



A Revolution for the Steel Industry

KBS 1051

The Fastest Structural Profile Band Saw in the World!



Technological Highlights

Halve Cutting Time



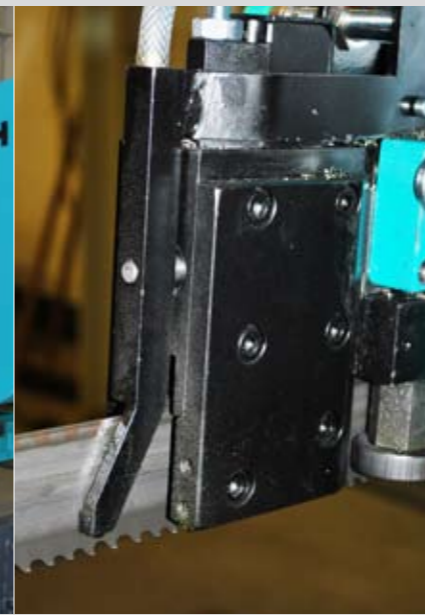
Increased cutting performance through the use of a ballscrew spindle for the sawblade feed.



Carbide saw blades can be used for the first time, due to the powerful saw drive (12.9 kW) and AFC system, these increase cutting performance by fifty percent.



The retractable vertical clamping device enables easy, user-friendly blade changing in no time at all.



Double sided carbide tipped band guide with automatic, electro-hydraulic cutting-pressure regulation and band-deflection control.



Vertical clamping device with tensioning blades for optimum grip of short pieces

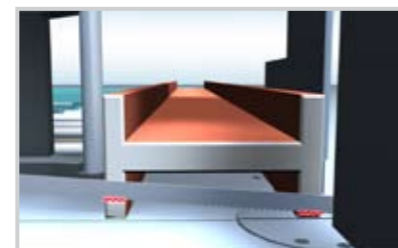
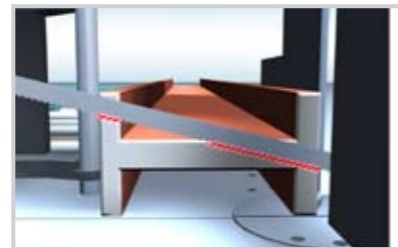
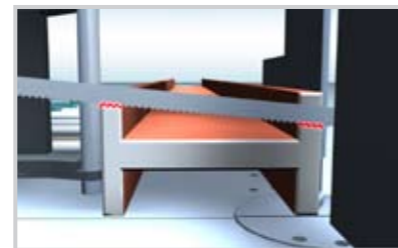


Good accessibility to electronics, hydraulics and atomised lubrication system.

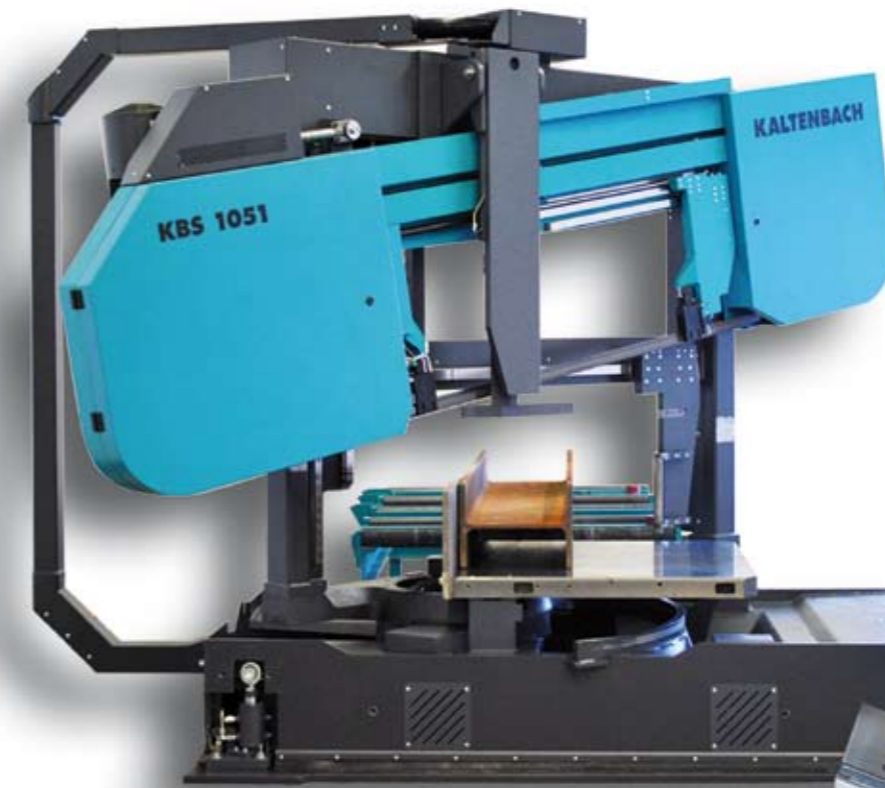
The KBS 1051 sets new standards for structural profile band saws, maintaining the highest cutting quality with its revolutionary increase in cutting speed and implementation of the most up-to-date carbide tool technology
Today's demanding requirements from customers from the steel construction and steel trading industries can now be met with ease.
Greater throughput, optimum cutting quality, excellent blade life, minimal set-up and non-productive times.

Threefold Increase in Cutting Speed

- The cutting performance of the new KBS 1051 structural profile bandsaw from KALTENBACH could be noticeably increased through the use of a ballscrew spindle for the sawblade feed.
- An additional increase in cutting performance is possible through the use of carbide saw blades.
- With the optional patented AFC (Auto-Flex Control) System, the saw blade incline is automatically adjusted to the material cross-section of the profile, resulting in a minimal engagement length of the blade in the material.

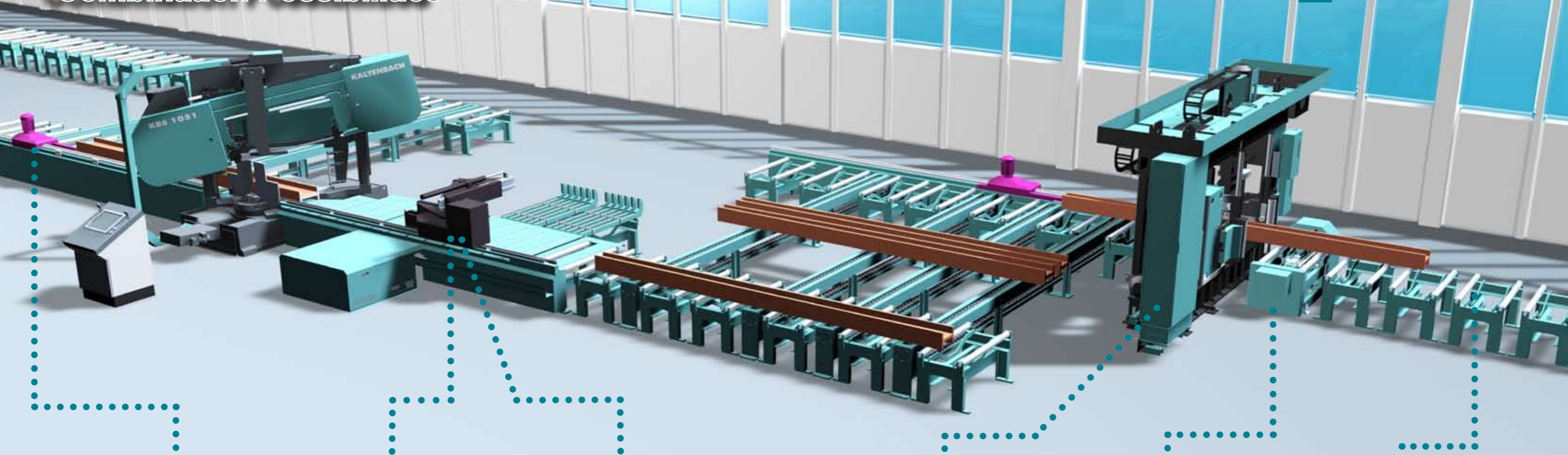


AFC: Auto-flex control: When sawing, the saw-blade angle adjusts automatically in order to maintain an optimal engagement length of the blade in the material as the cross section changes through the cut.



Fast and precise **mitre settings** with servomotor, sprocket, pinion and planetary gear.

Combination Possibilities



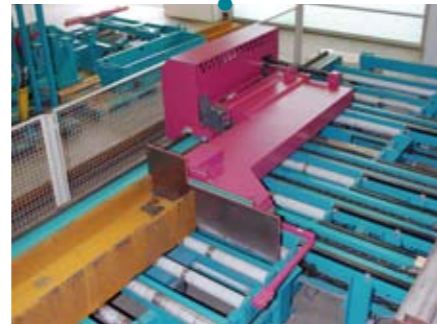
Measuring System

- Sliding measuring carriage (pusher or gripper)



Auto Sorter

- Reliable full automation in profile processing
- Disposal of trim cuts and end pieces



Measuring System

- Length stop
- Measuring system for bundles and layers



Sectional Beam Drilling Machine

- Efficient drilling, centre marking and thread cutting
- Use of HSS, carbide drills
- Three drill axes with a total of 15 tools and automatic tool changing system
- Flexible contour marking system



Marking Unit

- High speed marking operation for applying characters
- Up to 22 characters without material movement
- Can be integrated into fully-automatic processing sequences
- Imprint still clearly visible after galvanizing or painting



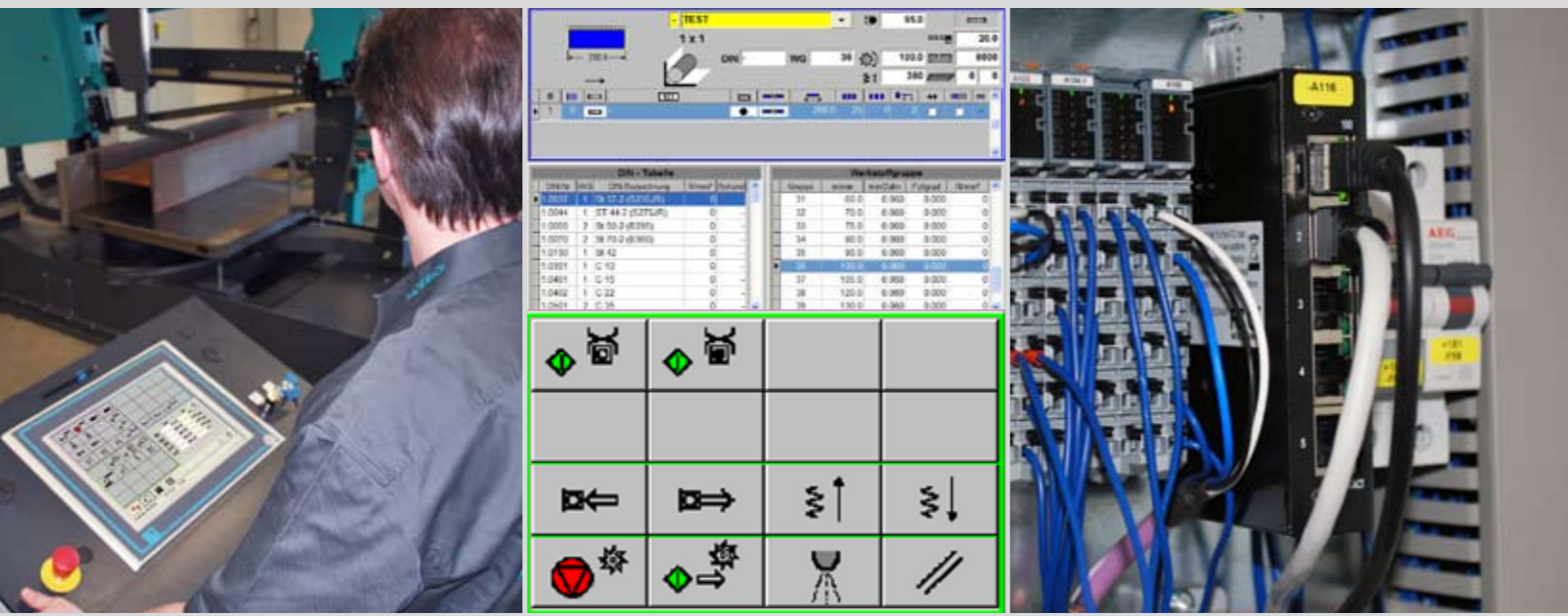
Transport Systems

- Roller conveyors in robust construction
- Cross transport as drag chain, lift-and-carry system or chain conveyor
- Modular System
- Various levels of automation, from semi to full automation of the complete processing line



Stand-alone sawing installation with transport system on the infeed and outfeed side

Superlative Software: PROFICUT/PROFILINE



Operation

The programming and operation of the automatic sawing centre is undertaken using PROFICUT software, carried out either directly on the machine via the touchscreen display or during work preparation in the office. In the latter case the order data is sent online via data link or customer network to the machine in Excel format and imported, or transferred offline using a USB stick.

With PROFICUT* software, customer specific materials databases for recurring orders and parts databases can be created.

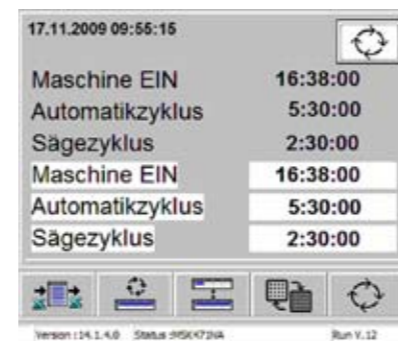
Controlling with PROFICUT*

The programming of sawing tasks using PROFICUT is a highly logical process in order that the operator can intuitively follow the sequence of the images displayed. Following entry of the order data, DIN number or material group, the software takes over all further calculations and preliminary selections, for example:

- Feed speed
- Cutting speed
- Bar allocation, etc.

Remote Diagnosis and Maintenance

Remote access to the automatic sawing centre is possible at all times via analogue/digital modem or VPN connection for fast troubleshooting.



The overview of operating times in the product data report helps the operator to estimate the remaining service life of the saw blade and shows the production times of both individual parts and complete orders.

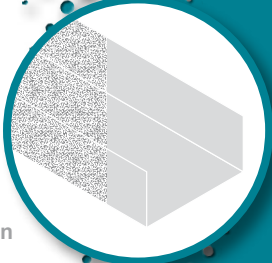
* With a sawing-drilling installation the bandsaw is controlled using PROFILINE software

Technical Data / Cutting Range		KBS 1051	
Saw band dimensions	mm	8900 x 54 x 1,6	
Saw band types		HSS / HM in Verbindung mit AFC	
Drive power	kW	12,9	
- Saw motor		2,2	
- Hydraulics			
Cutting speed infinitely adjustable	m/min	15 - 150	
Saw band feed	mm/min	0 - 600	
- Infinitely adjustable		6.000	
- Fast return trace			
Operating height	mm	640	
Dimensions (L x W x H)	mm	4.370 x 1.435 x 2.650	
Weight	kg	5.800	
Working range	90 Grad	mm	1030 x 500
	+ 70 Grad	mm	980 x 500
	- 70 Grad	mm	960 x 500
	+ 60 Grad	mm	900 x 500
	- 60 Grad	mm	880 x 500
	+ 45 Grad	mm	740 x 500
	- 45 Grad	mm	700 x 500
	- 40 Grad	mm	630 x 500
	+ 30 Grad	mm	525 x 500
Smallest material cross-section	mm	20 x 10	

Equipment	KBS 1051
Sawband feed via ballscrew spindle	■
NC controlled cutting angle setting	■
Automatic, electro-hydraulic cutting pressure regulation	■
Lubricant reduction through micro-dosing system	■
Swarf chamber brush with motor driven adjustment	■
Electronic band slip monitoring	■
Automatic hydraulic lowering of the machine to protect workpieces during material transport	■
Machine operation via control console with PROFICUT software package	■
Automatic material height and width measurement	■
Frequency controlled cutting-speed adjustment	■
Swarf conveyor	○
Cut monitoring system when saw bands become worn	○
Clamping stroke limit for thin-walled profiles	○
Laser for visual display of the cutting edge	○
Auto-Flex Control (AFC): Adjustment of the sawband incline to the profile cross-section	○

KALTENBACH: Full Range of Steelfabrication Systems

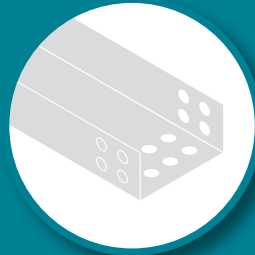
Shotblasting
and Preservation



Band Sawing and
Circular Sawing
Machines



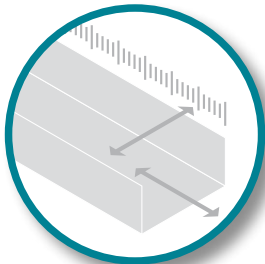
Drilling Machines



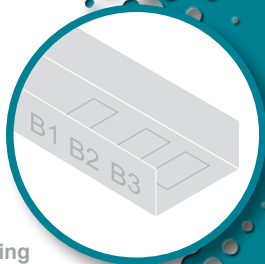
Robotic Coping
Machines



Measuring Systems



Contour Marking



Punching/Shearing
Machines

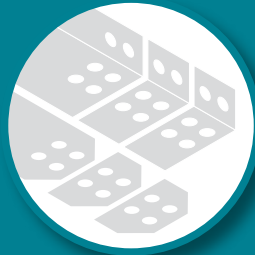
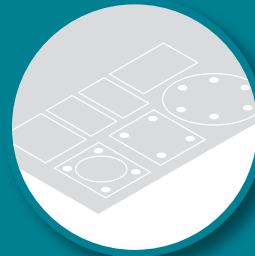


Plate Processing
Centers



In addition to special solutions for steel fabrication and steel service centers, KALTENBACH offers an extensive standard sawing program for steel and aluminum. Ask for our brochure as well as any additional information you might require.



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