



RC 110

Benching centre for fully automatic, complete machining of band saw blades. Levels, tensions and straightens in a single clamping operation

The idea.

The culmination of extensive development.

Levelling, tensioning and straightening band saw blades has traditionally been a highly labour-intensive job which could only be performed in individual steps by highly skilled and qualified operating personnel.

The RC 110 benching centre now lets you level, tension and straighten your band saw blades in a single clamping operation, with such a degree of precision that you are guaranteed optimum cutting performance every time. This degree of accuracy is repeated any number of times, so creating identical application conditions for every band saw blade. And importantly, operating personnel are relieved of the requirement to perform manual operations – our contribution towards creating a more human working environment.

The optimal handling of the band saw blades is vital to the economic efficiency of the sawmill. It increases the tool life of the band saw blades, reduces untrue running of the blade and so improves the sawn timber quality and yield.



Control panel with input keyboard for program editing and data input.

The concept.

Measuring, levelling, tensioning and straightening in a single clamping operation.

Tensioning



Levelling



Measuring station



Straightening



Tensioning and straightening station

Levelling station





Monitor picture levelling







Monitor picture tension profile without tireline (European standard)



Monitor picture straightening

Intelligent sequential programs are standard

- Integrated automatic programs for either fully automatic complete machining or for part functions.
- Levelling programs with substantial time savings due to skipping of levelled tracks or levelling quality already achieved.
- Automatic programs for welded seam machining for either levelling and tensioning or for part functions.
- Expert programs which can be freely programmed by the user for individual work steps.

The operation.

Complete band saw blade benching in a single clamping operation.

Operation is extremely convenient and simple. After positioning the saw blade, only a minimal amount of data and target values have to be entered at the control panel. The user is guided through the program by graphic on-screen prompting, and can also select individual machining processes such as levelling or tensioning and straightening.

During the levelling program, a probe performs non-contact measurement of deviations from target at adjustable intervals (tracks) over the entire width of the blade. Using the measured values, two controlled pairs of rollers level out bumps and hollows both from above and below. This process is repeated until the deviations lie within the tolerance required. The tensioning and straightening program starts with a measurement of the existing tension over the entire blade width. The rolling station is then activated and the saw tension built up over the entire blade width. At the same time, the system measures the back of the blade at set measurement points. It should be straight or slightly convex over its entire length. The blade is then rolled according to the set input values. These work processes are essential if constant, even, cutting conditions are to be achieved over the lifetime of the saw blade. After completing these steps, the benching centre stops automatically. The band saw blade dressing process is complete.



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Specifications at a glance:

- Working speed continuously adjustable
 5 to 27 m/min
- Total connected load approx. 3 kVA/2.4 kW
- Weight approx. 2300 kg

Dimensions





The highlights:

- Complete dressing of band saw blades in a fully automatic sequence.
- Considerable simplification of work processes for operating personnel.
- Only one machine for levelling, tensioning and straightening, thus requiring less space.
- Simple, convenient operation. Input of target values on the control panel.
- Operating personnel are provided with information at any stage about the current saw blade status.
- Precise results with infinite repeatable accuracy as an essential precondition for optimum cutting performance and optimum saw blade lifetimes.
- For machining saw blades up to 420 mm in width, 2.8 mm in thickness and 18 m in length.
- With facility for manual operation of individual processes, e.g. before and after a welded seam, or in case of damage to the band saw blade.
- All systems can be moved back for easy loading of the band saw blade.
- Full enclosure of the entire working area. Complete personnel protection.

We reserve the right to make design modifications in the interests of technical improvement. Patents pending.

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