

## A wide belt sanding machine from one cast.

The construction of a machine in the high end sector had to involve a material which is superior to the steel previously used and which offers fundamental advantages in various points. The material which fulfils the decisive criteria is the mineral cast (concrete polymer).

This material developed in the USA in the 1950's and which has been used in machine construction with great success since the end of the 1970's is now also revolutionizing the characteristics of the wide belt sanding machines from Steinemann Technology.

The introduction of the mineral casting technology is opening up a new chapter in the construction of low vibration and temperature-stable machine components. The mineral cast is produced from compact vibrated siliceous limestone and a small share of epoxy binder. This siliceous limestone, a natural product from the Swiss Alps is cast in particle sizes of 0 – 16 mm. The advantages compared with steel are clear to see:

- ▷ vibration absorbing (compared with cast iron better by the factor 10)
- ▷ temperature-stable
- ▷ resistant against chemicals
- ▷ favourable noise transmission characteristics
- ▷ solid body
- ▷ non-conductive
- ▷ corrosion resistant

### The mineral cast

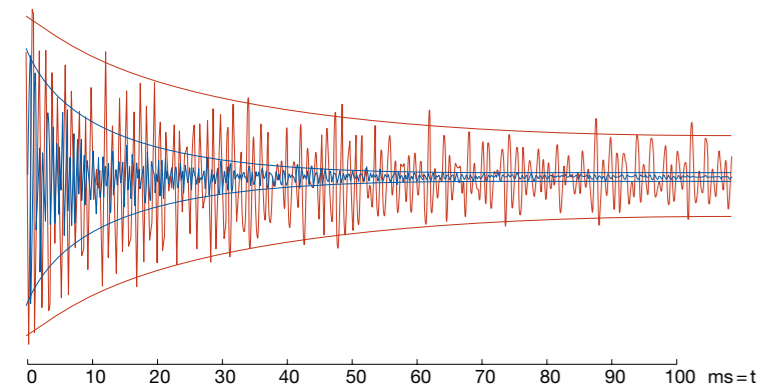
From a weight point of view the material consists mainly of mineral filling materials (weight share > 90%) and a completely hardened chemically neutral epoxy binder. Sure knowledge is available on the suitability with regard to various stress forms (mechanical, chemical, thermal etc.). The life span of mineral cast is comparable with that of other machine construction materials.

### Vibration measurement

Vibration excitation by impulse using hammer knock.

The recordings show the difference between the fading curves. Following a vibration duration of 100 ms the amplitude intensity with steel is still 38%, with mineral cast almost 0%.

— machine frames with mineral cast  
— machine frames from steel



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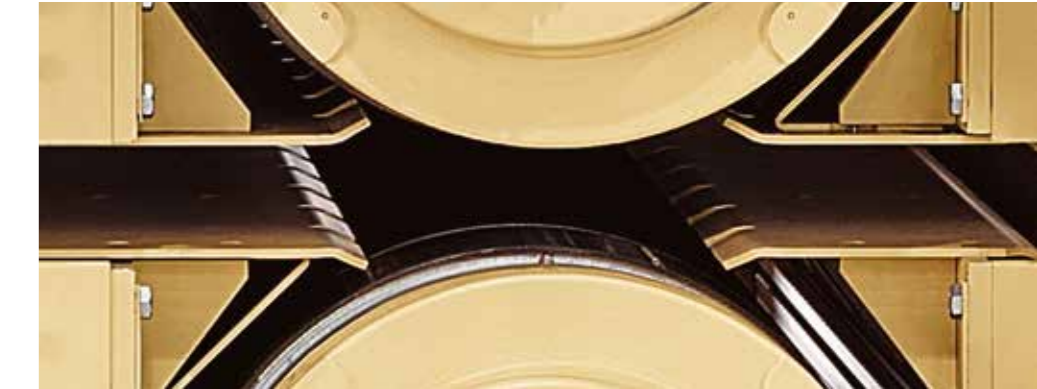
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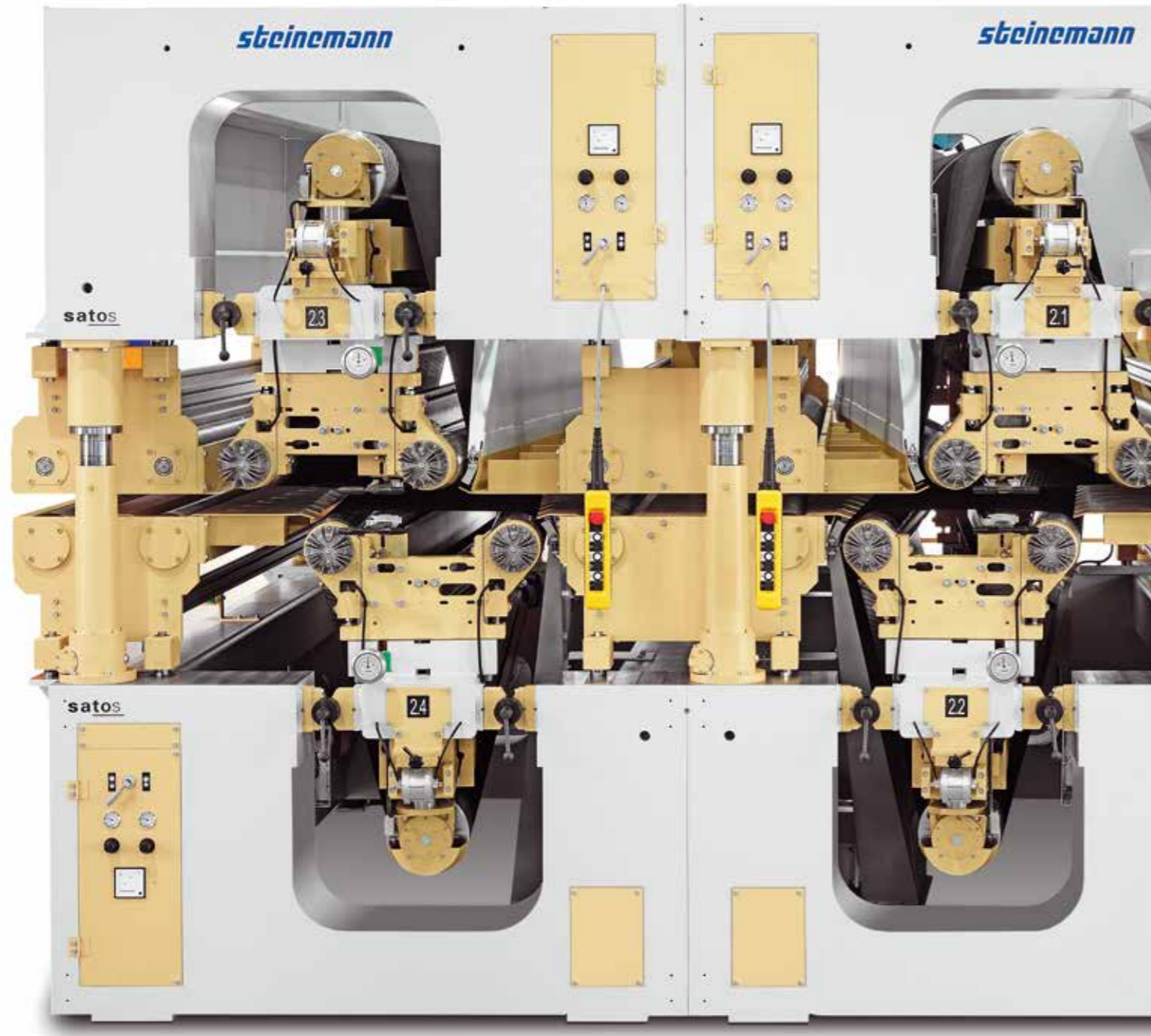
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# satos

Sander for Top Surfaces



## Satos 28 KK-NN



## Nature lays the foundation stone for the future.

Steinemann Technology has enjoyed an excellent reputation throughout the world in wide belt sanding machine construction for over 45 years. The Swiss quality, the reliability and the high degree of technical innovation are a unique combination.

The constantly increasing demands in terms of capacity and quality in the panel industry are also pushing the demands on sanding machines ever higher. We at Steinemann Technology have taken up this challenge and developed a machine which sets new standards in the high end sector.

During the development of the new machine the engineers also allowed themselves to be influenced by nature. The idea of using mineral cast as a material opens up new perspectives in every respect. With this rock hard material Steinemann Technology has laid the foundation stone for the sanding technology of tomorrow and patented the mineral cast frames for wide belt sanding machines.

The new Satos wide belt sanding machine is marketed exclusively on a world-wide basis by Steinemann Technology. Satos stands for «Sander for Top Surfaces» and above all also for completely new possibilities and perspectives, namely for:

- ▷ maximum availability, safety and maintenance-friendliness
- ▷ narrowest tolerances and optimum surface quality
- ▷ trend-setting technology and optimal cost efficiency

# Satos 28 KK-NN



Control system

Sanding platen

Temperature sensor

Belt tensioning cylinder

Belt tear switch

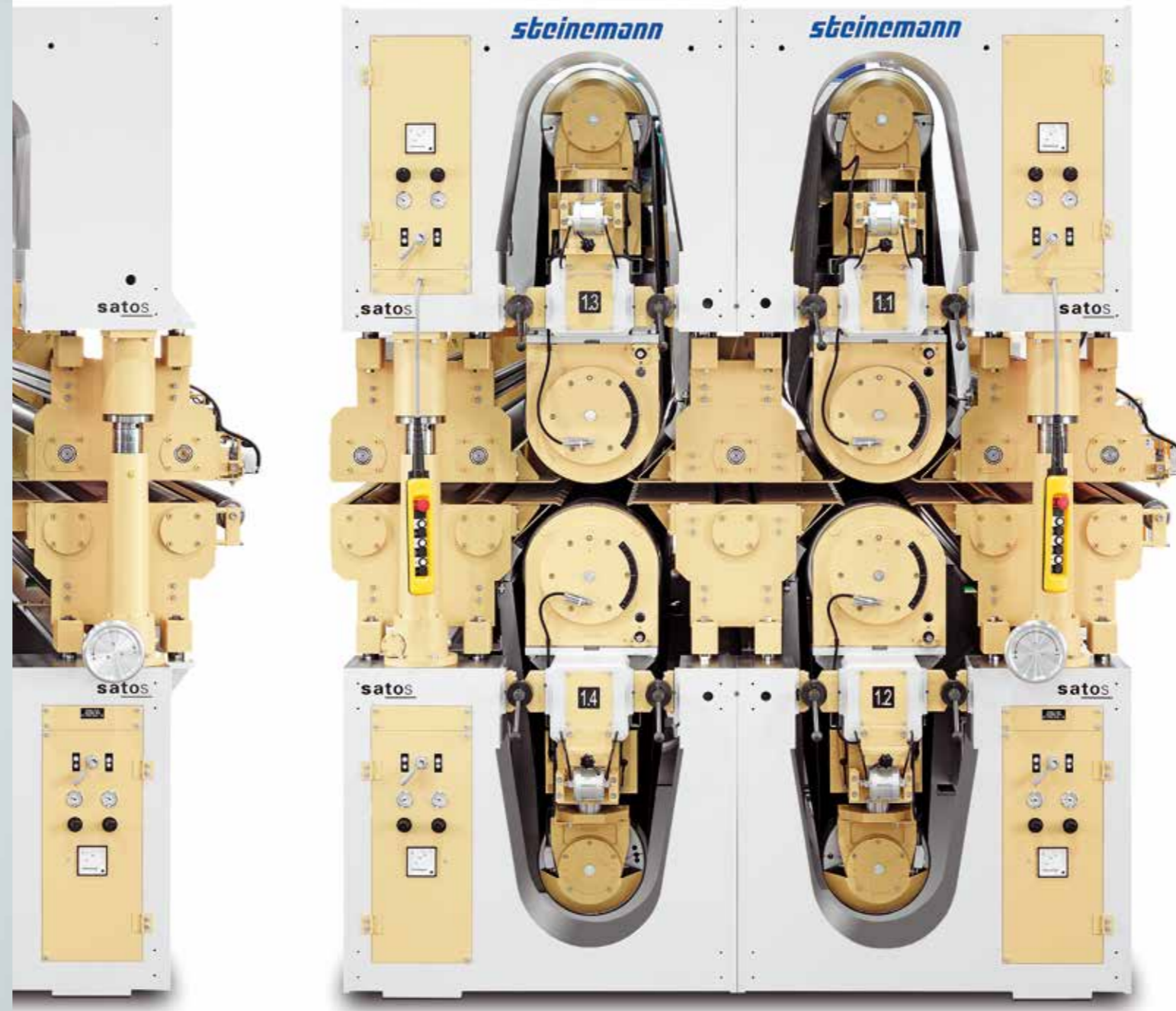
Belt tracking control

Connecting shaft and worm gear for feed drive

Vibration absorbing rubber coupling for sanding drum

Transmission for sanding drum with disk brakes

Central lubrication manifold



## Technical data

		satos 22	satos 28	satos 32
Panel thickness	mm	2.5 – 50	2.5 – 50	2.5 – 50
Max. panel width	mm	2250	2850	3300
Machine opening	mm	0 – 300	0 – 300	0 – 300
Working height	mm	1550	1550	1550
Feed speed range	m/min	15 – 120	15 – 120	15 – 120
Contact drum diameter	mm	455	455	455
<b>Abrasive belt dimensions</b>				
Max. sanding belt width	mm	2300	2900	3350
Oscillation approx.	mm	15	15	15
Abrasive belt length	mm	3200	3200	3200
<b>Motor capacities</b>				
Sanding motors	kW	up to 160	up to 200	up to 250
Feed motors	kW	up to 11	up to 15	up to 22
<b>Compressed air</b>				
Compressed air requirement per sanding head	m <sup>3</sup> /h	2.5	2.5	2.5
Operating pressure	bar	6	6	6
<b>Suction extraction capacity</b>				
2 K-heads (calibration)	m <sup>3</sup> /h	27 750	33 850	39 450
2 F-heads (calibration/fine sanding)	m <sup>3</sup> /h	27 750	33 850	39 450
2 N-heads (fine sanding)	m <sup>3</sup> /h	16 300	20 900	23 200
<b>Dimensions/weights (height 3 100 mm)</b>				
K-module (2 opposed sanding heads)				
Length x width	mm	4 800 x 1 750	5 400 x 1 750	5 850 x 1 750
Net weight	t	20	22	24
F-module (2 opposed sanding heads)				
Length x width	mm	4 800 x 2 000	5 400 x 2 000	5 850 x 2 000
Net weight	t	21	23	25
N-module (2 opposed sanding heads)				
Length x width	mm	4 800 x 2 400	5 400 x 2 400	5 850 x 2 400
Net weight	t	19	21	23

(subject to alteration without notice)