Temelsan®

DK BLOCK
BLOCK METAL CUTTING BANDSAW MACHINE



Standard Features...

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We are thrilled to introduce the Temelsan Vertical Block Bandsaw Machines, designed to deliver unparalleled cutting quality, precision, and sustainability. These machines have been meticulously developed with insights and feedback from our esteemed users, making them a standout choice in the industry.
Here are some of the remarkable standard features that set our vertical contour bandsaw machines apart:

- ***Column-Mounted Controls:*** Ensures operator safety by keeping hands away from the blade during band start.
- ***Motorized Post Elevating:*** Allows precise adjustments without compromising safety, reducing band deflection and extending blade life
- ***Adjustable speed of bandsaw blade:*** The saw speed can be adjusted using a pod, tailored to the height and chemical composition of the material being cut. This ensures precision and efficiency, adapting to various product specifications seamlessly. Experience the power of customizable cutting that enhances productivity and delivers exceptional results. Get ready to revolutionize your cutting process with this innovative feature!
- ***Flanged Aluminum Band Wheels:*** Equipped with rubber tires and carbide back guides to minimize wear and maximize band life.
- ***Hydraulic Band Tension:*** Prevents over/under tightening with a factory-installed pressure gauge for optimal cutting performance.
- ***Durable Storng Steel Table:*** Standard on all machines for stability and precision.
- ***Replaceable Brush:*** Protects the lower wheel by preventing chip buildup and ensuring proper blade tracking.
- ***Standard Guides and Inserts:*** Supports bands 54mm (2”), reducing deflection and enhancing cutting accuracy.
- ***Door Switches:*** Ensures operator safety by halting the blade when doors are open.
- ***2-Year Manufacturer’s Warranty:*** Enjoy peace of mind with our extended warranty on mechanical parts.

Standard Features of DK BLOCK...

- Fixed Table
- 2 x 400mm (16") and 1 x 600mm (24”) Steel flanged, tapered bandwheels with rubber tires
- Upper wheel adjustment up to 100mm (4")
- Operator controls mounted on column
- One set of saw guide blocks with carbide backup for chosen bands

One set of metal saw guide inserts for chosen bands

- T-Slots for Easy Clamping
- Motorized Band wheel brush
- Work light
- Hydraulic Bandsaw Tension Unit with handle control
- Chip blower (plant air required)
- Saw blade guards.
- Band door interlocks.
- Variable frequency band drive.
- Post Elevating By AC Motor
- One (1) complimentary Bi Metal saw blade.
- Operation and parts manuals always available online
- Stop Running upon Bandsaw Breake
- Emergency shut-off buttons
- Chip collection drawer

Fixed Table as standard features

The Temelsan DK BLOCK model vertical block cutting machines come standard with a fixed table, providing a robust and stable platform for your cutting needs.

Designed without T-slots, the table remains completely stationary, ensuring precision and consistency in every cut. The table dimensions are set at a generous 1600mm by 1500mm, offering ample space to accommodate various materials. For ease of use, the product to be cut can be smoothly slid across the table, making the cutting process efficient and straightforward. Should you require a movable table for more versatility in your operations, options are available on the following pages to configure the machine according to your desired cutting distance. We invite you to explore the subsequent pages for more customizable options and details that can tailor the machine to your specific requirements.

Optional Features

Optional Features of DK BLOCK...

Temelsan Makine's DK 1500 / 2000 / 2500 / 3000 series are vertical block cutting machines that share the same robust body design and general features.

These machines offer a versatile platform where you can select from various options to configure the cutting length according to your specific needs. With the flexibility to choose different cutting dimensions, you have the power to tailor the machine to your exact requirements.

DKO - 15TS

This option features a cutting length of 1500mm and comes standard with a T-slotted, hydraulically driven table. This table is mounted on the machine and delivered ready for use, with an option to upgrade to the DKO - SMT Servo-driven table for enhanced performance.

DKO - 20TS

This option offers a cutting length of 2000mm, also equipped with a standard T-slotted, hydraulically driven table, and the same servo-driven table upgrade option is available.

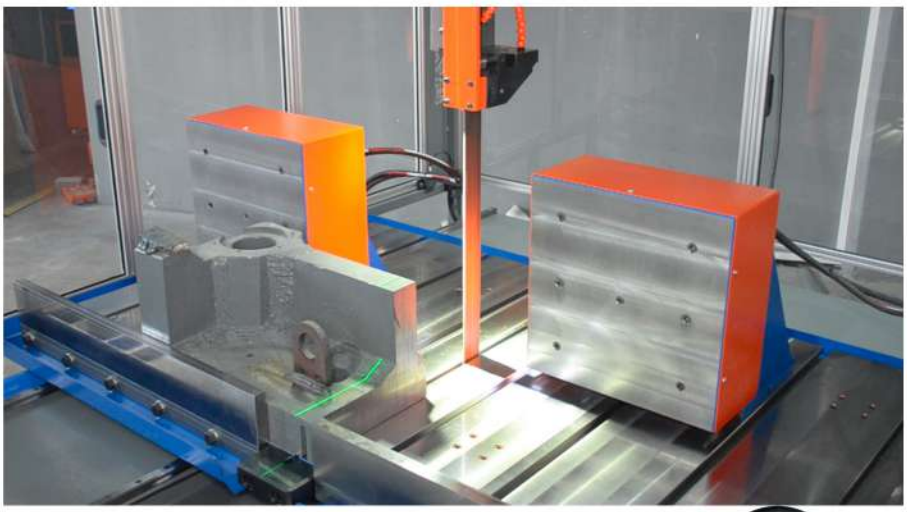
For those requiring longer cuts,

DKO - 25TS

This option provide a cutting length of 2500mm. Choosing this table size necessitates selecting both the DKO - PLC and DKO - SMT options, ensuring you have the advanced control and precision needed for more demanding applications. With these customizable options, Temelsan Makine ensures that each machine can be perfectly adapted to meet the diverse needs of its users, delivering exceptional performance and reliability in every cut.

DKO - 30TS

This option provide a cutting length of 3000mm. Choosing this table size necessitates selecting both the DKO - PLC and DKO - SMT options, ensuring you have the advanced control and precision needed for more demanding applications. With these customizable options, Temelsan Makine ensures that each machine can be perfectly adapted to meet the diverse needs of its users, delivering exceptional performance and reliability in every cut.



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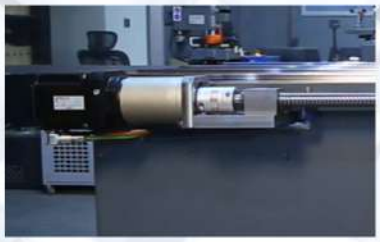


DKO - PLC - PLC Control Unit

The DKO-PLC Control Unit revolutionizes machine operation by replacing traditional contactor-based systems controlled through buttons on the control panel. With this advanced option, all machine movements are seamlessly managed by a sophisticated PLC unit, ensuring enhanced precision and reliability. The control interface is further upgraded to include a 7-inch sensitive touch screen HMI, offering an intuitive and user-friendly experience. This modernized system not only

rol, efficiency, and ease of use, marking a significant advancement in machine automation technology.

DKO - SMT - Servo Motion Table



It is a viable option when the PLC option is purchased! Imagine the thrill of precision and efficiency coming together in perfect harmony! With the implementation of servo motor control for table movement, you gain access to a multitude of innovations that elevate the cutting process to new heights. Imagine being able to adjust the cutting length with millimetric precision, ensuring that every slice is as accurate as possible. The cutting speed can now be managed with tighter tolerances, providing a smoother operation and enhancing the overall performance. Plus, the system is smart enough to alert you when the band saw blade becomes dull, preventing any mishaps and maintaining the quality of your cuts.

This advanced control mechanism results in more polished and aesthetically pleasing cut surfaces, which in turn consistently enhances product quality. The repeatability of cutting quality ensures that there is a continuity in the excellence of your products, making them stand out in the marketplace.



DKO – PS – Proximity Sensor

Enter the Proximity Sensor, a game-changer specifically designed for machines equipped with servo-controlled tables. This sensor transforms the cutting process into a seamless operation. By simply pressing the start button, the sensor allows the table to rapidly approach any piece placed along the cutting direction, making it incredibly simple and safe to adjust the cutting distance. The risk of the post elevation part crashing into the piece is completely eliminated, ensuring a safe and efficient working environment.

Moreover, in operations involving spaced or sequential cuts, the ability to traverse the intermediate distances at rapid speed results in significant time savings. This means you can accomplish more in less time without compromising on safety or quality. The proximity sensor not only enhances the precision of the cutting process but also optimizes the workflow, allowing for a more streamlined and productive operation. With these advancements, you're not just cutting materials; you're crafting excellence, pushing the boundaries of what's possible, and setting new standards in the industry.

DKO - HBTU - Automatic Hydraulic Bandsaw Tension Unit



This feature is exclusively applicable when the DKO-HMT option is integrated into the machine. By utilizing this option, the operator is relieved from the manual task of using a hand wheel to apply tension to the blade for cutting purposes. Instead, once the machine is powered on, the tension unit operates automatically, ensuring seamless and efficient blade tensioning without requiring additional manual intervention. This automation enhances operational efficiency and minimi-

user-friendly.



DKO - CL - Band Mist coolant system

During the cutting soft materials, the blades often experience significant heat buildup, which not only reduces their lifespan but also slows down the cutting speed. By utilizing a Mist Spray Coolant system, the blades remain consistently cool throughout the cutting process. This cooling effect not only enhances the durability and longevity of the blades but also ensures a more efficient and faster cutting performance.

DKO - LWCS - Liquid Wet Cutting System



The DKO-LWCS Liquid Wet Cutting System is an advanced solution meticulously designed to enhance cutting processes that require the use of coolant. This system is seamlessly integrated into the machine, ensuring precision and efficiency in operations where coolant application is essential. By facilitating optimal cooling during the cutting process, the system not only improves the quality of cuts but also extends the longevity of cutting tools. Its innovative design minimizes heat

for industries that demand high-performance cutting solutions. The DKO-LWCS exemplifies cutting-edge engineering, combining reliability and functionality to meet the rigorous demands of modern manufacturing environments.

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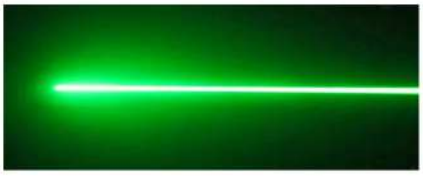


DKO - PDSS - 5+ - Pilz Door Safety System

The DKO-PDSS-5+ Pilz Door Safety System is a specialized safety enhancement designed for use exclusively when the DKO-PLC option is integrated into the machine. Temelsan Vertical Bandsaw Machines are equipped with interlock safety systems as a standard feature to ensure compliance with CE conformity requirements. However, the Pilz Safety System provides an advanced solution to achieve EN ISO 13849-1/-2 control system safety standards, offering elevated safety measures for operations. This system is particularly suitable for machines that feature over four doors, ensuring comprehensive safety coverage. By incorporating this option, users can ensure superior protection and adherence to stringent safety regulations, making it an essential upgrade for enhanced operational safety and reliability.

DKO - LCL - Laser for Cutting Line

The DKO-LCL Laser for Cutting Line is a high-quality solution designed to enhance the precision and efficiency of cutting operations. Featuring a vibrant green laser line though the producer offers flexibility to adjust the color based on preference it significantly simplifies the operator's task of positioning workpieces on the table. The clear and distinct cutting line projection ensures that operators can effortlessly align materials, reducing errors and improving overall productivity. This in-



timize cutting accuracy and streamline operations.



DKO - DMPA - Different Motor Power Application

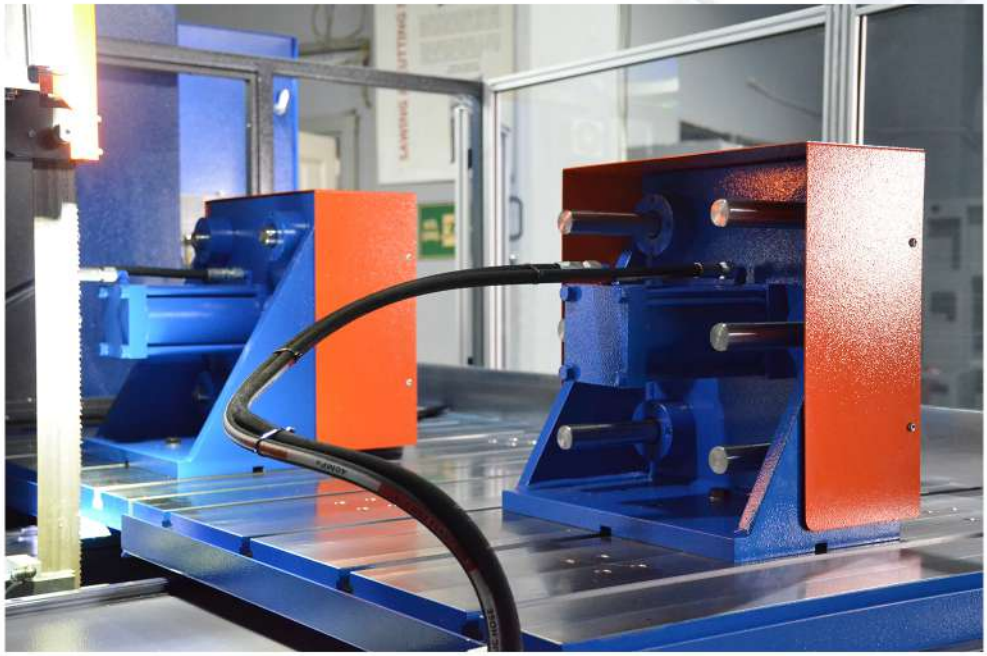
The Temelsan DK BLOCK Band Saw Benches are designed to operate with a standard 7.5 kW motor, ensuring optimal performance for a wide range of applications. However, to cater to the specific needs and preferences of our valued customers, we offer the flexibility to equip these benches with motors of varying power capacities, up to a maximum of 10 kW, provided they remain within the design limits of the machine. This customization allows for enhanced adaptability and effi-

your requests for this option, please specify the desired motor power to ensure we meet your expectations effectively.

DKO - CV - Material Clamping Vice Set

The clamping and holding apparatus are meticulously designed products tailored for the block plate bandsaw machine. These options can be acquired independently of the table selection, offering flexibility to users looking to enhance their cutting operations. The system comprises two clamping apparatuses, creating a robust mechanism that, although challenging to install post-purchase, remains feasible for those committed to upgrading their machinery. By opting for this feature, the control panel is augmented with two control points, marked as 1-0-2, enabling movement in both opening and tigh-

one end of the table, facilitating precise cutting operations. Furthermore, it is possible to position the product between the two apparatuses for additional cutting possibilities, ensuring versatility in use. This apparatus not only enhances the efficiency of the bandsaw machine but also provides users with the capability to perform intricate cuts with ease, making it an invaluable addition for those seeking to optimize their cutting processes.



DKO - DVA - Different Voltage Application



Temelsan Bandsaw Machines are designed to operate with a standard power supply of 380V AC, ensuring optimal performance under typical working conditions. However, recognizing the diverse requirements of various industries and regions, we also offer customization options to accommodate different voltage applications. For clients operating in environments with unique power source specifications, we provide tailored solutions at an additional cost. This flexibility underscores our commit-

the high-quality standards associated with Temelsan products.

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SPECIFICATIONS OF DK BLOCK			
Bansdsaw Tension Unit	Hydraulic		
Table Stroke	1500mm (59") / 2000mm (79") / 3000mm (118") (Hydraulic)		
Band Driving Type	Frequence | Inverter		
Cutting Height	1200 mm (47")		
Throat Size	850 mm (33")		
Table dimensions	1600mm (63") x 1500mm (59") / 2000mm (79") / 3000mm (118")		
Table Tilt Left	N/A		
Table Tilt Right	N/A		
Table Tilt Front	N/A		
Table Tilt Back	N/A		
Table Height	910 mm (36")		
Motor Power	7,5 kW (10 HP)		
Bandsaw Speed	Can be aranged upon request		
Maximum Load Capacity	7000 kg (15432 lbs)		
Blade Length	6820 mm (269")		
Blade Width	54mm (2") upon request		
Floor Space	2400mm (95") x 3400mm (134") / 4400mm (173") / 6200mm (244")		
Overall Height	3000 mm (118")		
Weight	7000 kg (15432 lbs)		
APPLICABLE POWER SOURES			
600 V	3 PHASE	50 - 60 HZ	
480 V	3 PHASE	50 - 60 HZ	
380 V	3 PHASE	50 HZ	
220 V	3 PHASE	50 - 60 HZ	
DIMENSIONS			
LENGTH	DEPTH	HEIGHT	WEIGHT
2400mm (95")	3400mm (134")	3000 mm (118")	7000 kg (15432 lbs)

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