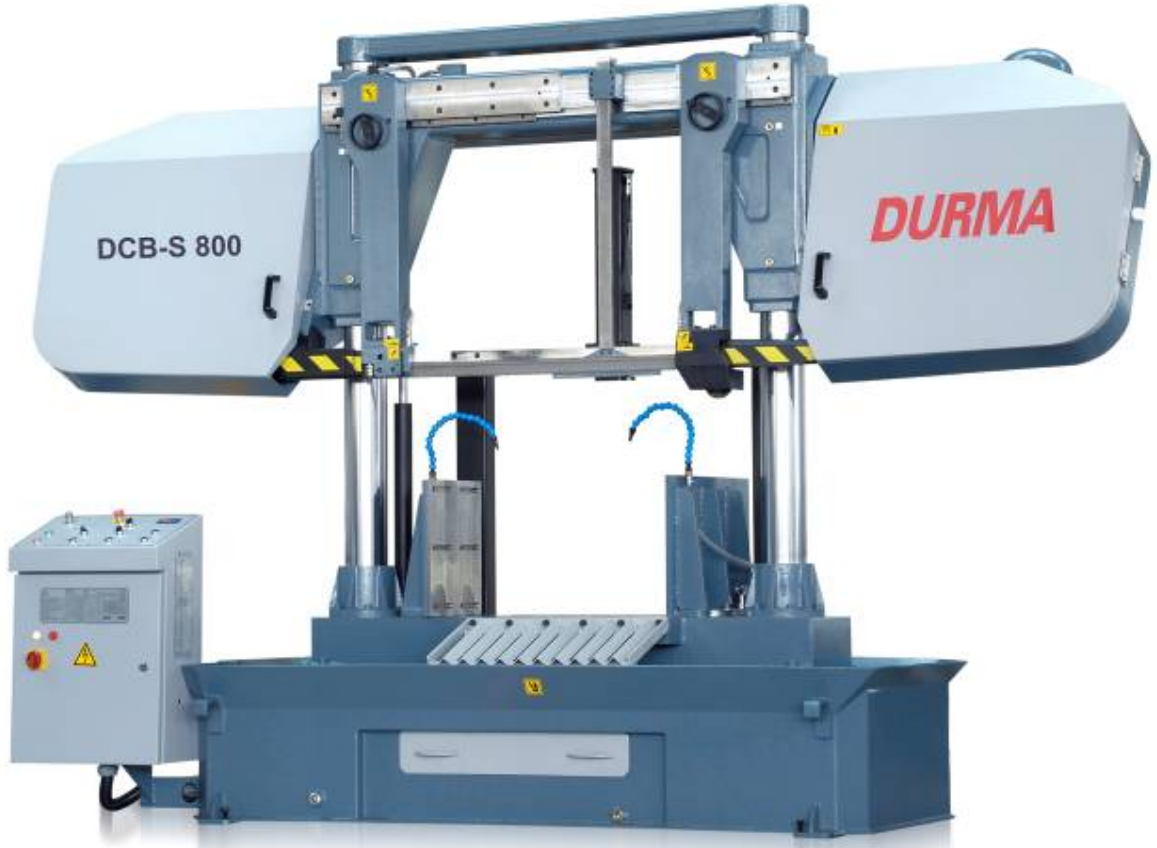


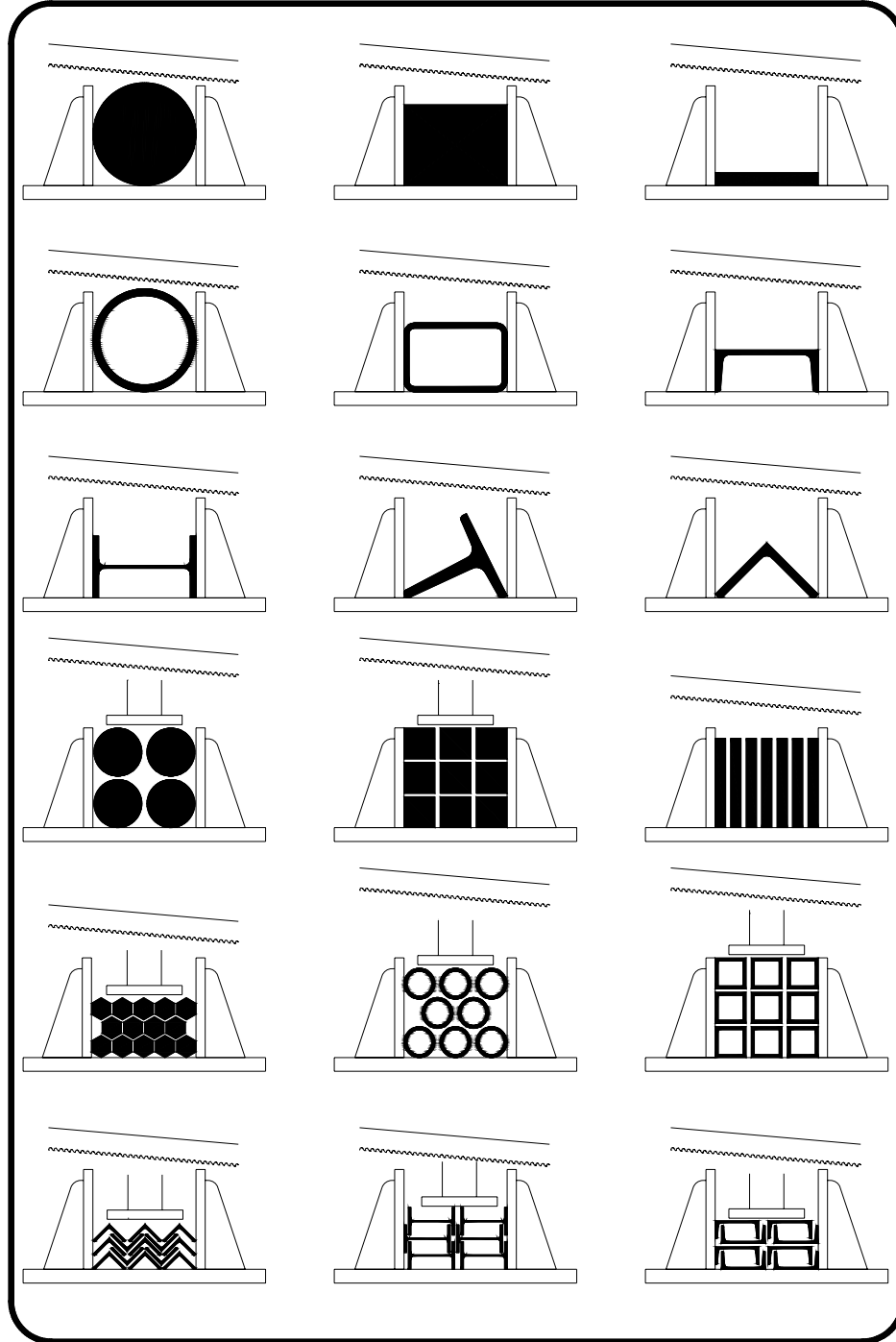


**DCB-S 800**  
**DOUBLE COLUMN SEMI-AUTOMATIC BANDSAW MACHINE**



### METAL CUTTING WITH BANDSAWS

Today, Bandsaws are the easiest, the fastest and the best way to cut metal. They are used in cutting iron, copper compounds, aluminum compounds, production steel, carbon steel, hot-cold work tool steel, reform steel, pattern steel, nickel chrome compound steel, bearing steel, stainless steel, titanium compounds, foundries, construction steels and non-ferrous metals straight or angular. It can cut one by one and also multiple. As bandsaws are fast and inexpensive, they are used commonly in steel plants, craft, aircraft, automotive industries and manufacturing, construction and aluminum sectors.



## **ADVANTAGES OF DESIGN AND PRODUCTION**

### **R&D**

All mechanical and hydraulic systems of HB and DCB series Durma Band saws are designed by experienced Durmazlar engineers in the R&D centre by using parametric 3D technology. All electric and electronic systems are designed by our own computer and mechatronics engineers. Prototypes are forwarded to the serial production after numerous tests.



### ***Strong and Heavy Body Design***

Stretch and vibration during the cutting process are minimized by the reinforced body structure. Rigid body is connected to the strong chassis by chrome plated columns. Chassis, body and other parts are treated with stress relieve device after casting and welding. The other processes are completed with 5 axis CNC working stations in one fixing. By this way, entire axes and the surfaces of the machine are being paralleled.

All these processes ensure DURMA HB, DCB series Band saws precise and long lasting for cutting operations.

### ***High Motor Power and Faster Cutting Ability***

The saw that turns on pulley is driven by high torque helix gear box and electrical motor. Even in continuous working conditions no heating or torque loss is happened on reducer. The torque transmitted to the saws without any power loss by driven system guided with strong conic bearings at the same axis with pulley. Because of high torque its cutting speed is much higher than the other machines in the market.

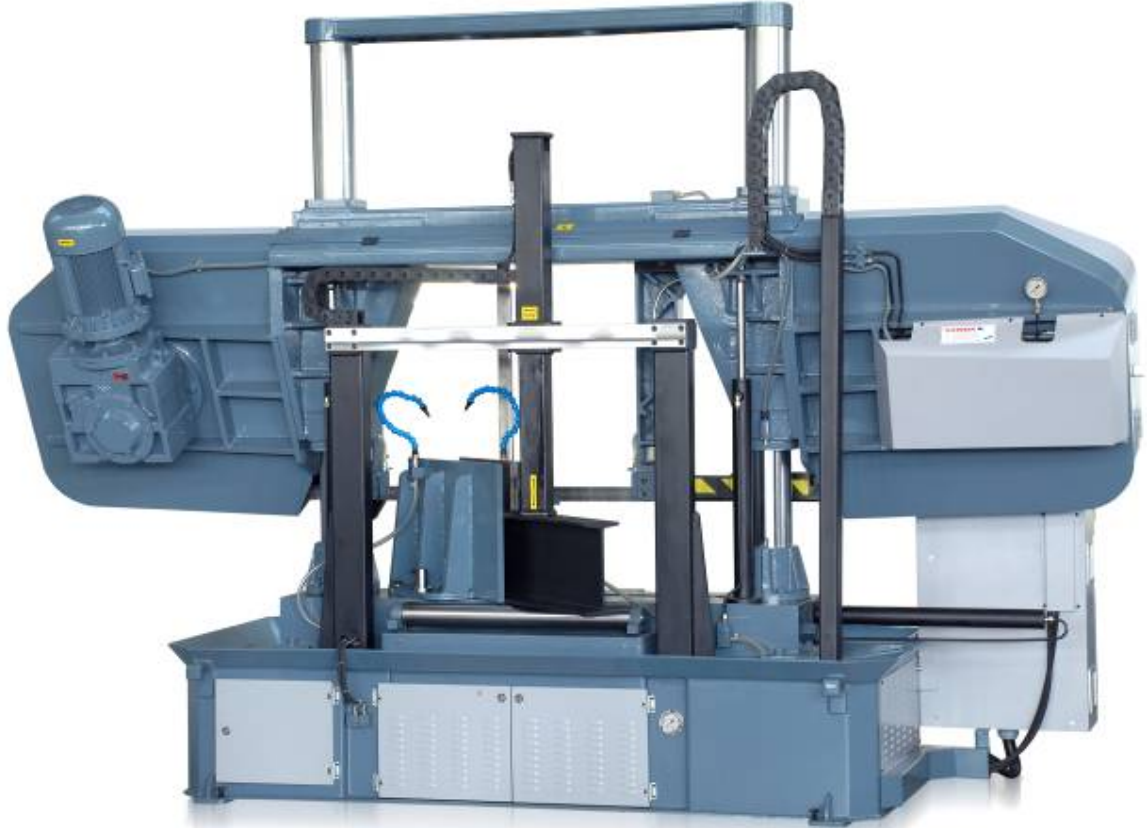
The frequency inverter provides protection for the tape and other components to possible overloads and peak pressure.



### ***Longer Tape Life***

While saw tape is tight between the pulleys and tends to twist between the guides vertical to the table. Twisting level increases when the tape is on maximum angle and minimum distance to the work piece. This causes very thin fractures on the tape which make the tape broken.

DURMA HB, DCB series Band saws last longer because the body which the saw tape is placed 25-40° backwards and the distance between pulleys are %10-30 longer in comparison to the other machines in the market.



### ***Low Sound Level***

Despite suitable cutting parameters are assured, the sounds in production process are caused by the mechanical parts. The sounds due to vibration are minimized when the pulleys and the bearings are in appropriate length and quality. In DURMA HB, DCB series Bandsaws, the pulleys and the direction arms are produced by vibration and sound absorbent casting. Also bearings from worldwide best quality brands are used.

### ***Hydraulic and Electric System***

The desired precision in hydraulic movements and down speed is gained by worldwide known Rexroth valves' which are able to response quickly to the commands as well as with its pressure compensation. Especially during solid material cutting unwanted speed differences does not occur and no harm is done to the saw edges. All electrical control components are selected from Siemens and Schneider.

## STANDARD FEATURES



### • Hydraulic Vice (HV)

One of the most important factors for cutting quality is to fasten the material between the vices. The materials are fastened by hydraulic driven vices in order to prevent any loosening during cutting.



### • Electronic Cutting Speed Adjustment with Inverter (INV)

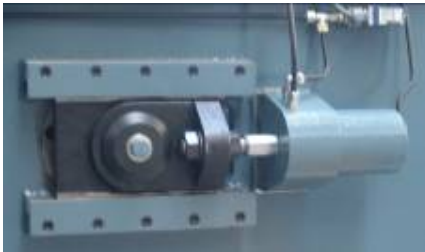
The appropriate cutting speed is very important for providing ideal cutting. In case of cutting speed is faster or slower, it affects the cutting quality as well as shortens the tape life. As it shown on the picture, cutting speed is easily adjustable on the digital control panel.



### • Bimetal Bandsaw and Cooling System (SAW)

As a standard one bi-metal bandsaw for general purpose is given with the machine.

Water based boron oil is spread with desired flow to the tape bed and cutting area with strong centrifugal pump.



### • Blade Tensioning - Hydraulic (TH)

Provides blade tensioning done via the control panel without the need for human operation. When ideal stress occurs, the process terminates tension. In the event of rupture, the system stops.



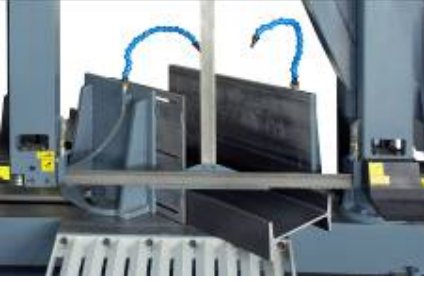
### • Bearing and Carbide Type Blade Housing (BH)

When the right saw tape is used, the steepness and tangential of the cutting is mostly depends to tape guiding. Ideal cutting is achieved by carbide metals guides that touch to the tape side surface thanks to its vertical positioned bearings that assures proper gap and parallelism. By this way, tape and material costs are minimized and finishing operations eliminated.



### • Automatic Cutting Height Adjustment and Rapid Approach(CHA)

According to the height of the strip of material to be cut, positioning the tape at a sufficient height saves big time in serial cuts by reducing the time the cycle to wait. With the automatic cutting height adjustment, saw strip rapidly approaches until the upper surface of the material, and after drops to a slow speed cut. After cutting rises not up the upper limit, but up to 15 mm from the upper surface of the material and stops.



- **One-way 45 ° Angle Adjustable Clamp (R45)**

In semi-automatic models it allows simple angled cutting work to be done and is able to receive 45 ° angles to the right. There are pins in every 15 ° to make the adjustment easier.



- **Chip Brush (CB)**

Cleaning the chips between the tapes is very important for the tape's life. Manual chip brush cleans most of the chips and prevents the dirt gathering on the body.



- **Roller Material Table L= 1500 mm (RT1500)**

At the front or back side of the machine the table provides easy material entrance by bear driven rolls. One table is standard with the related machine. Extra tables can be put together, this way longer materials are supported.

## OPTIONAL SUPPLEMENTS



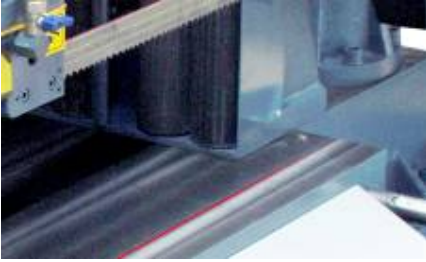
### • Motorized Chip-Brush (CBM)

Cleaning the chips between the tapes is very important for the tape's life. Motorized chip brush cleans most of the chips and prevents the dirt gathering on the body.



### • Chip Conveyor (CC)

Especially solid material cutting creates big amounts of chips and needs to be cleaned frequently. The motorized chip conveyor transfers the chips out of the machine.



### • Laser Marking System (LM)

It helps length adjustment of the work piece. The laser line reflecting on the front side of the tape allows seeing the length and the cutting line of the material easier. Tape placed higher than the material and during feeding of the material, tape is not damaged by hitting the material. This system provides convenience in half-automatic machines and special cutting works.



### • Top Clamping - Hydraulic (TCH)

In bonded material cutting process, hydraulically adjusted with bearing roll prevents the material to be spread from the package.



### • Turning Table (TT)

The machine can be turned on the turning table manually in semi-automatic models. This saves time and working space in either angular or simple cutting.



### • Micro Spray Cooling System (MC)

The spray is used on the tape instead of boron oil to prevent over heating. It minimizes the heating by spraying special mixture of micronized cutting oil and air to make longer tape life and facilitate the cutting. Besides being ecological it also minimizes the boron oil costs.





- **Automatic Cutting Pressure Control (ACP)**

It is very important to obtain suitable lowering speed for ideal cutting. If the speed is too slow or too fast it affects the cutting quality and shortens tape life. Automatic cutting pressure control prevents the machine working overload.



- **Extra Roller Material Table L= 1500 mm (RT1500)**

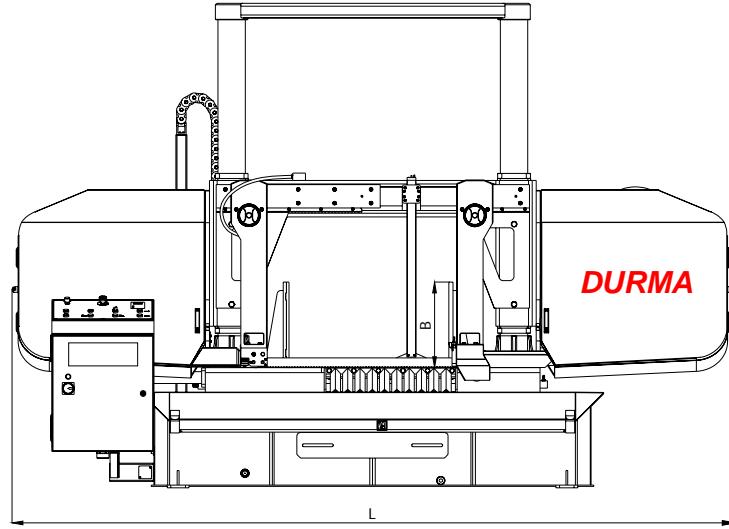
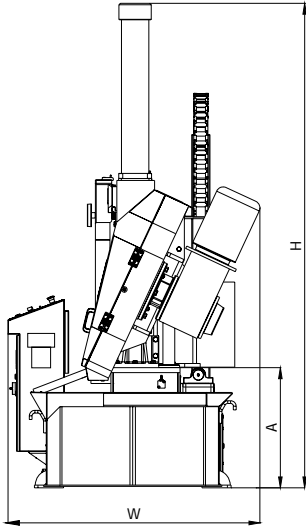
At the front or back side of the machine the table with bearing driven rolls provides easy material feeding. Extra tables can be fixed together in order to support longer material.



- **Motorized Roller Material Table L= 3000 mm (RTM3000)**

It helps to move the material back and forward on motor driven rollers especially in motor driven models. Extra tables can be fixed together in order to support longer material.

## DCB-S 800 TECHNICAL DATA



DCB-S 800					Double-Column Semi-Automatic Band Saw	
Cutting Capacities	90°	○	Round	Inch	31½"	
		□	Square	Inch	31½"	
		▭	Rectangle	Inch	31½" x 36¼"	
	60°	○	Round	Inch	27½"	
		□	Square	Inch	27½"	
		▭	Rectangle	Inch	31½" x 27½"	
	45°	○	Round	Inch	15¾"	
		□	Square	Inch	15¾"	
		▭	Rectangle	Inch	31½" x 15¾"	
	30°	○	Round	Inch	-	
		□	Square	Inch	-	
		▭	Rectangle	Inch	-	
Motor	Main Motor			HP	10	
	Hydraulic Pump Motor			HP	2	
	Material Rolling Motor			HP	-	
	Cooling Motor			HP	1/2	
Dimensions	Length (L)		Inch	157"		
	Width (W)		Inch	55"		
	Height (H)		Inch	105"		
	Vice Height (B)		Inch	18½"		
Cutting Speed			Ft/Min	65 ~ 295 Inverter		
Band Size			Inch	2" x .06" x 339" (28')		
Working Height			Inch	26"		
Weight			Lbs.	9,921 Lbs.		
Band Twisting Angle			°	60°		