of module arrangement and form of energy
- independent use of individual modules in existing vulcanization processes
- simple integration of additional customer requirements
- extended machine features and optimized design in terms of energy efficiency
- Industry 4.0 equitable, app-based machine operation

Vulcanization Technology

The new machine generation: flexible machine configuration through self-sufficient modules

1. Module Product infeed and hot air inlet

- height adjustable profile touch roller
- flow-optimized 360° air inlet
- conveyor belt deflection
- improved thermal insulation
- dimensions of the product cavity adjustable
- optional height adjustment of the cavity



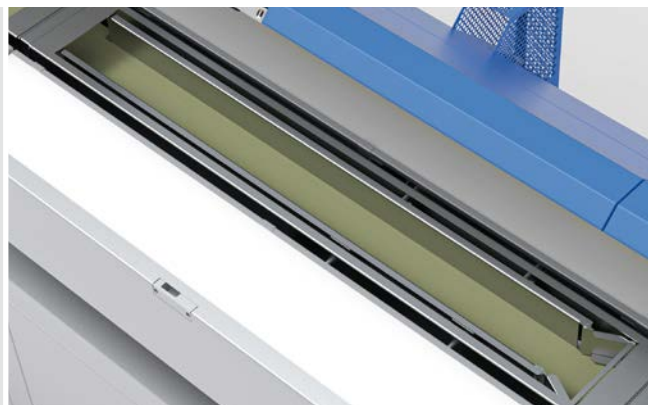
2. Module Microwave

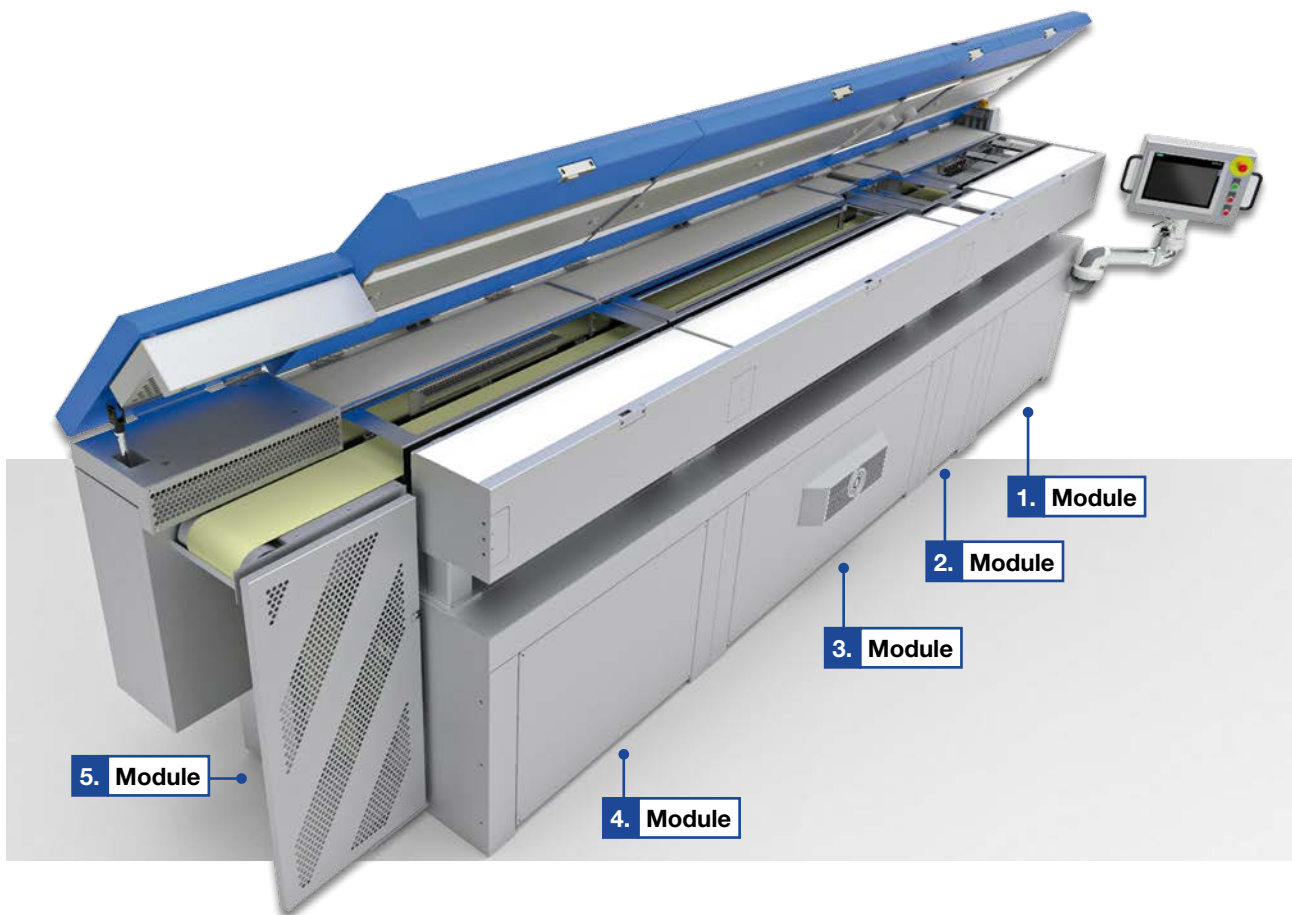
- 0.5 kW UHF Solid State
- semiconductor based frequency variation
- novel UHF profile feedthrough
- digital display of power decoupling



3. Module Heating

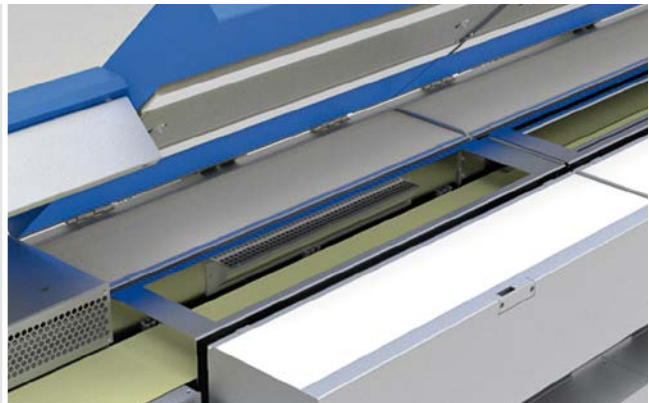
- flow-optimized channel geometry
- continuous electrical channel width adjustment
- efficiency increase through flow optimization
- built-in 20 kW electric heating
- cleaning of heating registers possible





4. Module Exhaust

- exhaust at machine end
- flow-optimized arrangement
- process air flow in circulating- or fresh air mode
- air velocity modulation
- no fumes escaping from the machine



5. Module Belt drive and tension device

- PTFE belt, speed 0.5-60 m/min
- easy belt change possibility
- pneumatic belt tensioning device
- automatic belt tracking
- optional station exhaust
- safety grid and soundproof hood

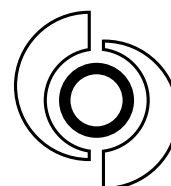
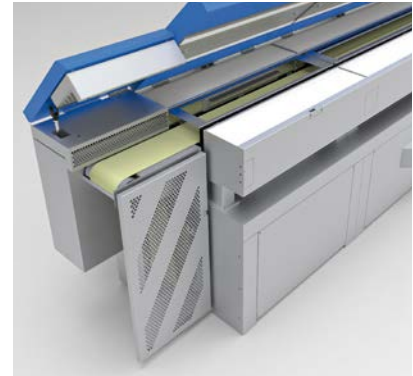


Vulcanization Technology

The new machine generation: flexible machine configuration through self-sufficient modules

Summary of technical data

Machine dimensions LxWxH	4.5 x 1.1 x 1.2 m
Profile dimension WxH	40 mm x 40 mm
Number of modules	5
Machine cover opening	single or total opening
Machine operation	by touch panel or app
Control, PLC	Siemens S7-1200
Electrical connection	230/400 V, 3 Ph, 50 HZ, PE+N
Machine design	CE standards, DIN standards
Injection module length	1.0 m
Inner channel dimension WxH	180 mm x 55 mm
Profile infeed and monitoring	adjustable sensing roller
Air inlet	360°, adjustable
Air velocity change	frequency controlled
Profile conveyor	PTFE belt and rollers
UHF module length	0.5 m
UHF type	Solid State, Magnetron Technology
UHF power	500 W - 3kW
Frequency band modulation	2.4 - 2.5 GHz
Additional UHF power display	digital on sighting flap
UHF-Safety	Sighting flap switch
Heating module length	1.5 m
Form of heating energy	electric or gas
Electrical heating power	from 20 kW
Process air flow principle	circulating and fresh air
Continuous channel width adjustment	electrical
Exhaust module length	1.0 m
Extraction type	machine end and central exhaust
Drive and tension device length	0.5 m
Drive brand	SEW
Belt speed	0.5 - 60 m/min
PTFE belt width	from 180 mm
Belt tension	pneumatic



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