



Temelsan®

DK 400 XL VERTICAL CONTOUR 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 Storing 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 6mm (1/4") to 27mm (1"), 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 400 XL

- Fixed Table
 - Table tilt to 45 degrees outside - 15 degrees inside
 - Table tilt to 15 degrees front side - 15 degrees back side
 - 2 x 400mm (16") Aluminum flanged, tapered bandwheels with rubber tires
 - Upper wheel adjustment up to 76mm (3")
 - Operator controls mounted on column
 - One set of saw guide blocks with carbide backup for bands 6mm (1/4") to 27mm (1")
- One set of metal saw guide inserts for chosen bands
- Band wheel brush
 - Work light
 - Manual bandsaw tension with pressure gauge indicator.
 - Saw blade guards.
 - Band door interlocks.
 - Rip Fence for width adjustment
 - Post Elevating Hand Wheel
 - One (1) complimentary Bi Metal saw blade.
 - Operation and parts manuals always available online
 - Stop Running upon Bandsaw Breake
 - Emergency shut-off buttons

Optional Features...

DKO - FIBD-4 - Variable frequency band drive



The DKO-FIBD-4 Variable Frequency Band Drive is an advanced solution designed to enhance operational efficiency in bandsaw applications. This system enables the bandsaw blade's motor to connect directly to a frequency inverter, providing seamless and precise control over blade speed. By incorporating this technology, operators gain the flexibility to adjust the cutting speed to suit various types of workpieces, ensuring optimal performance and precision. Whether cutting

drive ensures that the blade operates at the most effective speed, reducing wear and tear while improving overall productivity. This feature not only enhances the quality of the cut but also extends the lifespan of the equipment, making it a valuable asset for diverse industrial applications.

DKO - HMT - 4 - Automatic Hydraulic Motion Table

The DKO-HMT-4 Hydraulic Motion Table is an innovative solution designed to enhance operational efficiency and precision in cutting processes. Unlike traditional fixed tables, this advanced system features a hydraulically driven table that significantly improves functionality. The operator begins by securely clamping the workpiece onto the table, after which the hydraulic piston enables precise table strokes. To further optimize the cutting process, the operator can easily adjust the cutting length using limit switches conveniently located on the table. Additionally, the system allows for seamless adjustment of the cutting speed, ensuring a consistent and uniform surface finish across the entire cutting length. This level of control not only enhances the quality of the cut but also guarantees repeatability, enabling a flawless and identical surface appearance for every cut. The DKO-HMT-4 exemplifies a perfect blend of innovation and practicality, making it an indispensable tool for achieving superior results in industrial applications.





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 minimizes user-friendly.

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 – CBMPE – Contour Bandsaw Motorized Post Elevation Unit

The DKO – CBMPE Contour Bandsaw Motorized Post Elevation Unit is an innovative solution designed to enhance the efficiency and precision of cutting operations. This motorized post elevation unit replaces the standard manual adjustment mechanism for setting the cutting height, allowing operators to easily make adjustments using up and down buttons powered by a motor. This advanced functionality not only simplifies the adjustment process but also significantly reduces

machine settings can be conveniently controlled from the control panel located on the column, ensuring seamless and centralized management of the machine's functions. This feature enhances user convenience and contributes to improved operational accuracy and productivity.

DKO - PES - Post Elevation Sensor

The DKO – PES – Post Elevation Sensor is an innovative feature designed to enhance both functionality and safety. This sensor allows the motorized post elevation component to automatically adjust to the most optimal height based on the specific height of the part being processed. By doing so, it ensures precision and efficiency during operations. Moreover, this advanced automation significantly enhances operator safety by minimizing manual adjustments and reducing po-



exemplifies a seamless integration of safety and performance, making it an indispensable asset in modern machinery.



DKO - CL - Band Mist coolant system

When 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 - MTS - 4 - Manual Sliding Table

Typically, machines are equipped with fixed tables that remain stationary during operation. However, with this innovative option, the table is designed to move forward and backward manually, allowing the operator to adjust its position with ease by applying hand force. This added functionality enhances operational flexibility, enabling precise positioning and improved adaptability for various tasks. It provides a user-friendly solution for operators who require greater control over the table's movement, making it a practical and efficient enhancement to conventional machine setups.



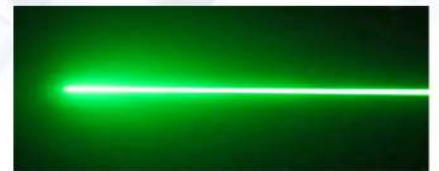


DKO - SAWL - Semi-Auto Welding Shop Unit

The DKO-SAWL Semi-Automatic Welding Shop Unit is an excellent choice for applications involving cuts primarily used for internal mold evacuations and the inner surface cutting of perforated products. This versatile equipment is designed to handle demanding tasks with precision and efficiency. It features a welding machine capable of welding bandsaws up to 13mm (1/2") in width, ensuring robust and reliable performance. Additionally, the unit comes equipped with a grinder and shear cutter apparatus, providing comprehensive functionality to meet various operational needs. This all-in-one solution is ideal for professionals seeking a dependable and efficient tool for specialized cutting and welding tasks.

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 through 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 - PDSS - 4 - Pilz Door Safety System

The DKO-PDSS-4 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 up to 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 - LWCS - C - 4 - Liquid Wet Cutting System

The DKO-LWCS-C-4 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

ponent for industries that demand high-performance cutting solutions. The DKO-LWCS-C-4 exemplifies cutting-edge engineering, combining reliability and functionality to meet the rigorous demands of modern manufacturing environments.



DKO - CM - Chain Mechanism For Material Holding

The DKO-CM Chain Mechanism is an innovative solution designed to enhance material handling processes by ensuring a more secure and stable grip. This advanced mechanism facilitates the effortless holding of materials, significantly improving operational efficiency and reliability. By providing a firm and consistent hold, the chain mechanism minimizes the risk of slippage or instability, making it ideal for a wide range of industrial applications. Its robust design and precision engineering ensure durability and long-term performance, even under demanding conditions. This mechanism is a testament to the commitment to quality and innovation, offering users a dependable tool for achieving seamless material handling and improved workflow stability.



DKO - WHJ - Workpiece holding jaw with handles Set

The DKO-WHJ Workpiece Holding Jaw with Handles Set is an innovative solution designed to enhance material handling efficiency and stability. This advanced tool ensures a secure grip on workpieces, making operations smoother and more reliable. Equipped with ergonomic handles, it allows for effortless adjustment and positioning, catering to diverse material sizes and shapes. Engineered for precision and durability, the workpiece holding jaw is an essential addition to



her for industrial applications or specialized tasks, this tool guarantees improved performance and user convenience, making it an indispensable asset for professionals.

DKO - CAP - Chip Absorption Pipe



The DKO-CAP, or Chip Absorption Pipe, serves as a critical connection point between the vacuum system and the machine, specifically designed to facilitate the efficient collection of chips generated during fine and dusty cutting processes. This innovative component ensures seamless integration with the vacuum system, enabling the effective removal of debris and maintaining a clean operational environment. By optimizing the extraction of fine particles and dust, the DKO-CAP enhances both the performance and longevity of the machinery, contributing to improved precision and overall operational efficiency. Its robust design and functionality make it an indispensable element in ensuring a clean and safe workspace, particularly in industries requiring meticulous dust and chip management.

DKO - DMPA - Different Motor Power Application

The Temelsan DK 400 XL Band Saw Benches are designed to operate with a standard 2.2 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 4 kW, provided they remain within the design limits of the machine. This customization allows for enhanced adaptability and efficiency.



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

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 commitment to meeting the specific needs of our customers while maintaining the high-quality standards associated with Temelsan products.

SPECIFICATIONS OF DK 400 XL			
Bandsaw Tension Unit	By hydro-Mechanic Handweel as a standard - Hydraulic auto tension applicable		
Table Stroke	300mm (12") (Hydraulic)		
Band Driving Type	Standard speed by gearbox or pulley belt system		
Cutting Height	400 mm (16")		
Throat Size	400 mm (16")		
Table dimensions	600mm x 600mm (24" x 24")		
Table Tilt Left	15 Degree		
Table Tilt Right	45 Degree		
Table Tilt Front	N/A		
Table Tilt Back	N/A		
Table Height	915 mm (36")		
Motor Power	0,6kW (0,8HP) up to 3kW (4HP) Applicable		
Bandsaw Speed	Can be aranged upon request		
Maximum Load Capacity	500 kg (1102 lbs)		
Blade Length	3850 mm (151")		
Blade Width	6mm (1/4") up to 27mm (1") upon request		
Floor Space	1200mm x 1300mm (47" x 51")		
Overall Height	2000 mm (79")		
Weight	650 kg (1432 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
1200 mm (47")	1300 mm (51")	2000 mm (79")	650 kg (1432 lbs)



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