DURMA



Durmazlar has aimed continous development since 1956

Owes one of the world's most contemporary production plants in the production technology business .3 different plants oriented to different product families, 1000 dedicated employees and 150.000 m2 footprint.

In order to offer solution according to clients' needs and enriching the quantity and quality of its own patent rights; long experienced Engineering Department transformed to Durma Research & Development Center has opened in the year 2010. Designed and engineered with modern technics; its products are equipped with proven quality components to precisely fulfill your requirements. We serve "accuracy, speed, flexibility, durability, reliability and advanced technology" with high performance/price ratio.Worldwide Durma distributors and technical support network assures perfect support to our clients.

With its 55 years of experience, its product quality, innovative solutions Durma gives importance and cares you with proactive approach. We thank all our clients to hold us at the top segment of the world brands.







Başköy Factory

Durma 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 band saws are fast and inexpensive, they are used commonly in steel plants, craft, aircraft, automotive industries and manufacturing, construction and aluminum sectors.

Durma R&D experience

Machines' strong bodies with precise machining

High motor powers chosen as design criteria for fast cutting ability

Longer tape iije

Hydraulics and electronics system from world class producers

HB-S, DCB-S Series

Semi Automatic Bandsaws



DCB-M, DCB-DM Series

Miter Bandsaws



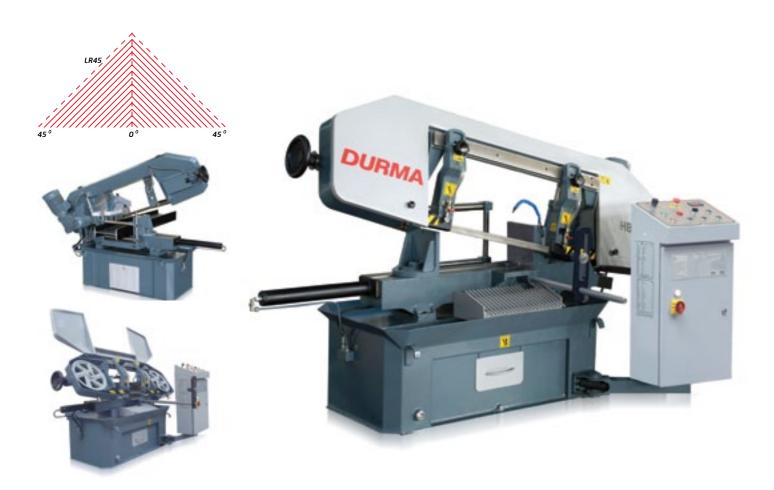
HB-A, DCB-A, DCB-FA Series

Automatic Bandsaws



Semi Automatic Bandsaws

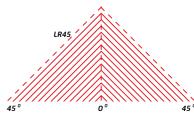
Horizontal Semi Automatic HB-S 280, 330



| Bandsaw | | | HB-S 280 | | HB-S | 5 280 | HB-S 330 | HB-S 330 | | |
|----------------|----------------------|---------|-------------------|----------------|------------|-------------|-------------------|----------------------|---------|--|
| | | | (Semi Automatic) | | (with Turr | ning Table) | (Semi Automatic) | (with Turning Table) | | |
| | | 0 | mm | Ø280 | Ø2 | 280 | Ø330 | Ø330 | | |
| Capacities | 90° | | mm | 260 | 20 | 50 | 240 | 240 | | |
| | | | mm | 200x340 | 200 | x340 | 240x500 | 240) | ×500 | |
| | | \circ | mm | Ø220 | R Ø220 | L Ø240 | Ø300 | R Ø330 | L Ø300 | |
| | 60° | | mm | 200 | 200 | 180 | 230 | 200 | 230 | |
| | | | mm | 160x280 | 160x280 | 180x300 | 230x360 | 320x380 | 230x360 | |
| | | 0 | mm | Ø130 | Ø130 | Ø220 | Ø260 | Ø280 | Ø260 | |
| | 45° | | mm | 120 | 120 | 160 | 200 | 260 | 200 | |
| | | | mm | 100x210 | 100x210 | 160x240 | 200x280 | 230x330 | 200x280 | |
| | | 0 | mm | | | | | | | |
| | 30° | | mm | | | | | - | - | |
| | | | mm | | | | | | | |
| | Main Motor | | kW | 1.5 | 1 | .5 | 2.2 | 2. | .2 | |
| Motor | Hydraulic Pump Motor | | kW | 0.37 | 0 | 37 | 0.37 | 0.3 | 37 | |
| MOLOI | Material Feed Motor | | kW | - | - | | - | - | | |
| | Cooling Motor | | kW | 0.09 | 0. | 09 | 0.09 | 0.0 | 09 | |
| LxWxH | | | mm | 1940x1000x1050 | 1940x11 | 00x1140 | 2150x1000x1250 | 2150x11 | 00x1340 | |
| Cutting Speed | | | m/dk | 20 ~ 80 | 20 - | ~ 80 | 20 ~ 80 | 20 - | ~ 80 | |
| Working Height | | | mm | 620 | 710 | | 650 | 74 | 10 | |
| Weight Kg | | | Kg | 470 | 70 | 00 | 700 | 94 | 10 | |

Double Column Semi Automatic DCB-S 360, 460, 560, 800, 1100









| DCB-S 360 | DCB-S | 5 360 | DCB-S 460 | DCB- | 5 460 | DCB-S 560 | DCB-S 560 | | DCB-S 800 | DCB-S 1100 |
|-------------------|------------|-------------|-------------------|------------|------------|-------------------|----------------------|---------|-------------------|-------------------|
| (Semi Automatic) | (with Turn | ning Table) | (Semi Automatic) | (with Turn | ing Table) | (Semi Automatic) | (with Turning Table) | | (Semi Automatic) | (Semi Automatic) |
| Ø360 | Ø3 | 60 | 460 | Ø4 | 60 | Ø560 | Ø5 | 60 | Ø800 | 1100 |
| 360 | 36 | 50 | 460 | 46 | 50 | 560 | 56 | 50 | 800 | 1100 |
| 500x360 | 500x | x360 | 460x600 | 460) | ĸ600 | 560x750 | 560 | k750 | 800x920 | 1100x1300 |
| Ø280 | R Ø350 | LØ280 | Ø430 | R Ø430 | L Ø430 | Ø560 | Ø560 | Ø560 | Ø700 | 840 |
| 280 | 350 | 280 | 430 | 430 | 430 | 560 | 560 | 560 | 700 | 840 |
| 280x360 | 350x360 | 280x360 | 430x460 | 430x460 | 430x460 | 560x600 | 560x600 | 560x600 | 800x700 | 1100x840 |
| Ø160 | Ø200 | Ø160 | Ø330 | Ø330 Ø330 | | Ø430 | Ø430 | Ø430 | 400 | 640 |
| 160 | 200 | 160 | 330 | 330 330 | | 430 | 430 | 430 | 400 | 640 |
| 160x360 | 200x360 | 160x360 | 330x460 | 330x460 | 330x460 | 430x560 | 430x560 | 430x560 | 400x800 | 1100x640 |
| | | | | | | | - | | | - |
| | | | | | . - | | - | | | - |
| | | | | - | | | | | - | |
| 2.2 | 2. | .2 | 3 | Ė | 3 | 4 | 4 | | 7.5 | 11 |
| 0.55 | 0.5 | 55 | 1.1 | 1. | 1 | 1.1 | 1 | .1 | 1,5 | 2.2 |
| - | | | - | - | - | - | - | | - | - |
| 0.09 | 0.0 | 09 | 0.09 | 0.0 | 09 | 0.09 | 0. | 09 | 0.37 | 0.37 |
| 2480x1100x1615 | 2480x12 | 50x1715 | 3000x1000x1900 | 3000x12 | 00x2000 | 3450x1150x2100 | 3450x20 | 00x2200 | 3970x1380x2660 | 5500x1660x3400 |
| 20-80 | 20- | -80 | 20-90 | 20- | 90 | 20-90 | 20 | -90 | 20-90 | 20-90 |
| 540 | 64 | 40 | 580 | 68 | 30 | 580 | 68 | 30 | 660 | 680 |
| 1500 | 17 | 50 | 1760 | 20 | 60 | 2450 | 28 | 00 | 4500 | 7500 |

Miter Bandsaws

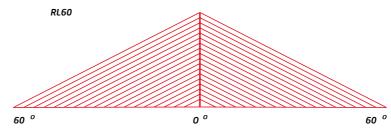
Double Column Semi Automatic Single Miter DCB-M 460, 560, 800, 1100



| Bandsaw | | | | DCB-M 460 | DCB-M 560 | DCB-M 800 | DCB-M 1100 |
|----------------|----------------------|---------|------|----------------|----------------|----------------|----------------|
| | | | | (Miter) | (Miter) | (Miter)" | (Miter) |
| | | 0 | mm | 460 | Ø560 | Ø800 | 1100 |
| Capacities | 90° | | mm | 460 | 560 | 800 | 1100 |
| | | | mm | 460x620 | 560x750 | 800x920 | 1100x1300 |
| | | \circ | mm | Ø460 | Ø560 | Ø550 | 840 |
| | 60° | | mm | 460 | 560 | 550 | 840 |
| | | | mm | 440x460 | 560x560 | 800x550 | 1100x840 |
| | | 0 | mm | Ø290 | Ø380 | 400 | 640 |
| | 45° | | mm | 290 | 380 | 400 | 640 |
| | | | mm | 290x460 | 380x560 | 400x800 | 1100x640 |
| | | 0 | mm | 120 | 160 | 200 | 360 |
| | 30° | | mm | 120 | 160 | 200 | 360 |
| | | | mm | 120x460 | 160x560 | 200x800 | 360x1100 |
| | Main Motor | | kW | 3 | 4 | 7.5 | 11 |
| Motor | Hydraulic Pump Motor | | kW | 1.1 | 1.1 | 1,5 | 2,2 |
| MOLOI | Material Feed Motor | | kW | | | - | - |
| | Cooling Motor | | kW | 0.09 | 0.09 | 0.37 | 0.37 |
| LxWxH | | | mm | 3000x1250x2000 | 3400x1300x2140 | 3970x1670x2885 | 5500x2000x3550 |
| Cutting Speed | | | m/dk | 20-90 | 20-90 | 20-90 | 20-90 |
| Working Height | | | mm | 680 | 680 | 885 | 830 |
| Weight | | | Кд | 2140 | 2850 | 5660 | 8400 |

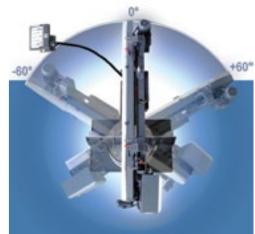
Double Column Semi Automatic Double Miter DCB-DM 560





| Bandsaw | | | | DCB 560 DM (Double Miter) |
|----------------|----------------------|----|------|------------------------------|
| | | 0 | mm | Ø580 |
| Capacities | 90° | | mm | 560 |
| | | | mm | 560x1050 |
| | | | mm | Ø580 |
| | 60° | | mm | 560 |
| | | | mm | 560x880 |
| | | 0 | mm | Ø580 |
| | 45° | | mm | 560 |
| | | | mm | 560x700 |
| | | 0 | mm | Ø470 |
| | 30° | | mm | 470 |
| | | | mm | 470x560 |
| | Main Motor | | kW | 7,5 |
| Motor | Hydraulic Pump Motor | | kW | 3 |
| MOTOL | Material Feed Motor | | kW | |
| | Cooling Motor | | kW | 0.37 |
| LxWxH | | | mm | 4100x2080x2620 |
| Cutting Speed | | | m/dk | 20-100 |
| Working Height | | mm | 780 | |
| Weight | | Kg | 5300 | |





Automatic Bandsaws

Horizontal Automatic HB-A 280, 330







| Bandsaw | | | | HB-A 280 | HB-A 330 |
|----------------|----------------------|---------|------|----------------|----------------|
| | | | | (Automatic) | (Automatic) |
| | | 0 | mm | Ø280 | Ø330 |
| Capacities | 90° | | mm | 240 | 300 |
| | | | mm | 220x280 | 300x400 |
| | | \circ | mm | | |
| | 60° | | mm | | |
| | | | mm | | |
| | | 0 | mm | | |
| | 45° | | mm | | |
| | | | mm | | |
| | | 0 | mm | | |
| | 30° | | mm | | |
| | | | mm | | |
| | Main Motor | | kW | 1.5 | 2.2 |
| Motor | Hydraulic Pump Motor | | kW | 0.37 | 0.37 |
| MOTOL | Material Feed Motor | | kW | 0.25 | 0.25 |
| | Cooling Motor | | kW | 0.09 | 0.09 |
| LxWxH | | | mm | 1940x1050x1050 | 2200x1100x1250 |
| Cutting Speed | | | m/dk | 20 ~ 80 | 20 ~ 80 |
| Working Height | | | mm | 620 | 650 |
| Weight | | | Kg | 580 | 820 |

Double Column Automatic DCB-A 360, 460, 560, 800, 1100



| | | | DCB-A 360 | DCB-A 460 | DCB-A 560 | DCB-A 800 | DCB-A 1100 |
|----------------------|---|------|----------------|----------------|---------------------------------------|--|---|
| | | | (Automatic) | (Automatic) | (Automatic) | (Automatic) | (Automatic) |
| | 0 | mm | 360 | 460 | Ø560 | 800 | 1100 |
| 90° | | mm | 360 | 460 | 560 | 800 | 1100 |
| | | mm | 360x380 | 460x470 | 560x610 | 800x920 | 1100x1300 |
| | \circ | mm | - | | - | | - |
| 60° | | mm | | | - | | - |
| | | mm | | | - | | - |
| | 0 | mm | - | | - | | - |
| 45° | | mm | - | | - | | - |
| | | mm | - | | - | | - |
| | 0 | mm | | | - | | - |
| 30° | | mm | - | | | | - |
| | | mm | - | | - | | - |
| Main Motor | | kW | 2.2 | 3 | 4 | 7.5 | 11 |
| Hydraulic Pump Motor | | kW | 0.55 | 1.1 | 1.1 | 1,5 | 3 |
| Material Feed Motor | | kW | 0.25 | 0.75 | 1.1 | Hyd | Hyd |
| Cooling Motor | | kW | 0.09 | 0.09 | 0.09 | 0.37 | 0.37 |
| | | mm | 2480x1100x1650 | 3000x1150x1820 | 3300x1150x2040 | 3970x2000x2660 | 5500x2400x3400 |
| | | m/dk | 20-80 | 20-90 | 20-90 | 20-90 | 20-90 |
| | | mm | 540 | 580 | 580 | 660 | 680 |
| | | Kg | 1650 | 2300 | 2600 | 4500 | 9400 |
| | 45° 30° Main Motor Hydraulic Pump Motor Material Feed Motor | 90° | 90° | 90° | (Automatic) (Automatic) (Automatic) | (Automatic) (Automatic) (Automatic) (Aut | (Automatic) (Automatic) (Automatic) (Automatic) (Automatic) (Automatic) (Automatic) (Automatic) (Automatic) (Automatic) |

Double Column Automatic Miter DCB-FA330



| L60 | | |
|-----|-----|------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | 0 0 | 60 ° |
| | | |



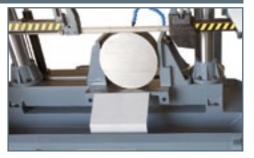


| | | NAVIOUS SERVICES | | | |
|--|----------------|----------------------|---------|------|----------------------------------|
| | Bandsaw | | | | "DCB-FA 330 (Full Automatic)" |
| | | | 0 | mm | Ø330 |
| | | 90° | | mm | 330 |
| | | | | mm | 330x370 |
| | | | \circ | mm | 310 |
| | | 60° | | mm | 310 |
| | Capacities | | | mm | 330x310 |
| | | | 0 | mm | 220 |
| | | 45° | | mm | 220 |
| | | | | mm | 330x220 |
| | | | 0 | mm | 120 |
| | | 30° | | mm | 120 |
| | | | | mm | 330x120 |
| | | Main Motor | | kW | 1.5 |
| | Motor | Hydraulic Pump Motor | | kW | 0.55 |
| | Piotoi | Material Feed Motor | | kW | 1.1 |
| | | Cooling Motor | | kW | 0.09 |
| | LxWxH | | | mm | 1950x2150x1710 |
| | Cutting Speed | | | m/dk | 20-100 |
| | Working Height | | | mm | 700 |
| | Weight | | | Kg | 1200 |
| | | | | | |

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. Cutting speed is easily adjustable on the digital control panel.



Bimetal Bandsaw & Cooling System) Saw)

As a standard one bi-metal bandsaw for general purpose is given with the machine. Different model or geared lanes are given on request. Water based boron oil is spread with desired flow to the tape bed and cutting area with strong centrifugal pump. The machine is dispatched without boron oil.



Cutting Height Adjustment) CHA)

According to work piece height, appropriate positioning of the tape saves great time especially at serial cuttings.



Bearing and Carbide Type Blade Housing) BH)

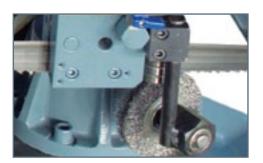
When the right saw tape is used, the steepness and tangential of the cutting is mostly depends to tape guiding. Ideal cutting is achieved by carbide metals guides that touch to the tape side surface thanks to its vertical positioned bearings that assures proper gap and parallelism. By this way, tape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



Blade Tensioning) Mechanic) TM)

Tape tension is very important for ideal cutting. In case the tape is too tight or loose, it affects the cutting process negatively and shortens tape life. Tape tightening process is done mechanically, hydro mechanically or hydraulic-driven. In each application there are switches automatically measures the tape tension. If the tension is not in right level, the system doesn't work and in case the tape is broken the system stops automatically.





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.

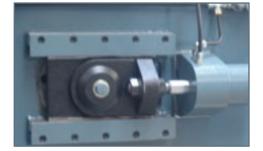
Motorized Chip Brush) CBM)

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.



Blade Tensioning) Hydromechanic) THM)

During the tensioning of the blade provides an ideal view of the tension from the manometer. In the event of rupture of the tape it stops the system.



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.



Turning Table) TT)

The machine is turned manually on turning table to gain the requested angle. This way, in simple angled cutting it saves time and working space. It is optional in semi-automatic models.



Motorized Roller Feeding) RFM)

It is the fastest and the simplest material driving system at automatic models.All rollers are driven with chains from the motor exit. It provides great advantage in general purpose cuttings.



Motorized Vice Feeding) VFM)

The electrical motor driving group in the hydraulically tightened material with capacity to move 600 mm forward and backward, desired ±0,2 mm susceptible cuts can be made.

Through PLC controlled automatic repeating feature, material in long lengths are cut in the same tolerance. And through fast driving and minimized waiting time more pieces are made in the cycle. It is ideal for cutting materials which deformation is not wanted on the surface.

Hydraulic Vice Feeding) VFH)

The hydraulic motor driving group in the hydraulically tightened material with capacity to move 600 mm forward and backward, desired ± 0.5 mm susceptible cuts can be made. Through PLC controlled automatic repeating feature, material in long lengths are cut in the same tolerance. And through fast driving and minimized waiting time in the cycle more pieces are made in the sector. It is ideal for cutting materials which deformation is not wanted on the surface. Heavy pieces are easily moved by the hydraulic driven rolls.



Top Clamping - Mechanical) TCM)

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



Top Clamping) Hydraulic) TCH)

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



Length Adjustment) Mechanical) LAM)

In semi automatic models length adjustment of the material is done manually up to 600 mm of the mechanical gauge. This way you dont have to measure for every piece.



Length Adjustment) Electrical) LAE)

Automatic models length adjustment of the material is done manually up to 600 mm of the switched mechanical gauge. In serial cuttings roller collar clamp(MRV); drives the material till the gauge, when in contact with the gauge the desired length is obtained and then driving process ends and cutting process begins. When cutting is over the piece falls the conversion is repeated.



Part Counter) PC)

In automatic models information of pieces of the material to be cut is entered in order to provide the serial cutting. Apart from this, also displays information about the machine, alarm and cutting.





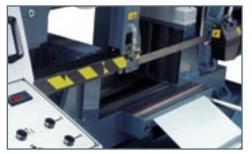
NC Control System) NC)

All functions operation, the amount of length, cutting units and other parameter use controlling via the touch screen provides ease of use. Material between the clamp controlled by PLC provides desired length cut. Provides the material which is compressed between the roller collar clamps, to be cut in desired length measured with the encoder; without need of having swicth type of automatic size system (SLA).



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) 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.



Roller Table) RT)

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.

Microspray Cooling) 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)

Setting the appropriate landing speed is very important to obtain an ideal cut. If landing speed is more or less, the result of cutting is effected negatively and the life of the tape is shortened. Automatic pressure control provides the tape cutting in ideal load and this way the tape lasts longer.

Standard & Option Table

| AUTOMATIC MITER SE | | | | | | | SEMI AUTOMATIC | | | | | ATIC | - | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------|---------------------------|-----------|-----------|-----------|-----------|----------|----------------|--------------------|-----------|-----------|-----------|------------|-----------|-----------|---------------------|-----------|--------------------------------|-----------|----------------|--|---|--|---|--|--|--|--------|---|---|-----|--|---|--|--|---|--|-----|--------------------------------|
| | | OUE | | | z | HO | RI TAL | | | | | BLE | | | | z | HOI | RI FAL | | | | | | | | | | | | | | | | | | | | |
| DCB-FA 330 | DCB-A 1100 | DCB-A 800 | DCB-A 560 | DCB-A 460 | DCB-A 360 | HB-A 330 | HB-A 280 | DCB-DM 560 | DCB-M 800 | DCB-M 560 | DCB-M 460 | DCB-S 1100 | DCB-S 800 | DCB-S 560 | DCB-S 460 | DCB-S 360 | HB-S 330 | HB-S 280 | MODELS | | | | | | | | | | | | | | | | | | | |
| | и | | | | | | | | | | | | | | | | | н | HYDRAULIC VICE | | | | | | | | | | | | | | | | | | | |
| | v | | | | | | | | | | | | | | | | | | INV | ELECTRONIC SPEED ADJ. WITH INVERTER | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | v | | | | | | | | | | SAW | BIMETAL BANDSAW&COOLING SYSTEM | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | v | | | | | | | | | | СНА | CUTTING HEIGHT ADJ. | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | v | | | | | | | | | | вн | BEARING AND CARBIDE TYPE BLADE HOUSING | | | | | | | | | | | | | | | | | | |
| | ı | л | | | | 0 | | | | | v | n | | | | | 0 | | СВ | CHIP BRUSH | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | 0 | | | | | | | | | | СВМ | MOT. CHIP BRUSH | | | | | | | | | | | | | | | | | | |
| | | Z | | | | v | | | | | 2 | 3 | | | | | v | | тм | BLADE TENSIONING-MECHANIC | | | | | | | | | | | | | | | | | | |
| | Z | | v | | v | | v (| | v o | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | | | Z A | U | Λ | Z/A | | v | | | 0 | | тнм | BLADE TENSIONING-HYDROMECHANIC |
| | | | | | 0 | | | | v | d | 2 | v | | | | | 0 | | тн | BLADE TENSIONING-HYDRAULIC | | | | | | | | | | | | | | | | | | |
| | | | | Z > | | | | | | | | | | 0 | | | | тт | TURNING TABLE | | | | | | | | | | | | | | | | | | | |
| | N/A | | | | S | | | | | | | | Z/A | | | | | | RFM | MOT. ROLLER FEEDING | | | | | | | | | | | | | | | | | | |
| S | | | | | | | | | | 2 | 2 | | | | | | | | VFM | MOT. VICE FEEDING | | | | | | | | | | | | | | | | | | |
| N/A | V | 1 | | | | | | | | 2 | 2 | | | | | | | | VFH | HYDRAULIC VICE FEEDING | | | | | | | | | | | | | | | | | | |
| | N/A | | | | v | | | | | 2 | 2 | | | | | | v | | тсм | TOP CLAMPING-MECHANICAL | | | | | | | | | | | | | | | | | | |
| | | | | 0 | | | | S | | | | | | 0 | | | | | тсн | TOP CLAMPING-HYDRAULIC | | | | | | | | | | | | | | | | | | |
| | | | | Z > | | | | | N/A | U | n | N/A | | | | | S | | LAM | LENGTH ADJ. MECHANICAL | | | | | | | | | | | | | | | | | | |
| | N/A | | | | v | | | | | | | | Z | | | | | | LAE | LENGTH ADJ. ELECTRICAL | | | | | | | | | | | | | | | | | | |
| | Z/A | | | | v | | | | | | | | Z | | | | | | PC | PART COUNTER | | | | | | | | | | | | | | | | | | |
| | v | | | | 0 | | | | | | | | Z/A | | | | | | NC | NC CONTROL SYSTEM | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | 0 | | | | | | | | | | сс | CHIP CONVEYOR | | | | | | | | | | | | | | | | | | |
| | | 0 | | | | | | | | | | | | LM | LASER MARKING | | | | | | | | | | | | | | | | | | | | | | | |
| | o | | | | | | | | | | | | | мс | MICROSPRAY COOLING | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | ACP | AUTO. CUTTING PRESSURE CONTROL | | | | | | | | | | | | | | | | | | | | | |
| | Z > | | | | | | | | | | | | v | RT | ROL. TABLE (SINGLE) | | | | | | | | | | | | | | | | | | | | | | | |
| S | | Z | | | | S | | | | | N/A | | | | ı | Λ | 0 | | RT1000 | ROL. TABLE L1000MM | | | | | | | | | | | | | | | | | | |
| | | | v | | | N A | | | | U | n | | | v | | | Z/A | | RT1200 | ROL. TABLE L1200MM | | | | | | | | | | | | | | | | | | |
| | и <u>Z</u> и и <u>Z</u> A | | | | Z | | RT1500 | ROL. TABLE L1500MM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Z | | | | | | | c | | | | | | Z | | RT3000 | MOT. ROL. TABLE L3000MM | | | | | | | | | | | | | | | | | | |