

Baseline-setting from Kesel

TSM 160s

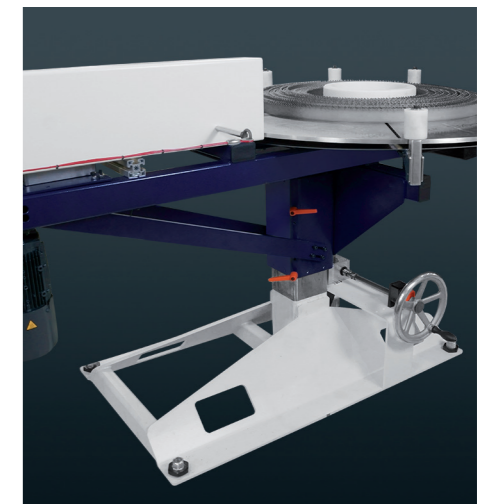
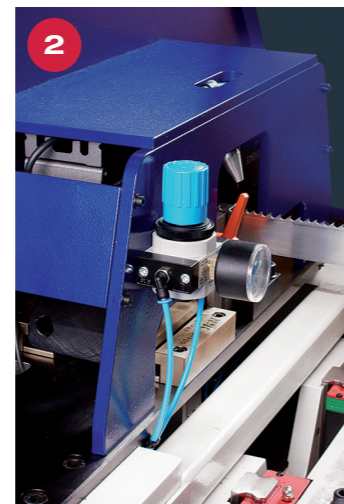
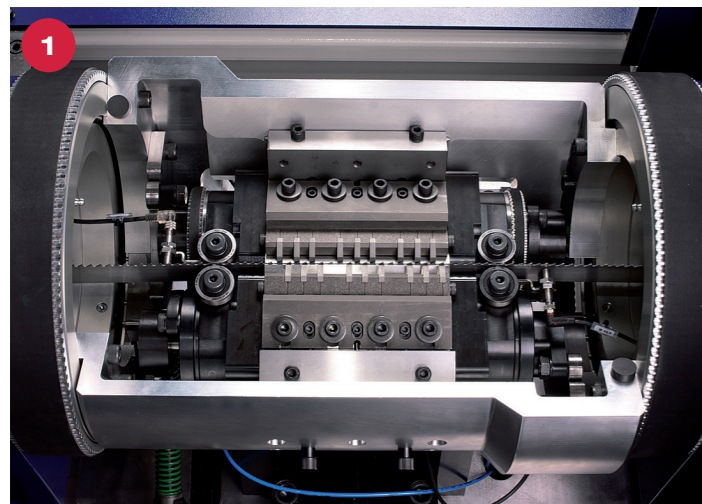
Bandsaw setting machine



- ▶ Bandsaw blade production
- > Steering rack production
- > Rack production
- > Gear processing
- > Clamping tools

TSM 160s

The design of the Kesel TSM 160s automatic bandsaw setting machine is based on our many years of experience in building machines for the bandsaw blade manufacturing industry. The Kesel TSM machine perfectly complements the existing Kesel products, ranging from our FS 1500 and FS 2500 milling machines and various coil handling systems to the SBA-2s machine and the BR 100s band straightening machine. As our customers have come to expect from us, these machines combine the highest quality and performance with first class customer service.



Setting mechanism

The TSM 160s machine is engineered and built as a powerful, automated machine for high quality, heavy-duty production. The efficient setting of carbon, bi-metal and carbide-tipped band material in either soft or fully hardened state can be processed with this machine. With its patented setting mechanism the Kesel TSM 160s sets the teeth via a circular movement from below the band – what we call the Baseline. Baseline setting prevents damaging the tooth tips as the setting movement completely avoids the tip and upper section. A further highlight of the TSM 160s is the CNC-controlled centric clamping system, which makes it a hydraulic free and low maintenance machine.

Camera measuring systems

The Kesel TSM setting machine is engineered to be mechanically robust and incredibly precise. The machine is equipped with a camera and measuring systems to constantly monitor the setting quality and accuracy. These systems come with the latest technological standards in data processing and data transfer. Every stroke and every tooth is measured, controlled and adjusted independently on each servo-controlled axis using the measuring and control system.

Control

With its Siemens control unit and customised user interface the TSM 160s is designed for operator ease-of-use whilst guaranteeing market-leading setting quality. The product and process parameters of all band types can be stored for quick recall. The system continually monitors and records setting quality which is then automatically saved.

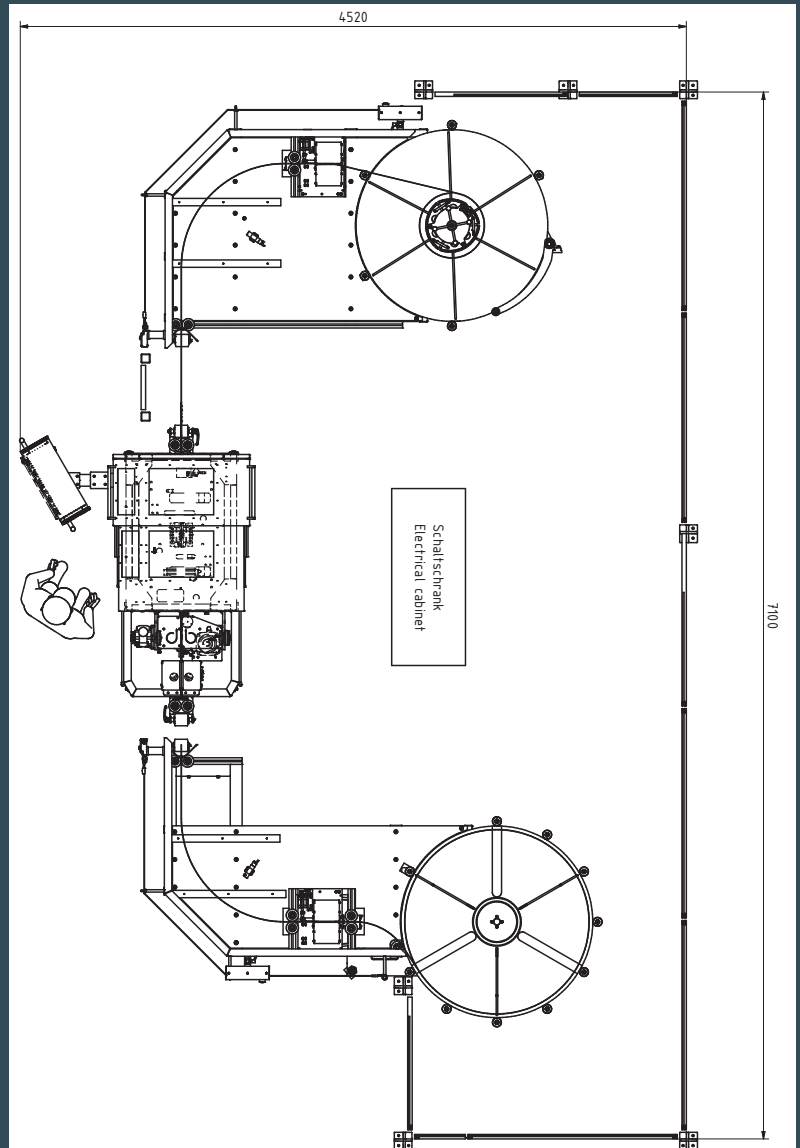
Programmable Feed System | Speed 90

The Kesel TSM 160s is equipped with a state-of-the-art roller feed system. This system ensures safe, secure band transport whilst allowing variable feed lengths to be programmed with ease. Positioning accuracy is permanently controlled and guaranteed by the integrated measuring device and the Siemens control unit. The camber compensation unit ensures the effect of band camber is greatly reduced and perfect setting uniformity is ensured at all times. To complement this machine Kesel offer various coiling solutions including the Speed 90 coiler, a perfect partner to the TSM 160s.

Specification TSM 160s

Workpiece data	
Band width min.	10 mm
Band width max.	90 mm
Band thickness min.	0.6 mm
Band thickness max.	1.65 mm
Band material:	Carbon, bi-metal and carbide-tipped
Control unit	
	Siemens SIMATIC HMI IPC
Operating system	Windows 10
Clamping system	
	Electric lever system clamping
Setting accuracy	
Setting tolerance	± 0.02 mm
Symmetry tolerance	± 0.02 mm
Tooth pitch	0.5 TPI – 32 TPI
Max. stroke length	160 mm
Output	
	250 – 660 m/h
Coiling system	
Coiling system interface	included
Coiling system	optional
Features	
Measuring system	Outgoing measuring system
Auto adjustment	Auto adjust setting width Auto adjust symmetry
Measuring log	yes
Band feed system	Programmable roller feed mechanism
Band cleaning	Blowing nozzle + brushes
Setting tools	Resharpable, slot key positioning

Additional accessories available upon request/Subject to modifications arising from technical advances



approx. dimensions