

BEHRINGER



High-Performance Automatic
Circular Cold Saws

VA-0 250 NC 1

VA-II 450 NC 1



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VA-II 450 NC 1

High-Performance Automatic Circular Cold Saws



Quality

VA-0 250 NC 1 / -II 450 NC 1 The sawing concept for highest performances, efficiency and flexibility

The straight-cut automatic sawing machines with NC controls are especially designed for mass production.

Their most striking characteristics are a very robust construction, highly-modern drive technology both for the feed axis and the main drive unit as well as the very rigid ballscrew construction providing highest accuracy and excellent cutting results.

Our proven concept for decades of our main drive motor combined with a worm wheel drive makes it possible to cut nearly all steel alloys and non-ferrous metals with short cycle times while minimizing blade wear. Therefore, our machines meet all standards concerning *flexibility, quality, state-of-the-art-technology and economical performance.*

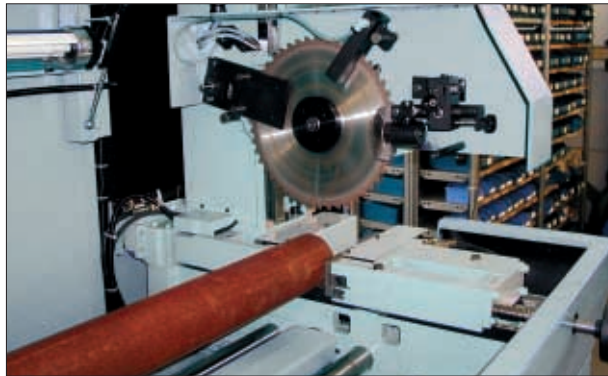


Control Unit



The highly modern control systems are easy to operate and offer a wide range of possibilities. The software program enables an interactive operation of the control system. All relevant sawing data such as profile parameters of the sections to saw, technology data as well as an error log book are standard. Telemaintenance and trouble-shooting are made via a service modem module. The feed length (cutting length) can be preset to a maximum length of 32.8'.

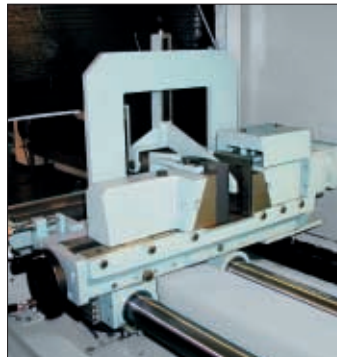
Clamping Unit and Blade Separation Feature



The clamping unit is designed as a two-point clamping device holding the sections on both the Input and Output side of the sawblade. This ensures nearly burr-free cuts. On the "Carbide" Machine, the blade separation feature guarantees a free return of the carbide sawblade. This results in -

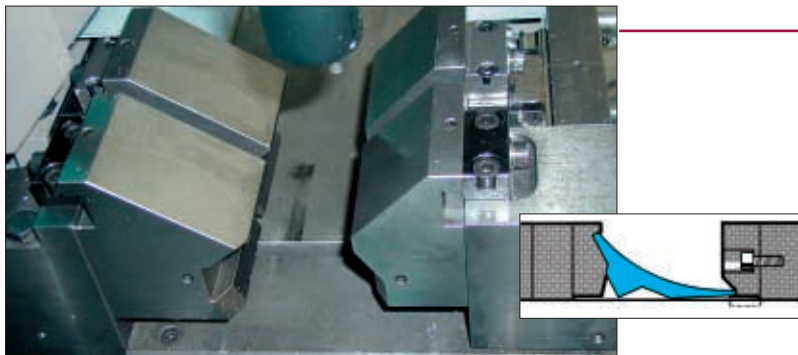
- ◊ High cutting quality, therefore
- ◊ Minimum reworking
- ◊ Resulting in increased efficiency

Material Feed Unit



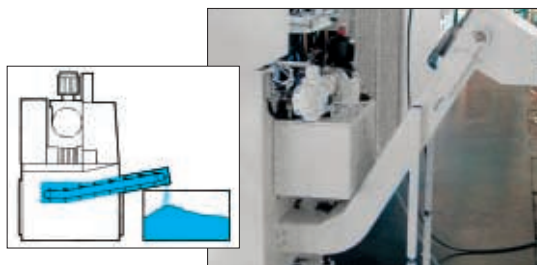
Equipped with a ballscrew and a floating bearing, the NC-axis provides a high degree of accuracy. The floating bearing of the NC-axis can make up for unfavorable inaccuracies in the straightness of the sections to be sawn. The maximum feed rate and reversing speed is 31.5" / second.

Use of Form Jaws



Some special shaped extruded sections are hard to clamp properly because of their complicated profile shape. In such cases, Form Jaws can be fabricated to suit the respective profile. Here the standard reduced clamping feature for Input/Output and Feed Unit is very useful in preventing any deformation of the sections, particularly of the thin-walled ones.

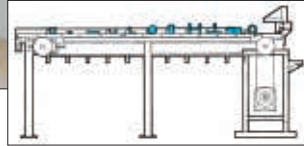
Chip Conveyor



Due to the high cutting performance of these machines, an automatic chip conveyor is highly recommended (option).



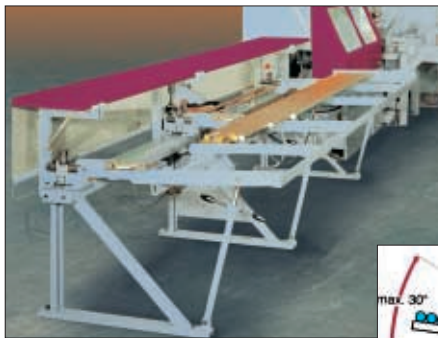
The KLM Flat Magazine can be used for the automatic feeding of a variety of profiles.



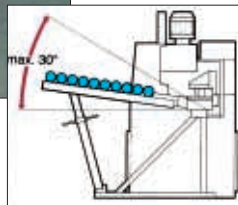
A variety of loading magazines:

Flat magazines, bundle loading magazines and inclined magazines are available. Loading can be accomplished from either the front side or the rear side, depending on the respective needs. Special devices for the handling of material, for example a device for putting rectangular sections upright etc. can be provided on request.

Infeed



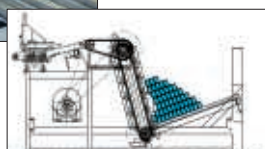
The Inclined Magazine can be used for the automatic loading of round, square or rectangular shaped materials.



The Bundle Loading Magazine is designed for the automatic loading of round, square or rectangular shaped material with an additional separation device for thin-walled tubing.

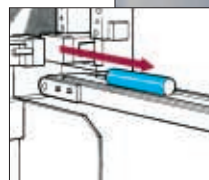
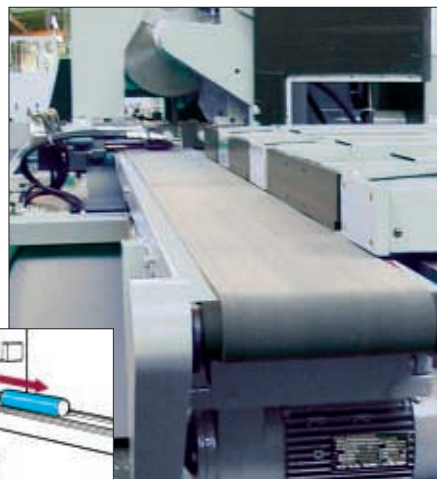


Lift Loading Magazines for the automatic loading of larger dimensioned tubes, square or rectangular shaped material.



Discharge

Sorting Systems



A conveyor belt with one or several unloading stations or buffer stations depending on the application.

The pieces can be transferred to other units such a de-burring brushes, furnaces, robots, etc. or to units for the marking, engraving or stamping of finished pieces.

Standard



Standard Package for VA-O 250 NC 1

Sawblade diameter up to 9.8"
 Cutting Speeds - 103 / 206 or 52 / 103 SFM
 Pole changing three phase motor 1.8 / 2.5 HP
 Two-point clamping system
 Saw feed with electronic positioning control
 Material feeding by means of servo motor and ballscrew
 Machine functions are controlled hydraulically
 PLC Controls
 Coolant System
 Manual central lubrication
 Cutting pressure controlled by sawblade switch off via ampmeter

Standard Package for VA-O 250 NC 1 / Carbide Version

Frequency controlled motor, 10.7 HP
 Cutting Speeds – 39 - 335 SFM
 Pre-tensioned roller guide rails and saw spindle bearings
 Blade separation feature on left hand side of sawblade
 Cutting pressure controlled by sawblade on/off switch on the PLC Controls
 Spray Mist System
 Automatic Central Lubrication Unit

Standard Package for VA-II 450 NC 1

Sawblade diameter up to 17.7"
 Cutting Speeds – 58 / 116 SFM
 Pole changing three phase motor – 4.9 / 6.3 HP
 Two point clamping system
 Saw feed with electronic positioning control
 Material feeding by means of servo motor and ballscrew
 Machine functions are controlled hydraulically
 PLC Controls
 Coolant System
 Manual central lubrication
 Cutting pressure controlled by sawblade switch off via ampmeter

Standard Package for VA-II 450 NC 1 / Carbide Version

Frequency controlled motor - 20.1 HP
 Cutting Speed Range – 5 - 40 SFM
 Pre-tensioned roller guide rails and saw spindle bearings
 Blade separation feature on left and right hand sides of sawblade
 Cutting pressure controlled by sawblade on / off switch on the PLC Controls
 Spray Mist System
 Automatic Central Lubrication Unit

Technic

TECHNICAL DATA VA-O / VA-II

MODEL		VA-O 250 NC 1	VA-O 250 NC 1 Carbide	VA-II 450 NC 1	VA-II 450 NC 1 Carbide
Cutting Range		90°	90°	90°	90°
Standard Sawblade Ø	Inches	9.8	9.8	17.7	14.2
●	Inches	2.9	2.3	5.9	4.3
○	Inches	2.9	Upon request	6.2	Upon request
□	Inches	2.9 x 2.7	Upon request	6.2 x 5.3	Upon request
■	Inches	2.7	Upon request	5.3	Upon request
Saw Motor	HP	1.8 / 2.5		4.9 / 6.3	
Optional	HP	4.0 / 4.8			
Frequency Motor	HP	10.7	10.7	10.7	20.1
Cutting Speeds	SFM	103 / 206	39 - 335	58 / 116	5 - 40
Optional Speeds	SFM	52 / 103		28 / 56 / 111 / 222	
Optional Speeds	SFM	26/52/103/206		28 / 39 / 56 / 79	
Optional Speeds	SFM	413 / 824		3 - 27	
Optional Speeds	SFM	18 - 180			
Sawblade Stroke		Hydraulic	Hydraulic	Hydraulic	Hydraulic
Single Stroke Unit	Inches	.4 – 38.1	.4 – 38.1	.4 – 38.1	.4 – 38.1
Multiple Stroke-max.	Inches	393.6	393.6	393.6	393.6
Feed Unit Speed up to	in./sec.	31.5	31.5	31.5	31.5
Electronic Positioning		Yes NC Axis	Yes NC Axis	Yes NC Axis	Yes NC Axis
Blade Separation		No	Left of sawblade	No	Left & Right of sawblade
Dimensions	Inches	75 x 50 x 75	75 x 50 x 75	75 x 50 x 83	75 x 50 x 83
Weight	Pounds	2,860	2,970	3,080	3,190

Behringer Eisele reserves the right to make technical and construction improvements.
 Illustrations, dimensions and weights are not binding. Shorter cut-off lengths and additional cutting speeds upon request.



VMS 2000

High Performance Circular Cold Saw VMS 2000

With the VMS 2000 Series, Eisele sets new heights in Circular Cold Sawing Technology for both semi-automatic and automatic machines. Machine longevity and excellent quality are trade marks of this series of machines.



VMS 2000

Program

The Eisele Program

Semi-Automatic Up-stroking Circular Cold Saws for straight and miter cuts with their modular construction that can be made into 3 axes CNC Controlled Sawing Centers. There are straight-cut automatic sawing systems for cutting nearly all grades of steel as well as straight-cut automatic sawing systems for cutting aluminum and other non-ferrous metals. Special sawing systems and tailored solutions can be designed according to the customer's application.



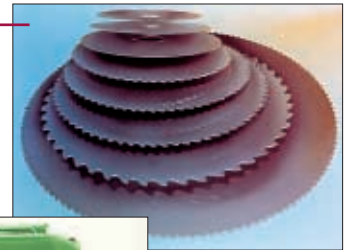
PSU 450 CNC 2

Accessories

Accessories and Spare Parts

Eisele has a large variety of circular sawblades of the highest quality and with specially-treated surface. The sawblades are designed especially for the use on our high-performance circular sawing machines.

The original Eisele cooling concentrate ensures a high cutting performance and longer blade life. By using the Eisele Spray Mist Coolant System, the coolant and lubricant consumption can be reduced to a minimum. It is biologically degradable and therefore eliminates expensive disposal costs. Furthermore, it reduces inventory costs and minimizes health risks for the machine operator.



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