



# Temelsan®

## KN 100 HBA PLC FLASH BUTT WELDING MACHINE

### Standard Features

- 20x0,90mm - 100x1,60mm width Bi-Metal band CT band welding capacity (please look at las page for more specific information)
- Pyrometer annealing control unit
- Manuel adjusting up to 500 bar pressure of clamping system
- Manuel adjusting up to 400 bar pressure of upsetting system
- From 8mm up to 16mm manuel adjustable jaw gap regulation
- Hydro-Pneumatic clamping system

- PLC controlled 7" Touch Screen HMI
- 99 Program memories for fully range of band saw blade dimensions
- Spark Protection Cover
- High pressure air cleaning system (Air blow off)
- Air tank and pistol



**Optional Features...** 

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# Optional Features...

## HBA/C PLC - PLC CONTROL UNIT FOR HBA AND HBAC TYPE WELDING MACHINES

You can choose your operating system on the Temelsan welding machines. As per your location, you are free to choose the operating system of PLC and servo components.

The gearbox of the PLC systems are standart as per all of your choice. The brand selection may affect delivery times and total cost of the machine.

We offer our customers three different brands for the operating system.

**HBA/C PLC – OMR** - This option has Omron PLC unit and Omron brand servo motors in the system. All other switching equipment of electric are Eaton, Siemens or WeidMüller.

**HBA/C PLC – AB** - This option has Allen Bradley PLC unit and Allen Bradley brand servo motors in the system. All other switching equipment of electric are Eaton, Siemens or WeidMüller.

**HBA/C PLC – SM** - This option has Siemens PLC unit, Siemens brand servo motors and Siemens HMI in the system. All other switching equipment of electric are also Siemens.

### What you will get with PLC option,

- Automatic clamping pressure ajustment via Festo automatic air regulators by receipt
- Automatic upsetting pressure adjustment via Festo automatic air regulators by receipt
- Automatic jaw gap adjustment on welding position by receipt
- Automatic aw gap adjustment on annealing position by receipt
- Automatic adjustment of parallel clamping for different size blades
- Servo motorized operational cam drive
- Servo motorized jaw gap adjustment
- Plenitary gearbox system for both motors
- 400 different log capacity
- Easy programing via USB
- Barcode Reading port
- No test weldings fafter the size changes



## HBA DBS – DE-BURRING UNIT FOR HBA TYPE WELDERS



This option is only applicable on HBA type Temelsan welding machines. As your welding machines deal with unwelcome burrs on your workpieces. These imperfections are unsightly, and more importantly, they reduce the functionality and safety of each affected part. You need a reliable way to remove burrs and provide smooth, quality components.

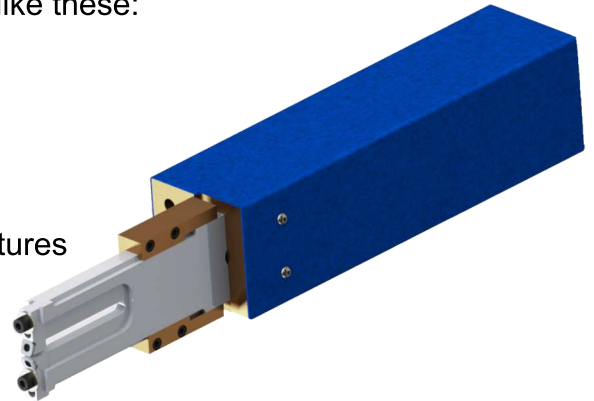
Deburring unit offer an ideal solution. The guide below will describe what causes a burr, explain why deburring is so critical and must remove burrs from blades.

Burrs compromise the quality of the finished part if they are not removed. After machining or welding, deburring removes these imperfections to provide a smooth, reliable metal part.

### Why Is Deburring Necessary?

Burrs compromise the functionality, lifespan and safety of the blades. They can cause numerous part quality issues like these:

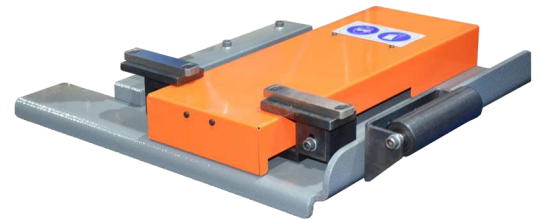
- Less operation time
- Higher quality
- Standardization on quality
- More efficiency annealing temperatures
- Easy to grind after welding
- Increased risk of static discharge
- Decreased fracture resistance



## HBA/C MSS – MOTORIZED STOPPER SYSTEM FOR HBA AND HBC TYPE WELDING MACHINES

Motorized Stopper System that allows the operator to set the stoppers for each different TPI of the blade in the right position. For all operations even if the operator changes from one to the other size or also can change only the TPI of the same size blade, the Motorized Stopper System will react in a second. Also the motorized stopper system is perfectly designed to save the carbide tipped blades. The stoppers are

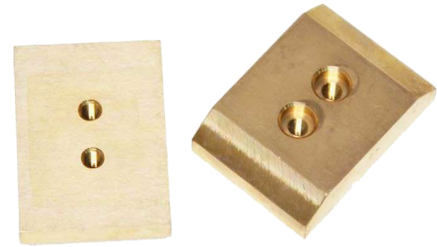
these only to place the blade to the machine.



## HBA/C – X - POWER LOWER JAWS ( ELECTRODES )

### FOR HBA AND HBC TYPE WELDERS

The X-Power electrodes are stronger and have a longer life than usual electrodes. Longer life will give you less service time and definitely will save your time and money.



### BARCODE READER

Customers can use their own stock codes to program and run the machine with a barcode reading system.

With a barcode reader operator doesn't need to search the program from the long list and makes no mistake choices.

### Liquid Cooling Unit

The Liquid cooling unit is an external machine made for cooling the jaws.

The cooling unit has the advantage of keeping the adjusted jaw level temperature for serial weld operations constantly.

Re-adjustment of welding current value are almost not needed anymore. Recommended for serial welding procedures, like any minute a weld or more.



ADDITIONAL INFORMATION AND APPLICATIONS				
	Min. Size Inch	Max. Size Inch	Min. Size mm	Max. Size mm
Bi-Metal Bandsaw Blades	3/4x0.035	4x0.063	20x0.90	100x1.60
Tungsten- Carbide Bandsaw Blades	3/4x0.035	4x0.063	20x0.90	100x1.60
Wood Bandsaw Blades	1x0.027	4 3/4x0.050	25x0.70	120x1.30
Stainless Steel Bandsaw Blades	3/4x0.022	2 3/8x0.025	20x0.50	60x0.80
Band Knives	1x0.022	4 3/4x0.042	25x0,50	120x1.10
Stainless Steel Bands	0.25	in2	160.00	mm2
Mild Steel Bands	0.40	in2	260.00	mm2

APPLICABLE POWER SOURCES		
600V	3 PHASE	50 - 60 Hz
480V	3 PHASE	50 - 60 Hz
400V	3 PHASE	50 Hz
220V	3 PHASE	50 - 60 Hz

DIMENSIONS OF MACHINE			
LENGTH	DEPTH	HEIGHT	WEIGHT
1100 mm	1200 mm	1900 mm	950 Kg