



ELECTRO TECHNO TAK
(KNOWLEDGE-BASED CO)

DESIGN & PRODUCTION OF WELDING MACHINERY

Butt Welding Machines

A Lasting Legacy in the Welding Industry

Since 1977





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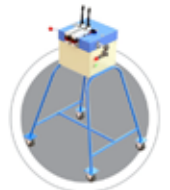
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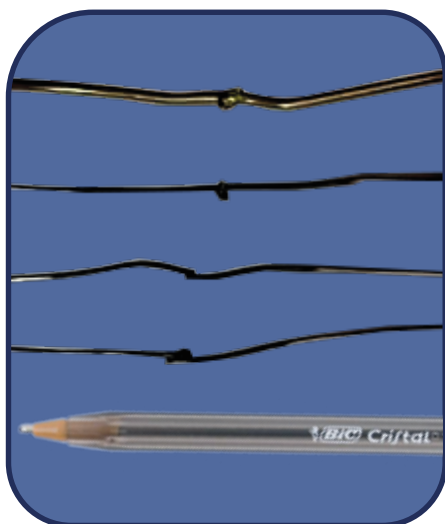
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Design and Production of Welding Machinery

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Butt Welding Machine Model BM-1



Butt Welding Machine BM-1

(For Wire drawing and Telecommunication Application)

Capable of welding fine iron wires,
with diameters ranging from 0.4 to 1mm.





Technical Data	BM-1
Power at 33% E.D KVA	4
Input voltage (V)	220/1ph
Max secondary voltage (V2)	2
Current steps	5
Advance travel of the moving jaw	15
Welding range:	
Mild Steel (ϕmm)	0.4 - 1
High Carbon Steel (With Annealing Control) (mm)	-
Copper Wire (ϕmm)	-
Light Metal (ϕmm)	-
Annealing length (mm) for Annealing Control Unit	-
Admissible output per hour at max section	5
Cooling water consumption in mass production (Lit/Min)	-
Input Cable size at 15m length	2 * 1
Overall Dimention (LxWxH) (ϕcm)	L: 28
	W: 20
	H: 27
Gross Weight (Kg)	8.8





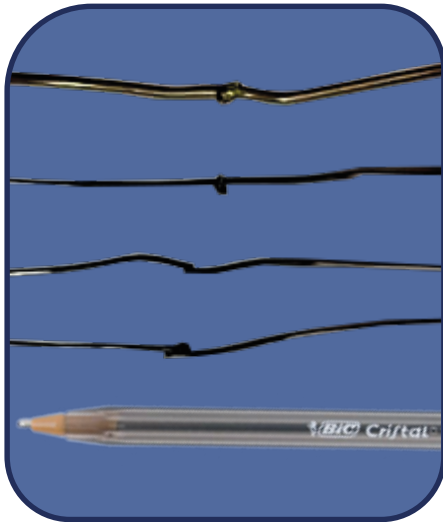
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Design and Production of Welding Machinery

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Butt Welding Machine
BM-1.5 Model

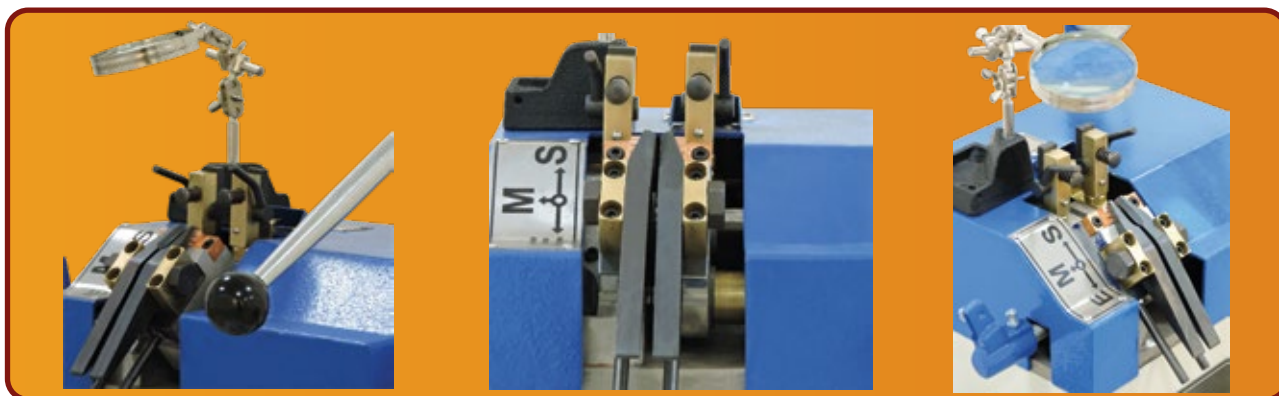


Butt Welding Machine BM-1.5

(For Wire and Cable, Wire drawing and Telecommunication Application)

Suitable for fine iron wires,
with diameters ranging from
0.2 to 1.5mm.





Technical Data	BM-1.5
Power at 33% E.D KVA	6
Input voltage (V)	220/1ph
Max secondary voltage (V2)	2
Current steps	2(5)
Advance travel of the moving jaw	30
Welding range:	
Mild Steel (ø mm)	0.2 - 1.5
High Carbon Steel (With Annealing Control) (ømm)	0.2 - 1.5
Copper Wire (ømm)	0.5 - 1
Light Metal (ømm)	0.5 - 1
Annealing length (mm) for Annealing Control Unit	40
Admissible output per hour at max section	15
Cooling water consumption in mass production (Lit/Min)	-
Input Cable size at 15m length	2 * 1.5
Overall Dimention (LxWxH) (cm)	L: 66
	W: 60
	H: 116
Gross Weight (Kg)	52.5





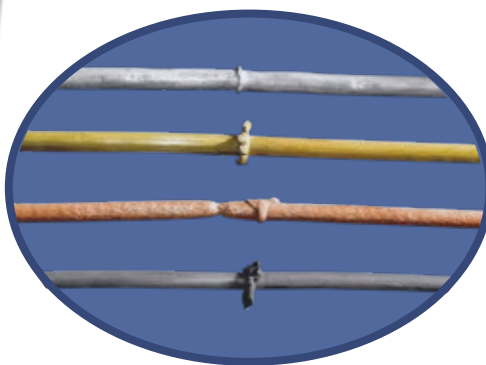
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Butt Welding Machine
BM-3-A & BM-3 Models



BM-3-A ▲

Butt Welding Machines

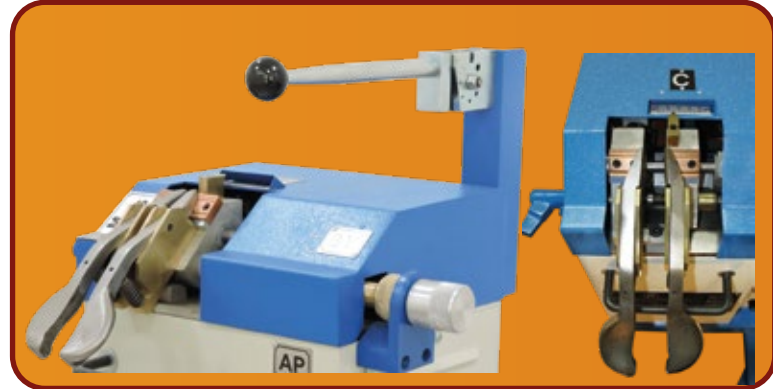
▲ BM-3

(For Wire and Telecommunication Application)

Equipped with a control panel and an annealing clamp, suitable for various types of wires, including iron, alloy steel copper, brass, and aluminum, with diameters ranging from 0.8 to 3mm, with modifications, it can weld wires with diameters from 0.5 to 3mm.

Suitable for various wires including iron, copper, brass and aluminum, with diameters ranging from 0.8 to 3mm, With modifications, it can also weld wires from 0.5 to 3mm.





Technical Data	BM-3	BM-3-A
Power at 33% E.D KVA	10	8
Input voltage (V)	220/1ph	220/1ph
Max secondary voltage (V2)	3.3	2
Current steps	2(5)	3(5)
Advance travel of the moving jaw(mm)	30	25
Welding range:		
Mild Steel (ømm)	0.7 - 3	0.7 - 3
High Carbon Steel (With Annealing Control) (ømm)	-	0.7 - 3
Copper Wire (ømm)	0.7 - 3	0.7 - 3
Light Metal (ømm)	0.8 - 3	0.8 - 3
Annealing length (mm) for Annealing Control Unit	45	45
Admissible output per hour at max section	15	15
Cooling water consumption in mass production (Lit/Min)	-	-
Input Cable size at 15m length	3 * 2.5	3 * 2.5
Overall Dimention (LxWxH) (cm)	L: 60	L: 66
	W: 53	W: 60
	H: 116	H: 116
Gross Weight (Kg)	49.5	63





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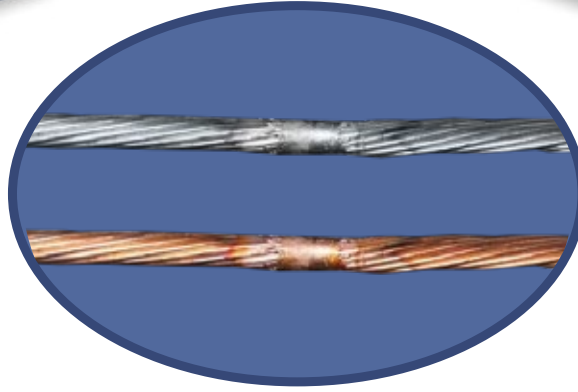
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Butt Welding Machine

BM-2-ST & BM-3-ST Models



BM-2-ST ▲

Butt Welding Machines

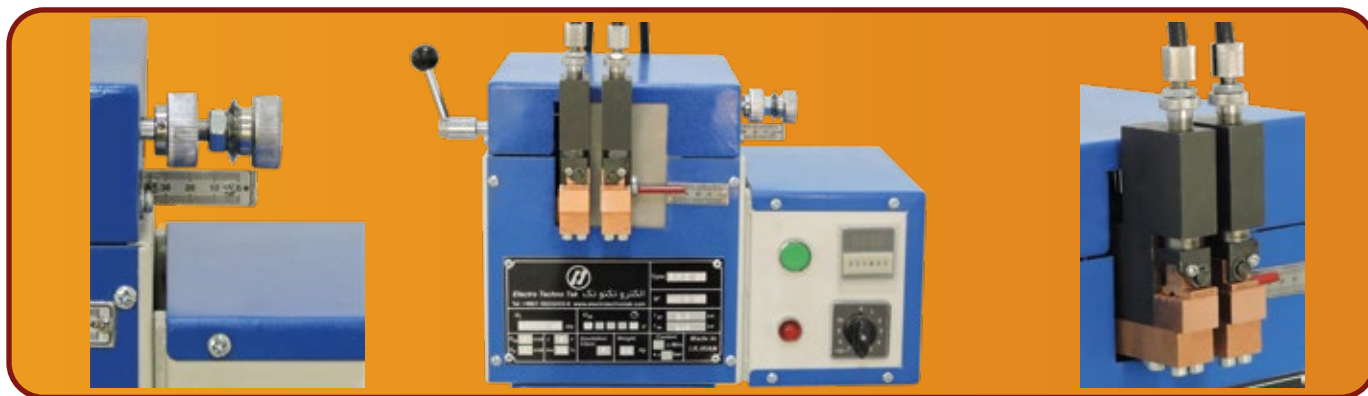
▲ BM-3-ST

(For Wire and Cable Application)

Suitable for stranded copper wire, with cross-sections ranging from 0.6 to 4.5 square mm, and stranded aluminum wires with a cross-sectional area of 3.5 to 10 square mm.

Suitable for stranded copper wire, with cross-sections ranging from 0.6 to 6.5 square mm and stranded aluminum wires with cross-sections ranging from 3.5 to 10 square mm.





Technical Data	BM-3-ST	BM-2-ST
Power at 33% E.D KVA	10	8
Input voltage (V)	220/1ph	220/1ph
Max secondary voltage (V2)	2.5	2.5
Current steps	10	10
Advance travel of the moving jaw(mm)	30	30
Welding range:		
Flexible Copper Wire(mm)	0.35 - 20	0.35 - 16
Flexible Aluminum Wire (mm ²)	1.5 - 20	1.5 - 16
Copper Wire (ømm)	1.38 - 3.5	1.38 - 3
Light Metal (ømm)	-	-
Anealing length (mm) for Anealing Control Unit	-	-
Admissible output per hour at max section	10	10
Cooling water consumption in mass production (Lit/Min)	-	-
Input Cable size at 15m length	2 * 1.5	2 * 1.5
Overall Dimention (LxWxH) (cm)	L: 60	L: 60
	W: 56	W: 56
	H: 132	H: 132
Gross Weight (Kg)	65	61.5





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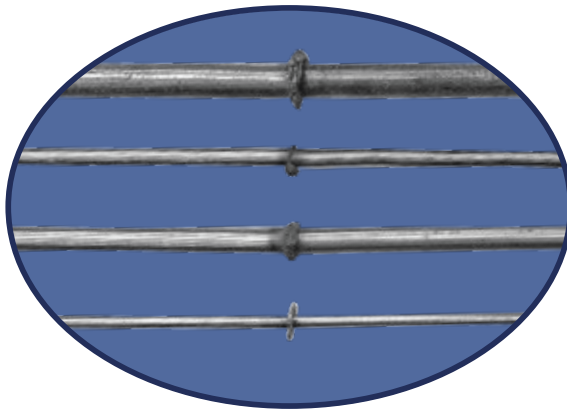
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Butt Welding Machine

BM-8 Model



Butt Welding Machine BM-8

(For Wire Drawing Application)

Capable of welding wires from 2 to 8 mm,
with modifications, it can weld wires,
starting from 1.5mm and above.





Technical Data	BM-8
Power at 33% E.D KVA	10
Input voltage (V)	220/1ph
Max secondary voltage (V2)	2.8
Current steps	7
Advance travel of the moving jaw (mm)	25
Welding range:	
Mild Steel (ømm)	1.5 - 8
High Carbon Steel (With Anealing Control) (ømm)	-
Copper Wire (ømm)	-
Light Metal (ømm)	-
Anealing length (mm) for Anealing Control Unit	-
Admissible output per hour at max section	15
Cooling water consumption in mass production (Lit/Min)	-
Input Cable size at 15m length	2 * 2.5
Overall Dimention (LxWxH) (cm)	L: 71
	W: 65
	H: 105
Gross Weight (Kg)	75

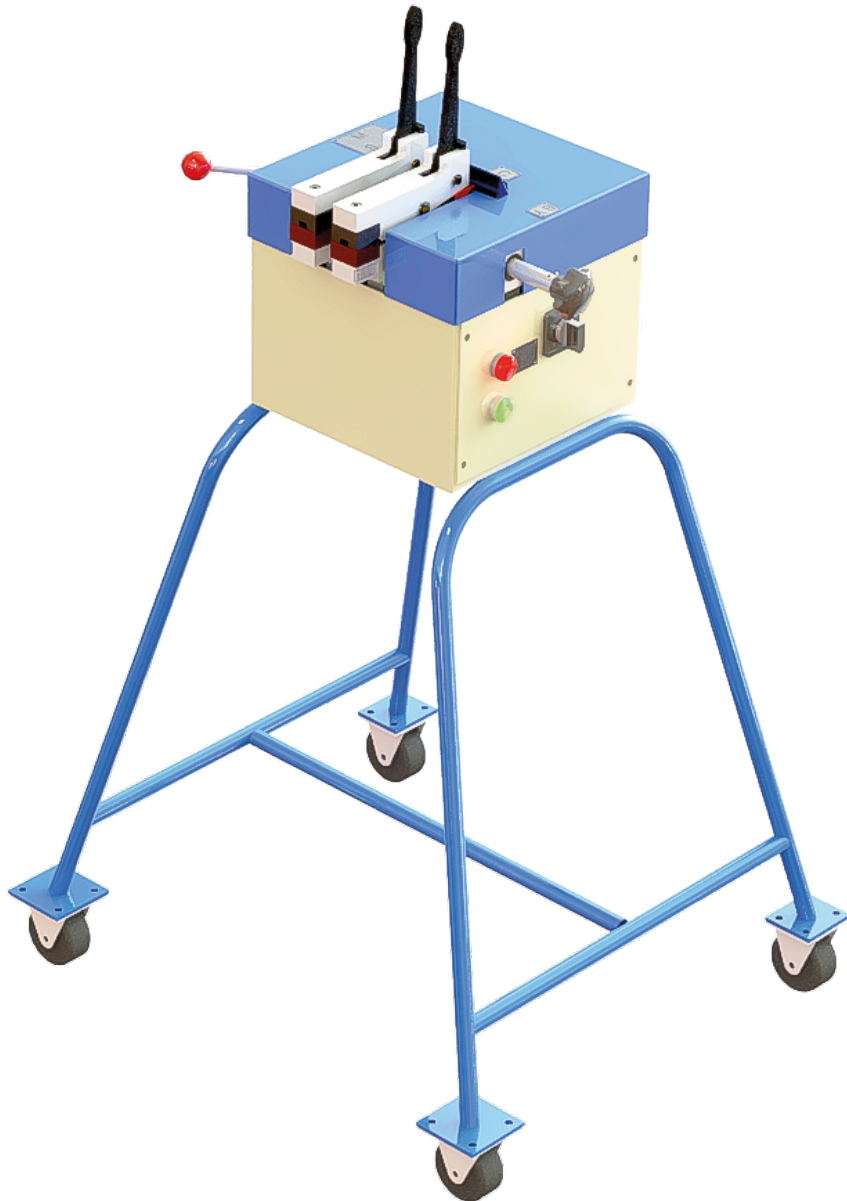




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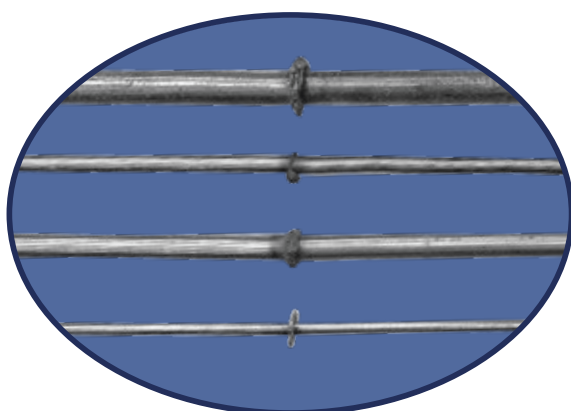
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Butt Welding Machine

BM-8-W Model



Butt Welding Machine BM-8-W

(For Wire Drawing Application)

Capable of welding copper wire,
from 3 to 6mm, with modifications,
up to 2 to 8mm.





Technical Data	BM-8-W
Power at 33% E.D KVA	8
Input voltage (V)	220/1ph
Max secondary voltage (V2)	2.8
Current steps	5
Advance travel of the moving jaw (mm)	25
Welding range:	
Mild Steel (ømm)	3 - 6
High Carbon Steel (With Annealing Control) (ømm)	-
Copper Wire (ømm)	-
Light Metal (ømm)	-
Annealing length (mm) for Annealing Control Unit	-
Admissible output per hour at max section	15
Cooling water consumption in mass production (Lit/Min)	-
Input Cable size at 15m length	2 * 2.5
Overall Dimention (LxWxH) (cm)	L: 71
	W: 65
	H: 105
Gross Weight (Kg)	75





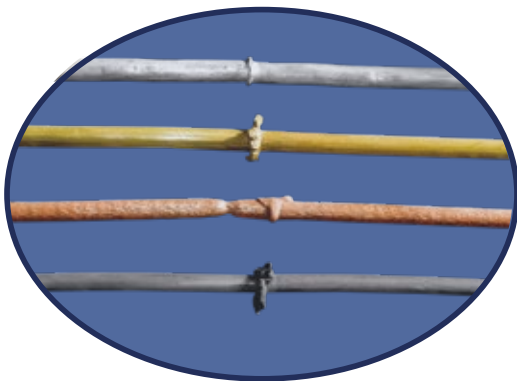
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Design and Production of Welding Machinery

A Lasting Legacy in the Welding Industry



Butt Welding Machine BM-8-CU Model



Butt Welding Machine BM-8-CU

(For Wire and Cable Application)

Capable of welding copper wire up to 8mm and aluminum up to 13mm.





Technical Data	BM-8-W
Power at 33% E.D KVA	50
Input voltage (V)	380/2ph
Max secondary voltage (V2)	3/3
Current steps	7
Advance travel of the moving jaw (mm)	28
Welding range:	
Mild Steel (ømm)	4 - 13
High Carbon Steel (With Annealing Control) (ømm)	-
Copper Wire (ømm)	4 - 8
Light Metal (ømm)	5 - 13
Annealing length (mm) for Annealing Control Unit	-
Admissible output per hour at max section	-
Cooling water consumption in mass production (Lit/Min)	100
Input Cable size at 15m length	3 * 8
Overall Dimention (LxWxH) (cm)	L: 87
	W: 82
	H: 122
Gross Weight (Kg)	135





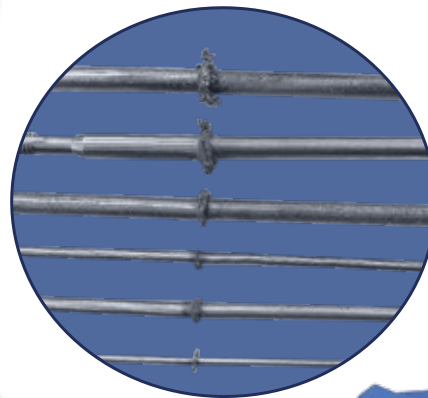
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Design and Production of Welding Machinery

A Lasting Legacy in the Welding Industry



Butt Welding Machine
BM-12-A & BM-12 Models



BM-12-A ▲

Butt Welding Machines

▲ BM-12

(For Wire drawing and Telecommunication Application)

Equipped with a control panel and annealing clamp, this machine welds iron and steel wires from 2 to 12mm in diameter.

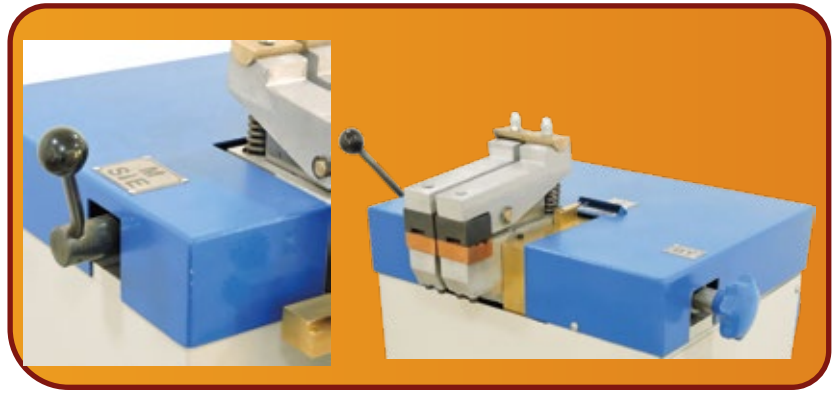
With modifications, it can weld wires from 1.5 to 12mm and is ideal for mass production up to 7mm.

Note: With major modifications, it can also weld copper and aluminum wires.

Capable of welding iron wires from 2 to 12mm, with modifications, it can weld wires from 1.5 to 12mm, and is suitable for batch production up to 7mm.

Note: With major modifications, it can also weld copper and aluminum wires.





Technical Data	BM-12	BM-12-A
Power at 33% E.D KVA	25	25
Input voltage (V)	380/2ph	380/2ph
Max secondary voltage (V2)	3.3	3.3
Current steps	7	7
Advance travel of the moving jaw(mm)	40	40
Welding range:		
Mild Steel (ømm)	1.5 - 12	1.5 - 12
High Carbon Steel (With Analing Control)ø (ømm)	-	1.5 - 8
Copper Wire (ømm)	-	-
Light Metal (ømm)	-	-
Analing length (mm) for Analing Control Unit	100	110
Admissible output per hour at max section	20	20
Cooling water consumption in mass production (Lit/Min)	-	-
Input Cable size at 15m length	3 * 8	3 * 8
Overall Dimention (LxWxH) (cm)	L: 77	L: 78
	W: 73	W: 77
	H: 130	H: 130
Gross Weight (Kg)	125.5	140





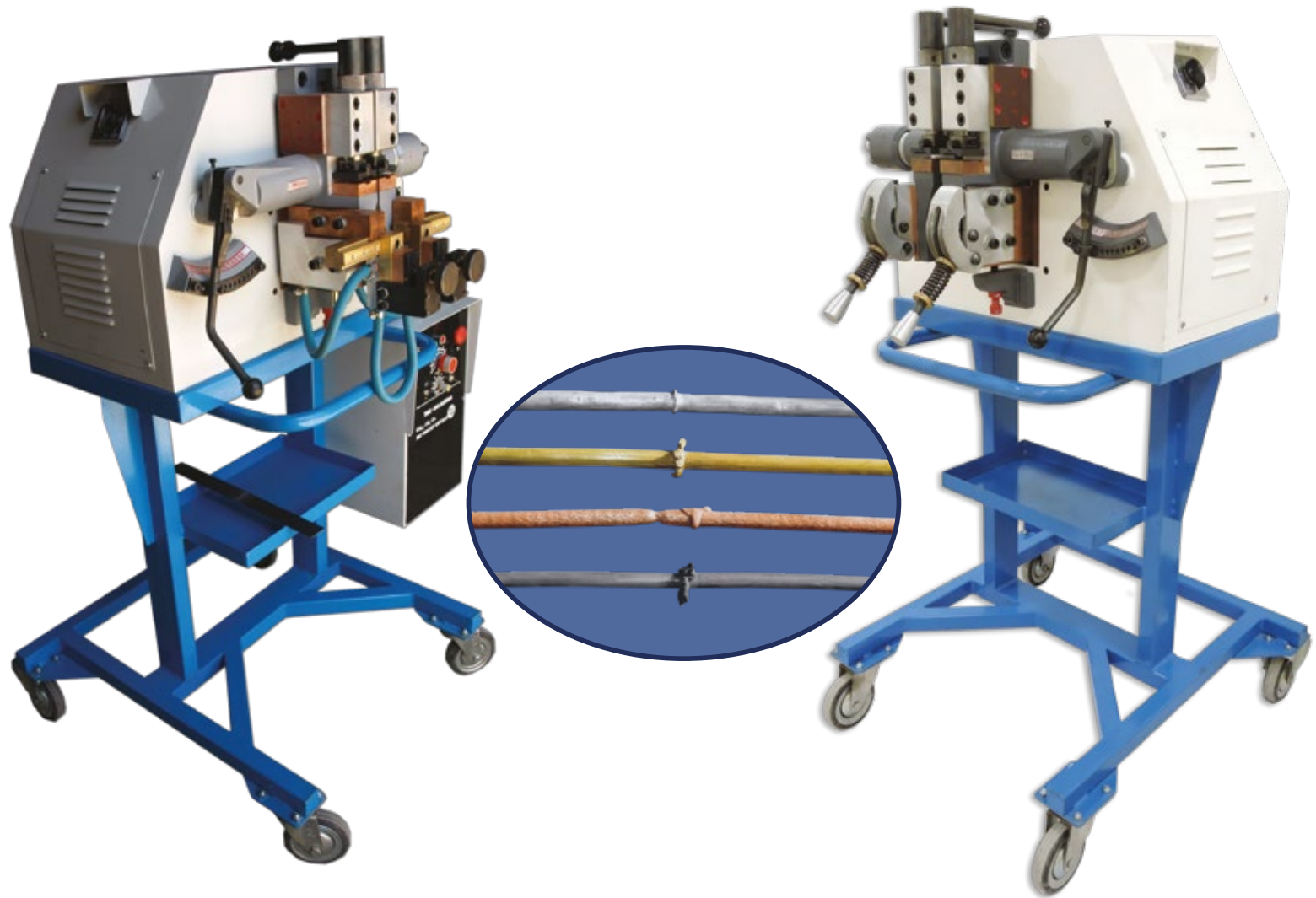
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Design and Production of Welding Machinery

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Butt Welding Machine
BM-16-A & BM-16 Models



BM-16-A ▲

Butt Welding Machines

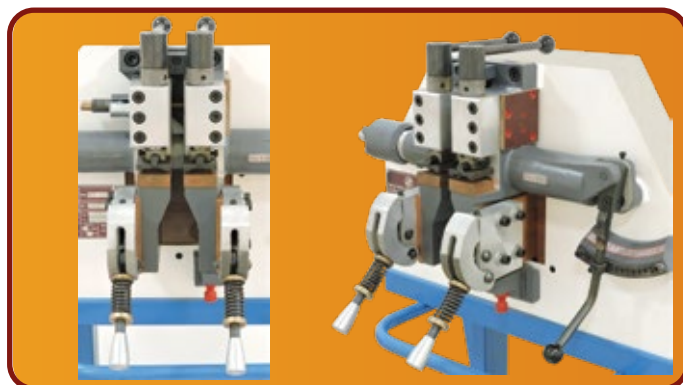
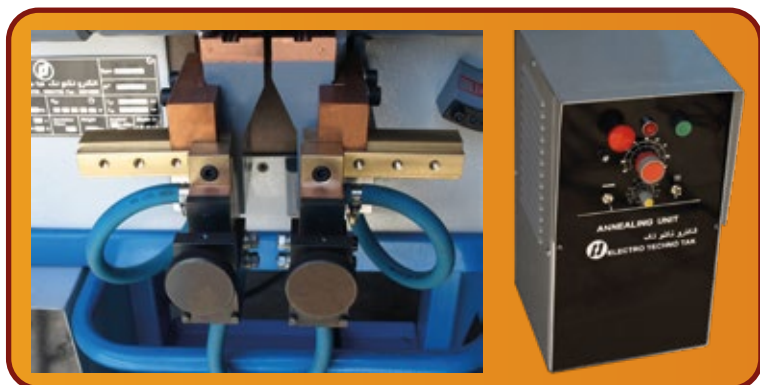
▲ BM-16

(Special for Wire and Cable, Iron and High Carbons Application)

Equipped with a control panel and annealing clamp, it can weld copper wires from 4 to 8mm, aluminum wires from 5 to 13mm, and steel wires from 4 to 13mm.

Capable of welding copper wires, with diameters ranging from 4 to 8mm, aluminum wires from 5 to 13mm, and iron wires from 4 to 13mm.





Technical Data	BM-16	BM-16-A
Power at 33% E.D KVA	50	50
Input voltage (V)	380/2ph	380/2ph
Max secondary voltage (V2)	3.3	3.3
Current steps	7	7
Advance travel of the moving jaw(mm)	28	28
Welding range:		
Mild Steel (ømm)	4 - 13	4 - 13
High Carbon Steel (With Aneling Control) (ømm)	-	4 - 13
Copper Wire (ømm)	4 - 8	4 - 8
Light Metal (ømm)	5 - 13	5 - 13
Aneling length (mm) for Aneling Control Unit	100	100
Admissible output per hour at max section	25	25
Cooling water consumption in mass production (Lit/Min)	-	-
Input Cable size at 15m length	3 * 8	3 * 8
Overall Dimention (LxWxH) (cm)	L: 92	L: 84
	W: 83	W: 83
	H: 140	H: 140
Gross Weight (Kg)	205	187





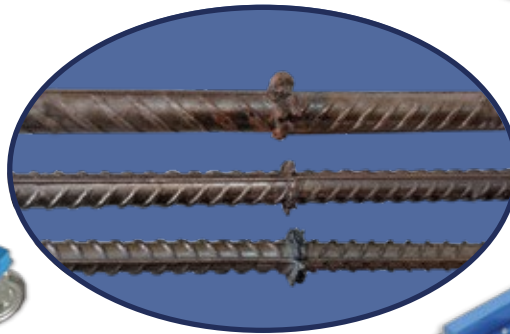
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Butt Welding Machine
BM-18-A & BM-18 Models



BM-18-A ▲

Butt Welding Machines

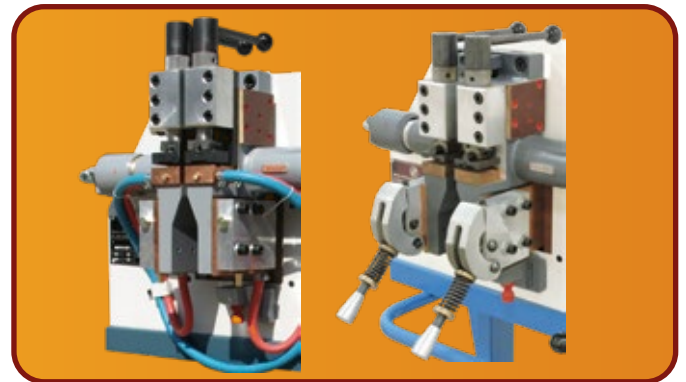
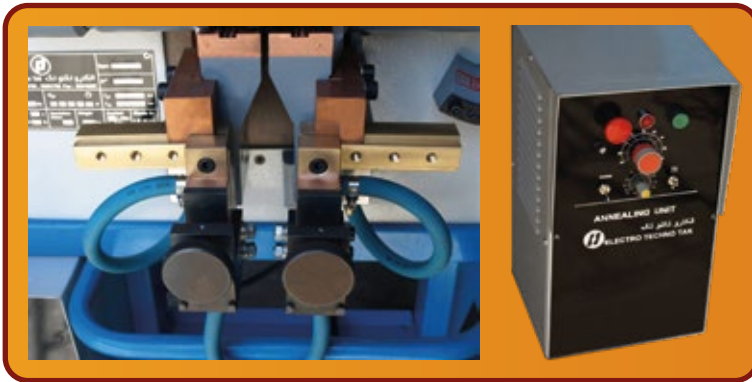
▲ BM-18

(Special for Iron and High Carbons Application)

Equipped with a control panel and an annealing clamp. Capable of welding steel wires with diameters ranging from 4 to 13mm, and with modifications, it can weld wires from to 8 to 16mm.

Capable of welding iron wires, with diameters ranging from 4 to 13mm and with modifications, it can weld wires from 8 to 16mm.





Technical Data	BM-18	BM-18-A
Power at 33% E.D KVA	50	50
Input voltage (V)	380/2ph	380/2ph
Max secondary voltage (V2)	3.3	3.3
Current steps	7	7
Advance travel of the moving jaw(mm)	40	40
Welding range:		
Mild Steel (ømm)	5 - 18	5 - 18
High Carbon Steel (With Aneling Control) (ømm)	-	5 - 13
Copper Wire (ømm)	-	-
Light Metal (ømm)	-	-
Aneling length (mm) for Aneling Control Unit	110	100
Admissible output per hour at max section	30	30
Cooling water consumption in mass production (Lit/Min)	4	4
Input Cable size at 15m length	3 * 8	3 * 8
Overall Dimention (LxWxH) (cm)	L: 92	L: 84
	W: 83	W: 83
	H: 140	H: 140
Gross Weight (Kg)	228.5	211.5





Electro Techno Tak

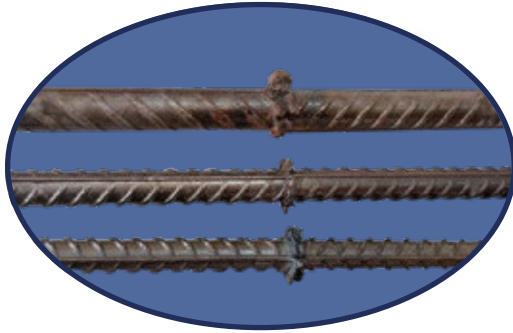
Design and Production of Welding Machinery

A Lasting Legacy in the Welding Industry



Butt Welding Machine

BM-20 Model



Butt Welding Machine BM-20

(For Wire Drawing Application)

Equipped with an annealing board and clamp, this machine can weld steel wires, with diameters from 4 to 13mm, with adjustments, it can weld diameters from 8 to 16mm, it also welds iron wires from 4 to 13mm, and with adjustments, from 8 to 16mm.





Technical Data	BM-20
Power at 33% E.D KVA	50
Input voltage (V)	380/2ph
Max secondary voltage (V2)	3/3
Current steps	7
Advance travel of the moving jaw (mm)	40
Welding range:	
Mild Steel (ømm)	5 - 18
High Carbon Steel (With Annealing Control) (ømm)	5 - 13
Copper Wire (ømm)	-
Light Metal (ømm)	-
Annealing length (mm) for Annealing Control Unit	100
Admissible output per hour at max section	30
Cooling water consumption in mass production (Lit/Min)	4
Input Cable size at 15m length	3 * 8
Overall Dimention (LxWxH) (cm)	L: 92
	W: 83
	H: 140
Gross Weight (Kg)	228.5





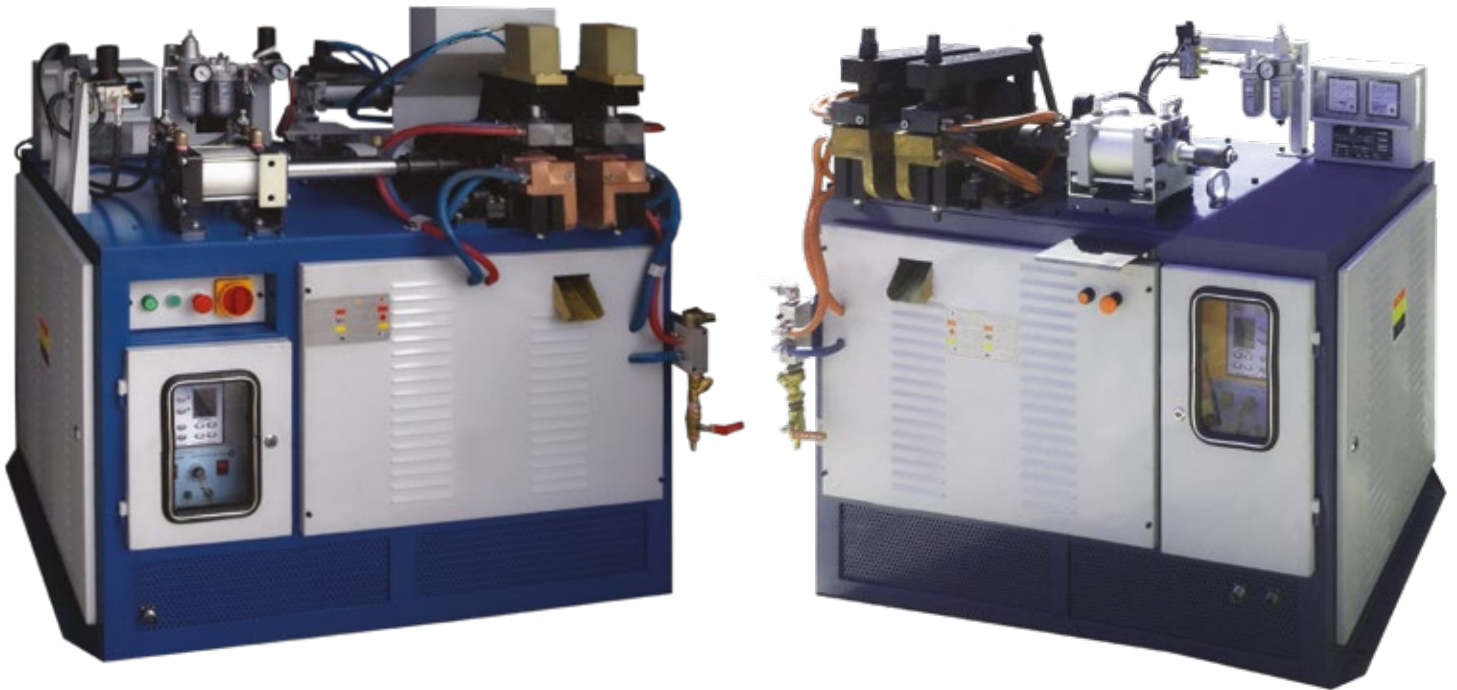
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Design and Production of Welding Machinery

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Butt Welding Machine
BM-32 & BM-40 Models

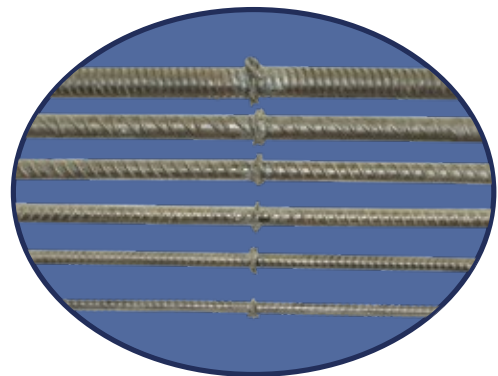
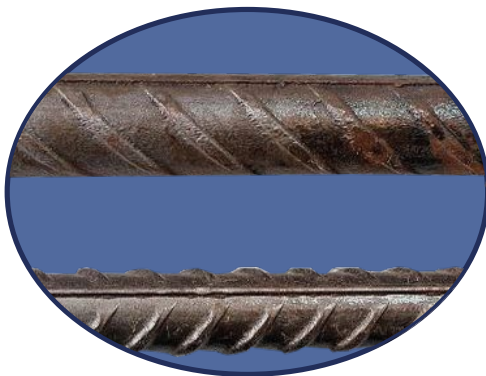


BM-32 ▲

Butt Welding Machines

▲ BM-40

(Special for Welding Construction Reinforcement in High Sections Application)



Various Butt Welding Machines for different alloys, such as steel, copper, aluminum, stainless steel, and more.





BM-32-C ▲

Butt Welding Machines

▲ BM-40-C

(For Welding Construction Reinforcement in High Sections, Rebar and Automotive Industries Applications)

Used for different alloys, such as Iron wires and strips, Aluminum, Copper, Coated materials, Stainless steel and more. Semi-Automatic, equipped with a digital control panel, Pneumatic movable jaw movement, Powerful, high-efficiency transformer, high-speed welding. And designed for 3 work shifts.





BM-32-FC ▲

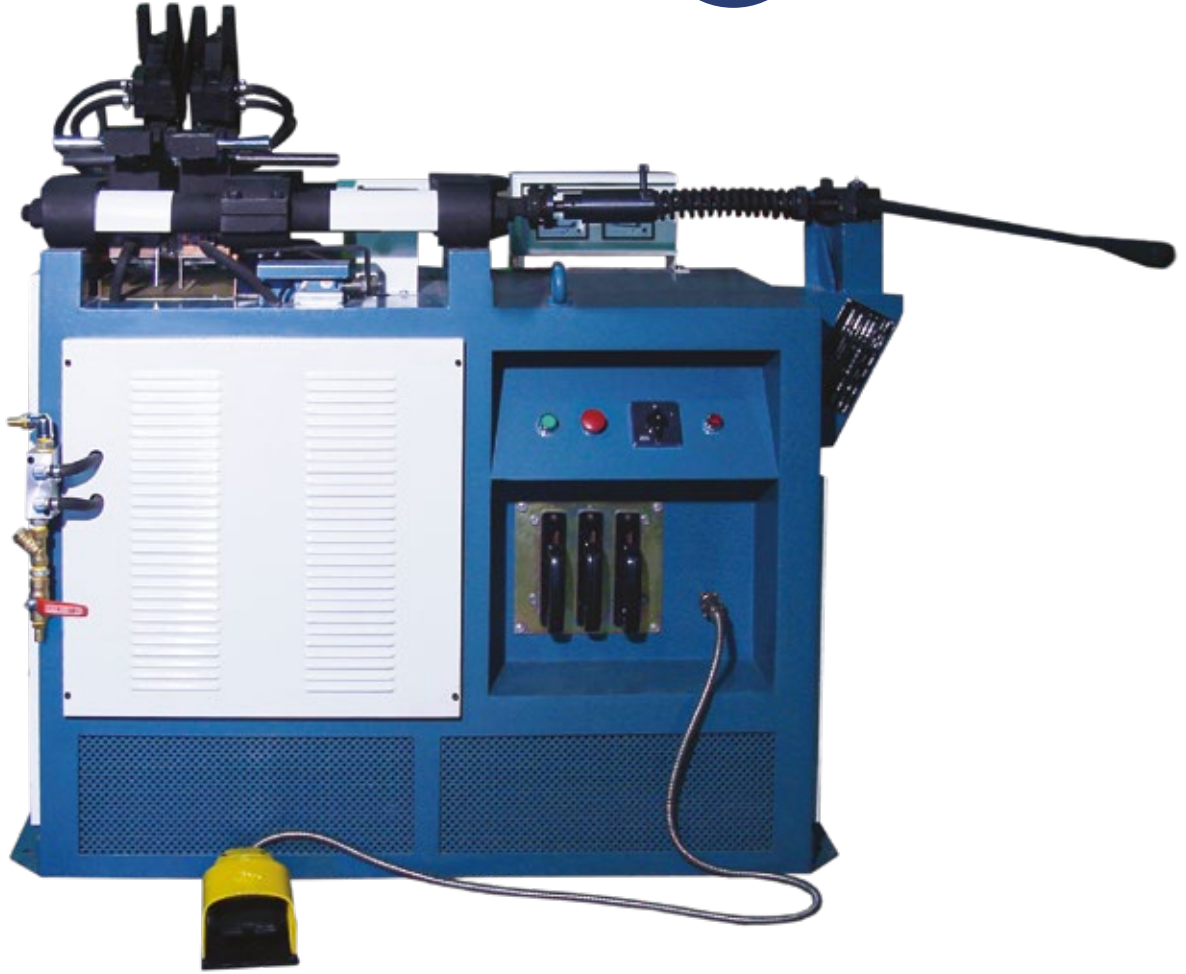
Butt Welding Machines

▲ BM-40-FC

(For Construction, Rebar and Automotive Industries Applications)

Used for joining high iron sections, Aluminum, Copper, Coated materials and Stainless steel.
Semi-Automatic, equipped with a digital control panel, Pneumatic movable jaw movement, Accurate mechanism. Powerful and durable, high reliability.
And designed for 3 work shifts.





BM-32-H ▲

Butt Welding Machines

▲ BM-40-H

(For Construction and Rebar Applications)

Used for joining Iron wires and strips, Aluminum, Copper, Coated materials and Stainless steel. Equipped with a powerful transformer with high efficiency, mechanical movement of the movable jaw and clamps, high -speed welding. And designed for 3 work shifts.





BM-32-MH ▲

Butt Welding Machines

▲ BM-40-MH

(For Construction and Rebar Applications)

Used for joining Iron wires and strips, Aluminum, Copper, Coated materials and Stainless steel. Equipped with a powerful transformer with high efficiency, mechanical movement of the movable jaw and clamps, high -speed welding. And, designed in movable jaw maneuverability in three directions for alignment with the fixed jaw. Suitable for 3 work shifts.





Technical Data	BM-32-C	BM-32-FC	BM-32-H	BM-32-MH
Power at 50% E.D (KVA)	150	150	150	150
Max. welding Power at 33% ED (KVA)	260	260	260	260
Input Voltage (V)	380/1ph	380/1ph	380/1ph	380/1ph
Secondary no - load Voltage (V)	8.6	8.6	8.6	8.6
Current control	SCR	SCR	-	-
Electronic control	Digital	Digital	-	-
Movable jaw movement system	Pneumatic	Pneumatic	Mechanical	Mechanical
clamp movement system	Mechanical	Pneumatic/ Hydro-pneu	Mechanical	Mechanical
Max electrode force (daN) with 6 bar	400	400	-	-
Jack stroke (mm)	50	50	-	-
current selection key	-	-	4	4
Movable jaw movement	50	50	50	50
Welding range:				
steel	15~32	15~32	15~32	15~32
high carbon steel	15~25	15~25	15~25	15~25
copper wire	8~16	8~16	8~16	8~16
aluminium wire	10~22	10~22	10~22	10~22
annealing length in models equipped with annealing system	80	80	80	80
Allowable number of welds per hour for maximum cross section	60	60	60	60
Cooling water consumption more than (Lit/Min)	15	15	15	15
cross section of the input in meters long	3*50	3*50	3*50	3*50
Compressed air supply (bar)	5	5	-	-
Overall monitoring (L x W x H) (cm)	L:190	L:190	L:190	L:190
	W:95	W:95	W:95	W:95
	H:150	H:150	H:150	H:150
Gross Weight (Kg)	700	700	700	700





Technical Data	BM-40-C	BM-40-FC	BM-40-H	BM-40-MH
Power at 50% E.D (KVA)	200	200	200	200
Max. welding Power at 33% ED (KVA)	348	348	348	348
Input Voltage (V)	380/1ph	380/1ph	380/1ph	380/1ph
Secondary no - load Voltage (V)	10	10	10	10
Current control	SCR	SCR	=	
Electronic control	Digital	Digital	-	-
Movable jaw movement system	Pneumatic	Pneumatic	Mechanical	Mechanical
clamp movement system	Mechanical	Pneumatic/ Hydro-pneu	Mechanical	Mechanical
Max electrode force (daN) with 6 bar	400	400	-	-
Jack stroke (mm)	50	50	-	
current selection key	-		4	4
Movable jaw movement	50	50	50	50
Welding range:				
steel	15~40	15~40	15~40	15~40
high carbon steel	15~32	15~32	15~32	15~32
copper wire	10~25	10~25	10~25	10~25
aluminium wire	12~28	12~28	12~28	12~28
annealing length in models equipped with annealing system	80	80	80	80
Allowable number of welds per hour for maximum cross section	60	60	60	60
Cooling water consumption more than (Lit/Min)	15	15	15	15
cross section of the input in meters long	3*70	3*70	3*70	3*70
Compressed air supply (bar)	5	5	-	-
Overall monitoring (L x W x H) (cm)	L:190	L:190	L:190	L:190
	W:95	W:95	W:95	W:95
	H:150	H:150	H:150	H:150
Gross Weight (Kg)	900	900	900	900





Electro Techno Tak

Design and Production of Welding Machinery

A Lasting Legacy in the Welding Industry



Flash Butt Welding Machine
FN-100 & 160 & 250



Flash Butt Welding Machine FN Model

**For Construction Rebar and Steel Band Saw
Blades used on Profiles, Alloy sections of
Non-identical Steels Applications**





Flash Butt Welding Machine FN-100 Model

Used for joining all kinds of alloys and all types of pipes, profiles, belts, round sections up to 25mm diameter. Equipped with full hydro pneumatic movement system, SCR digital welding control panel, and Siemens PLC and welding thyristor control board, automatic pre-heating or post-heating process protocol before and after welding. Powerful and suitable for 3 work shifts





Flash Butt Welding Machine FN-160 Model

Used for joining all kinds of alloys and all types of pipes, profiles, belts, round sections up to 25mm diameter. Equipped with full hydro pneumatic movement system, SCR digital welding control panel, and Siemens PLC and welding thyristor control board, automatic pre-heating or post-heating process protocol before and after welding. Powerful and suitable for 3 work shifts





Flash Butt Welding Machine FN-250 Model

used for joining all kinds of alloys and all types of pipes, profiles, belts, round sections up to 40mm diameter. Equipped with full hydro pneumatic movement system, SCR digital welding control panel, and Siemens PLC and welding thyristor control board, automatic pre-heating or post-heating process protocol before and after welding. Powerful and suitable for 3 work shifts





Technical Data	FN-100	FN-160	FN-250
Power at 50% E.D (KVA)	80	80	80
Max. welding Power at 33% ED (KVA)	140	140	140
Input Voltage (V)	380/2 ph	380/2 ph	380/2 ph
Secondary no - load Voltage (V)	7.6	7.6	7.6
Current control	SCR	SCR	SCR
Electronic control	Digital	Digital	Digital
Mover system	pneumatic	pneumatic	pneumatic
Max electrode force (daN) with 6 bar	3000	7000	8000
Jack stroke (mm)	50	70	30
Welding capacity of Mild steel rod in mass production (Ø mm)	16	25	40
Compressed air supply (bar)	6	6	6
Cooling water consumption more than (Lit/Min)	8	8	8
Overall monitoring (L x W x H) (cm)	H:1950	H:1950	H:1950
	W:800	W:800	W:800
	L:1350	L:1350	L:1200
Gross Weight (Kg)	750	1200	1300





ELECTRO TECHNO TAK (KNOWLEDGE-BASED CO)
DESIGN & PRODUCTION OF WELDING MACHINERY
A Lasting Legacy in the Welding Industry

Electro Techno Tak (Knowledge-Based Co)

Founded in 1976, ETT began as a privately-owned company and, in 1983, specialized in designing and manufacturing Resistance and Arc Welding” devices after receiving a license from the Ministry of Industries.

In 1994, ETT expanded its expertise by completing training with the American Miller Company, leading to the design of advanced welding machines and securing the after-sales service representative role for Miller.

Committed to quality and international standards, ETT earned the "National Standard" seal in 1998 and became the first accredited laboratory of the Iranian Institute of Standards and Industrial Research. In 2023, the company received the "Knowledge-Based Approval in High Tech" certification.

ETT Products and Applications:

Spot and projection welders, seam welders, butt and flash welders, portable systems, Electro forged grating and the other customized devices.

Specialized Equipment:

Automotive body repair, aerospace, and pipeline welding solutions.

Services:

Engineering consultancy, operator training, and maintenance support.

Industries Served:

Wire and Cable / Wire Drawing

Automotive / Aerospace / Oil & Gas

Construction / Home Appliances



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