



IKING ELECTROSLAG SUBMERGED WELDING MACHINE CATALOG



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Trolley Type Melting Nozzle Electroslag Welding Machine



WT-ZH



ZH-1250F

Description

The ZH-1250F electroslag welding rectifier is a welding power source designed for use with electroslag welding machines. The power supply adopts a thyristor rectification system, which enables rapid automatic compensation for network fluctuations to ensure arc stability and convenient adjustment of the output current. The ZH-1250F electroslag welding rectifier utilizes a three-phase circuit with a minimum trigger angle protection control method, effectively optimizing the power supply characteristics. As a result, this equipment can also provide DC output for various applications, including steelmaking, rapid quenching, and electroslag welding.

WT-ZH Nozzle Electroslag Welding Carriage

Name	Parameter
Wire Spool Capacity	25Kg
Torch Rotation Angle	±45°
Machine Head Rotation Angle	±45°
Beam Rotation Angle	360°
Weight (excluding welding wire)	50Kg
Rated Welding Current	1250A
Column Lateral Adjustment Stroke	78mm
Machine Head Vertical Adjustment Stroke	100mm
Machine Head Lateral Adjustment Stroke	100mm
Beam Lifting Stroke	170mm
Wire Feeding Motor Rated Voltage	DC90V
Welding Wire Diameter	2, 2.4, 3.2mm
Wire Feeding Speed	0.4~7.2m/min
Overall Dimensions (L×W×H)	962×425×976mm

ZH-F Electroslag Welding Power Source

Name	Unit	Value
Frequency	Hz	50
Efficiency	%	85
Rated Welding Voltage	V	44
Rated Input Capacity	KVA	83
Duty Cycle	%	60
Rated Input Current	A	121
Rated Welding Current	A	1250
Power Supply Input Voltage	V	AC3X380
Voltage Output Range	V	26.5~44
Current Output Range	A	250~1250
Dimensions	mm ³	650x720x1350

Applications

Welding thick plate splicing
Box column partition welding

Electroslag Welding System with Trolley Type Nozzle (IGBT)



Description

The welding machine transfers energy through an electric arc, generating high temperatures in the welding area to melt the welding material and the surface of the workpiece. After cooling, a strong weld seam is formed. The nozzle is the focal point of the welding arc and molten metal; it concentrates the current and heat, promoting metal melting and ensuring the formation of a uniform weld seam.

Specifications

WT-ZH Nozzle Electroslag Welding Carriage

Name	Parameter
Wire Spool Capacity	25Kg
Torch Rotation Angle	±45°
Head Rotation Angle	±45°
Beam Rotation Angle	360°
Weight (excluding welding wire)	50Kg
Rated Welding Current	1250A
Column Lateral Adjustment Stroke	78mm
Head Vertical Adjustment Stroke	100mm
Head Lateral Adjustment Stroke	100mm
Beam Lifting Stroke	170mm
Wire Feeder Motor Rated Voltage	DC90V
Welding Wire Diameter	2.0, 2.4, 3.2mm
Wire Feeding Speed	0.4~7.2m/min
Overall Dimensions (L×W×H)	962×425×976mm

ZH7 Wire Electrode Electroslag Welding Power Source (IGBT)

Name	Unit	ZH7-1000	ZH7-1250
Weight	KG	95	105
Full Load Efficiency	%	89%	89%
No-load Voltage	V	120	120
Rated Welding Voltage	V	60	60
Rated Input Current	A	128	160
Full Load Power Factor	-	0.88	0.88
Rated Welding Current	A	1000	1200
Voltage Output Range	V	22-60	22-60
Current Output Range	A	90-1000	120-1200
Power Grid Rated Input Capacity	KVA	>70	>85
Rated Duty Cycle	%	100	100
Welding Cable Cross-sectional Area	mm ²	140 or 70×2	140 or 70×2
Three-phase Input Wire Cross-sectional Area	mm ²	16	25
User Air Switch Capacity	A/V	250/380	250/380
Power Supply Input Voltage/Frequency	V/Hz	AV3×380/50	AV3×380/50
Overall Dimensions (L×W×H)	mm	823×371×840	823×371×840

Applications

This system is especially suitable for box column/girder plate welding, to achieve a high quality welding gap with low oxygen content and impurities. It helps improve mechanical properties and corrosion resistance.

Efficient Portable Wire Grade Electroslag Welding

Description

Wire pole electroslag welding machine is an electroslag welding equipment that uses welding wire as electrode, and the wire is fed into the slag pool through the non-consumable electroslag welding gun and conductive nozzle. It is mainly used for efficient welding of vertical weld seams in steel structures, and is especially suitable for the welding of box-type columns and box-type beam bulkheads. It can weld very thick workpieces at one time, with high welding speed, smooth welding process and not easy to produce spatter, with high deposition rate.



ZH7 Wire Electroslag Welding Power Supply (IGBT)

Name	Unit	ZH7-1000	ZH7-1250
Weight	KG	95	105
Full Load Efficiency	%	89%	89%
Open Circuit Voltage	V	120	120
Rated Welding Voltage	V	60	60
Rated Input Current	A	128	160
Power Factor at Full Load	-	0.88	0.88
Rated Welding Current	A	1000	1200
Voltage Output Range	V	22-60	22-60
Current Output Range	A	90-1000	120-1200
Power Grid	-	-	-
Rated Input Power Capacity	KVA	>70	>85
Wire Feeder	-	-	-
Rated Duty Cycle	%	100	100
Welding Cable Cross-Section	mm ²	140 or 70×2	140 or 70×2
Three-Phase Input Line Cross-Section	mm ²	25	16
User Air Switch Capacity	A/V	250/380	250/380
Power Input Voltage/Frequency	V/Hz	AV3×380/50	AV3×380/50
External Dimensions (L×W×H)	mm ²	823×371×840	823×371×840

Electroslag Welding Gun Length

Applications

1. Thickness of steel plate: 16-100mm
2. Grade of steel: low carbon steel, low alloy steel, medium carbon steel, refractory steel, etc.
3. Length of weld: Maximum 1680mm (depends on the length of electroslag welding torch)
4. Weld structure: T-type weld and butt weld

Efficiency, high performance, stable and easy to operate

Please specify the model when ordering, as listed in the table below.

Model	Electroslag Welding Gun Length	ZHS (L) Applicable Weld Seam Length
ZSN-10	1000mm	720mm
ZSN-12	1200mm	920mm
ZSN-14	1400mm	1120mm
ZSN-16	1600mm	1320mm
ZSN-18	1800mm	1520mm
ZSN-20	2000mm	1720mm

Wire Feeder

Item	Specification	Item	Specification
Wire Feeder Motor Voltage	24VDC	Applicable Welding Wire Reel	Φ300 × Φ50 × 103
Wire Feeding Speed Range	1.5—15 m/min	Wire Reel Capacity	20kg
Applicable Wire Diameter	1.6mm	Rated Traction Force	15kg
Total Weight	9kg	Dimensions (L×W×H)	460 × 200 × 280

Efficient Suspended Wire Grade Electroslag Welding System

Description

Wire pole electroslag welding machine is an electroslag welding equipment that uses welding wire as electrode, and the wire is fed into the slag pool through the non-consumable electroslag welding gun and conductive nozzle. It is mainly used for efficient welding of vertical weld seams in steel structures, and is especially suitable for the welding of box-type columns and box-type beam bulkheads. It can weld very thick workpiece at one time, high welding speed, smooth welding process and not easy to produce spatter, with high melting rate.

Efficiency, high performance, stable and easy to operate

Electroslag Welding Torch Lengths

Model	Electroslag Welding Torch Length	Applicable Weld Seam Length
ZSN-10	1000mm	720mm
ZSN-12	1200mm	920mm
ZSN-14	1400mm	1120mm
ZSN-16	1600mm	1320mm
ZSN-18	1800mm	1520mm
ZSN-20	2000mm	1720mm

Description

1.1.H7 Wire Electroslag Welding Power Source (IGBT)

1.1.2 Power Source Specifications

Name	Unit	ZH7-1000
Weight	KG	95
Full Load Efficiency	%	89%
No-load Voltage	V	120
Rated Welding Voltage	V	60
Rated Input Current	A	128
Full Load Power Factor	-	0.88
Rated Welding Current	A	1000
Voltage Output Range	V	22-60
Current Output Range	A	90-1000
Power Supply Rated Input Capacity	KVA	?
Rated Load Duty Cycle	%	100
Welding Cable Cross-sectional Area	mm ²	140 or 70×2
Three-phase Input Wire Cross-sectional Area	mm	16
User Air Switch Capacity	A/V	250/380
Power Input Voltage/Frequency	V/Hz	AV3×380/50
Overall Dimensions (L×W×H)	mm	823×371×840

Wire Feeder

Name	Parameter
Wire Feeding Motor Voltage	24VDC
Applicable Wire Reel	Φ300×Φ50×103
Wire Feeding Speed Range	1.5—15 m/min
Wire Reel Capacity	20kg
Applicable Wire Diameter	1.6mm
Rated Traction Force	15kg
Volume	9kg
Overall Dimensions (L×W×H)	460×200×280 mm

Applications

1. Thickness of steel plate: 16-100mm
2. Steel type: low carbon steel, low alloy steel, medium carbon steel, refractory steel, etc.
3. Welding seam length: Maximum 1680mm (depends on the length of electroslag welding torch)
4. Welding seam structure: T-welding and butt-welding.

Competitive Advantage

ZH7 inverter slag welding machine is a high efficient and energy-saving DC power supply with IGBT inverter technology, which can weld carbon structural steel, low alloy structural steel, heat-resistant steel and its composite steel.

1. Small volume and light weight.
2. Wide range of current adjustment.
3. the use of IGBT inverter technology to ensure that the welding specifications in the grid voltage and load changes in a highly stable.
4. With protection function, when over temperature or grid voltage is too low to protect, at the same time the protection indicator light. With rectifier output abnormal alarm function.
5. Automatically stop the output if the arc is not established within 1min of starting.
6. High efficiency and power factor, thus it has significant power saving effect and high grid utilisation.

Trolley Type Submerged Arc Welding System (Industrial Universal Type)



Description

This welder is a type of equipment that is widely used because it can be adapted to the welding needs of many different materials. This type of submerged arc welder is capable of welding carbon structural steel, stainless steel, heat-resistant steel, and its composite steels, as well as being suitable for the production of light-weight, medium-weight, and heavy-weight components. Designed for simplicity and durability, this equipment can be used in a wide range of welding work environments in steel, shipbuilding, automotive manufacturing, and more.

Efficiency, high performance, stability and ease of operation



Specifications

Welding System Specifications

Name	Parameter
Travel Motor Rated Voltage	DC90V
Wire Feeding Motor Rated Voltage	DC90V
Welding Wire Diameter	Φ3~Φ6mm
Welding Speed	20~205 cm/min
Wire Feeding Speed	20~200 cm/min
Rated Welding Current	1600A
Rated Load Duty Cycle	160%
Column Horizontal Adjustment Stroke	78mm
Boom Lifting Stroke	170mm
Welding Head Vertical Adjustment Stroke	100mm
Boom Rotation Angle	360°
Welding Head Rotation Angle	±45°
Welding Torch Rotation Angle	±45°
Flux Capacity	7L
Wire Capacity	25Kg
Overall Dimensions (L×W×H)	962×425×976mm
Weight (Excluding Flux & Wire)	52Kg

MZ-F Series Submerged Arc Welding Power Source

Unit	Name	MZ-1250F	MZ-1000F
Hz	Frequency	50	50
KG	Weight	330	320
A	Output Current Range	250-1250	200-1000
V	Rated Welding Voltage	44	44
mm ²	Input Cable Specification	25	16
KVA	Rated Input Capacity	80	64
A	Rated Input Current	121	97
A	Rated Welding Current	1250	1000
V	Power Supply Input Voltage	AC3X380	AC3X380
A/V	Air Switch Capacity	160/380	160/380
%	Rated Load Duty Cycle	60	100
V	Working Voltage Output Range	28-44	30-44
mm ²	Overall Dimensions (W×H×L)	566×699×1022	566×699×1022

Applications

It can be used to weld butt welds, lap welds, fillet welds, etc. This kind of weld can be located in the horizontal plane or with the horizontal plane into an inclined angle of not more than 10 ° inclined surface. Weldable steel types include carbon structural steel, low alloy structural steel, stainless steel, heat-resistant steel and its composite steel.

1. Compact and flexible, travelling smoothly, can be applied to a variety of welding scenes.
2. Equipped with transverse and longitudinal adjusting mechanism and multi-angle variable position wire feeding mechanism, convenient and flexible adjustment, suitable for multi-position welding.

Trolley Type Submerged Arc Welding System (Industrial Heavy-Duty)



WT-MZ



MZ-1600

Description

This welding system is a submerged arc automatic welding machine composed of an MZ series arc welding power source and a WT-MZ light trolley.

It is equipped with a strip electrode cladding head, a narrow gap head, an operator, a positioner, a roller frame, a weld tracking device, etc., and can form a fully automatic arc welding workstation.

WT-MZ Submerged Arc Welding Trolley

Name	Parameter
Rated Voltage of Travel Motor	DC 90V
Rated Voltage of Wire Feeding Motor	DC 90V
Wire Diameter	Φ3~Φ6mm
Welding Speed	20~205 cm/min
Wire Feeding Speed	20~200 cm/min
Rated Welding Current	1600A (60%)
Column Lateral Adjustment Stroke	78mm, 170mm
Beam Lifting Stroke	100mm
Vertical Adjustment Stroke of Welding Head	360°
Beam Rotation Angle	±45°
Welding Head Rotation Angle	±45°
Welding Torch Rotation Angle	-
Flux Capacity	7L
Wire Capacity	25Kg
Dimensions (L × W × H)	962×425×976 mm
Weight (excluding flux & wire)	52Kg

MZ Series Submerged Arc Welding Power Supply

Name	Unit	MZ-1000	MZ-1250	MZ-1600
Frequency	Hz	50	50	50
Rated Welding Voltage	V	44	44	44
Input Cable Specification	mm ²	25	25	35
Rated Duty Cycle	%	60	60	100
Rated Input Capacity	KVA	64	80	117
Weight	Kg	500	500	550
Rated Input Current	A	97	121	170
Rated Welding Current	A	1000	1250	1600
Output Voltage Range	V	28~44	30~44	36~44
Air Switch Capacity	A/V	160/380	160/380	200/380
Power Supply Input Voltage	V	AC3×380	AC3×380	AC3×380
Current Output Range	A	200~1000	250~1250	400~1600
Dimensions (L × W × H)	mm	700×745×1420	700×745×1420	700×745×1420

Applications

It is suitable for thicker structural steel parts and large scale steel projects.

Trolley Type Submerged Arc Welding Machine (IGBT)



Description

This welding system is an arc welding automatic welding machine composed of an MZ-B series submerged arc welding power source, a WT-MZ (with inverter controller) light trolley, which is suitable for arc welding under flux layer.

It can weld carbon structural steel, low alloy structural steel, stainless steel, heat-resistant steel and its composite steel, etc.

WT-MZ Submerged Arc Welding Trolley (With Inverter Power Source)

Name	Parameter
Welding Head Rotation Angle	360°
Welding Head Left/Right Rotation Angle	±45°
Welding Head Side Inclination Angle	±90°
Welding Head Vertical Adjustment Range	140mm
Welding Head Horizontal Adjustment Distance	100mm
Rated Welding Current	1600A (60%)
Wire Diameter	Φ3-Φ6mm
Wire Feeding Speed	20-200cm/min
Welding Speed	20-205cm/min
Weight (excluding welding wire and flux)	68Kg
Dimensions (mm)	1010×470×790
Rated Power Supply Voltage	1-50Hz 120V/3A

MZ-B Series Inverter Submerged Arc Welding Power Source

Name	Unit	MZ-1000B	MZ-1250B
Weight	KG	95	100
No-Load Voltage	V	78	90
Rated Welding Voltage	V	44	44
Full Load Efficiency	%	89	89
Rated Input Current	A	83	100
Power Factor at Full Load	-	0.88	0.88
Rated Welding Current	A	1000	1250
Current Output Range	A	60-1000	90-1250
Voltage Output Range	V	CC: 22.4-44 CV: 22-44	CC: 23.6-44 CV: 22-44
Rated Duty Cycle	%	100	100
Welding Cable Cross-Section	mm ²	140 or 70×2	140 or 70×2
Three-Phase Input Cable Cross-Section	mm ²	16	25
User Air Switch Capacity	A/V	120/380	160/380
Power Supply Input Voltage/Frequency	V/Hz	AC3×380	AC3×380
Dimensions (W×H×L)	mm ³	823×371×840	823×371×840
Rated Input Power	KW	56	70

Applications

The MZ-B series power supply is ideal for industries requiring high-efficiency, precision welding in heavy machinery, shipbuilding, steel structure fabrication, pressure vessel manufacturing, and pipeline welding. Its stable performance and energy-saving design make it a reliable and cost-effective choice for large-scale industrial welding operations.

Suspended Submerged Arc Welding Machine (IGBT)



-MZ-1600E 电源-

Description

This welding system is a submerged arc automatic welding machine composed of an MZ-E series submerged arc welding power supply, an MZK-BG controller, and a YT wire feeder head (left or right). The power supply adopts thyristor rectification, which can quickly and automatically compensate for network fluctuations, to ensure the stability of the arc and the convenience of adjusting the output current.

YT Wire Feeder

Name	Parameter
Power	165W
Rated Speed	20 RPM
Wire Diameter	Φ2.4-Φ6mm
Installation Dimensions	4-M10 screw holes, hole spacing 110×25mm
Maximum Motor Current	≤2A
Maximum Wire Feeding Speed	3m/min
Rated Motor Voltage	110VDC
Rated Welding Current	1600A (60%)
Dimensions (L × W × H)	278×154×188 mm
Weight (excluding wire & flux)	11Kg

MZK-BG Suspended Submerged Arc Welding Controller (IGBT)

Name	Parameter
Output Voltage for Wire Feeder Motor	10~110VDC
Excitation Voltage for Wire Feeder Motor	110VDC
Input Power Supply	120V±20%, 50/60Hz
Rated Output Power for Wire Feeder Motor	200W
Maximum Operating Temperature	45°C
Enclosure Protection Level	IP21
Weight	4.5Kg
Dimensions (L × W × H)	307×126×267 mm

MZ-E Series Submerged Arc Welding Power Supply (IGBT)

Name	Unit	MZ-1250E	MZ-1600E
Power Supply Input Voltage/Frequency	V/Hz	AC3×380/50	AC3×380/50
Minimum Grid Capacity	KVA	100	120
Generator Capacity	KVA	150	150
Rated Input Current	A	120	154
Open Circuit Voltage	V	78	78
Rated Welding Current	A	1250	1600
Rated Welding Voltage	V	44	44
Rated Duty Cycle	%	100	100
Voltage Output Range (CC Mode)	V	23.6~44	22.4~44
Voltage Output Range (CV Mode)	V	22~44	15~44
Current Output Range	A	90~1250	120~1600
Full Load Efficiency	%	89	89
Full Load Power Factor	-	0.88	0.88
User Air Switch Capacity	A/V	160/380	200/380
Three-Phase Input Cable Section	mm ²	25	35
Welding Cable Section	mm ²	140 or 70×2	140 or 70×2
Dimensions (L × W × H)	mm	823×371×840	944×583×1414.5
Weight	Kg	105	242

Applications

Heavy structural welding
Large-scale steel fabrication
Shipbuilding and offshore structures
Bridge and heavy equipment manufacturing

Suspended Submerged Arc Welding Machine (Industrial Universal Type)



Description

The system is particularly suitable for welding large metal structures, pipelines, and heavy-duty industrial components where deep penetration and strong weld seams are required.

One of the key advantages of this system is its suspended design, which enables greater flexibility and adaptability in various industrial settings. The welding head can be positioned precisely to accommodate different workpiece sizes and orientations, allowing for high-quality welds with minimal manual intervention. This feature also helps in reducing operator fatigue and increasing productivity in large-scale welding operations.

It is a high-performance, automated welding system that integrates advanced power control, efficient wire feeding, and precise welding regulation. Its ability to compensate for power fluctuations, maintain arc stability, and adapt to various work environments makes it an essential tool for industries requiring high-quality submerged arc welding.

Specifications

MK6G Submerged Arc Welding Controller

Name	Parameter
Wire Feeder Motor	200W
Enclosure Protection Level	IP21
Maximum Operating Temperature	45°C
Wire Feeder Motor Excitation Voltage	110VDC
Wire Feeder Motor Voltage	10~110VDC
Input Power Supply	120V, 27V, 50/60Hz

YT Wire Feeder

Name	Parameter
Power	165W
Rated Speed	20 rpm
Wire Diameter	Φ2.4-Φ6mm
Mounting Dimensions	4-M10 screw holes, spacing 110×25
Maximum Motor Current	≤2A
Maximum Wire Feeding Speed	3m/min
Motor Rated Voltage	110V DC
Rated Welding Current	1600A 60%
Dimensions (mm)	278×154×188
Weight (excluding wire and flux)	11KG

MZ-F Series Submerged Arc Welding Power Source

Name	Unit	MZ-1000F	MZ-1250F
Frequency	Hz	50	50
Weight	KG	320	330
Output Current Range	A	200-1000	250-1250
Rated Welding Voltage	V	44	44
Input Cable Specification	mm ²	16	25
Rated Input Power Capacity	KVA	64	80
Rated Input Current	A	97	121
Rated Welding Current	A	1000	1250
Power Supply Input Voltage	V	AC3×380	AC3×380
Air Switch Capacity	A/V	160/380	160/380
Rated Duty Cycle	%	100	60
Working Voltage Output Range	V	28-44	30-44
Dimensions (W×H×L)	mm ³	566×699×1022	566×699×1022

Applications

- Shipbuilding & Offshore Structures – Provides deep penetration and strong welds for marine environments.
- Steel Structure & Heavy Machinery – Ensures high-strength, defect-free welds for industrial components.
- Pipeline & Pressure Vessel Welding – Delivers stable, high-quality welds for critical infrastructure.

Suspended Submerged Arc Welding System (Industrial Heavy Duty)



Description

This suspended submerged arc welding machine is mainly used for efficient welding of large and heavy workpieces, providing a high level of productivity and automation while guaranteeing high quality, and is particularly suitable for large-scale welding of large structural parts.

This suspended submerged arc welding system is of suspended structure, which is more convenient and suitable for continuous automation to realize high-speed and large-area welding compared with the trolley type operation. It also improves electrode and material utilization during preheating and post-processing.

The welding system consists of a MZ series submerged arc welding power source, a MK6G controller, a YT wire feeder head (left or right) composed of submerged arc automatic welding machine, and with the pole cladding head, narrow gap head, the operator, the positioner, the roller frame, the weld tracking device, and other components, can be composed of a fully automatic submerged arc welding workstation.

Specifications

MK6G Submerged Arc Welding Controller

Name	Specifications
Wire feed motor	200W
Shell protection grade	IP21
Maximum ambient temperature	45°C
Wire feed motor excitation voltage	110VDC
Wire feed motor	10-110VDC
Input Power	120V, 27V, 50/60Hz

YT Wire Feeder

Name	Specifications
Power	165W
Rated speed	20rpm
Welding wire diameter	Φ2.4-6mm
Installation dimension	4-M10 threaded hole, pitch of hole is 110x25
Maximum motor current	≤2A
Maximum wire feeding speed	3m/min
Rated voltage of motor	110V DC
Rated welding current	1600A 60%
Dimensions (mm)	278*154*188
Machine weight(welding wire and flux not included)	11kgs

Applications

- 1.This series of welding machines is mainly used for welding various steel plate structures, including butt welds with or without grooves, lap welds, and fillet welds. These welds can be positioned horizontally or on inclined surfaces with an inclination angle not exceeding 10°. It can weld carbon structural steel, low-alloy structural steel, stainless steel, heat-resistant steel, and composite steel materials.
- 2.The welding machines in this series adopt the latest technology and components, ensuring stable operation and flexible, convenient operation. Their overall performance is significantly superior to older models such as the MZ-1000 and MZ-1-1000 submerged arc welding machines.
- 3.They are especially suitable for welding H-beams and panel assemblies in the steel structure industry.

Box Girder Submerged Arc Welding System



Description

The WT-XL Box Beam Submerged Arc Welding System delivers superior weld quality with high stability, efficiency, and reliability. Designed specifically for box beam and column main weld seams, it integrates years of welding technology expertise. The system includes two MZ-F series DC submerged arc welding power sources and a WT-XL trolley, featuring a twin-head design for simultaneous parallel seam welding. Its DC power source ensures stable arc performance and adaptability across various steel types.

Specifications

1.1.WT-XL Submerged Arc Welding Twin-Wire Trolley

Name	Parameter
Rated Power Supply Voltage	1~50Hz 120V/3A 27V/1A
Welding Wire Diameter	φ3~φ6mm
Wire Feeding Speed	20~200 cm/min
Welding Speed	20~205 cm/min
Rated Welding Current	1600A @ 60% Duty Cycle
Vertical Adjustment Range of Welding Head	80mm
Horizontal Adjustment Distance of Welding Head	340mm
Applicable Box Beam Width Range	350~1000mm
Dimensions (mm)	1040×1380×850
Weight (excluding welding wire and flux)	98Kg

1.1.2MZ-F Series Submerged Arc Welding Power Supply

Name	Unit	MZ-1000F	MZ-1250F
Frequency	Hz	50	50
Weight	Kg	320	330
Current Output Range	A	200~1000	250~1250
Rated Welding Voltage	V	44	44
Input Cable Specification	mm ²	16	25
Rated Input Capacity	KVA	64	80
Rated Input Current	A	97	121
Rated Welding Current	A	1000	1250
Power Supply Input Voltage	V	AC3×380	AC3×380
Air Switch Capacity	A/V	160/380	160/380
Rated Duty Cycle	%	100	60
Working Voltage Output Range	V	28~44	30~44
Dimensions (W×H×L)	mm ³	566×699×1022	566×699×1022

MZ Series Submerged Arc Welding Power Supply

Description	Unit	MZ-1000	MZ-1250	MZ-1600
Frequency	Hz	50	50	50
Rated welding voltage	V	44	44	44
Input cable specs.	mm ²	25	25	35
Rated load sustainability	%	100	60	60
Rated input capacity	KVA	64	80	117
Weight	Kg	500	500	550
Rated input current	A	97	121	170
Rated welding current	A	1000	1250	1600
Range of output working voltage	V	28~44	30~44	36~44
Air switch capacity	A/V	160/380	160/380	200/380
Input voltage	V	AC3×380	AC3×380	AC3×380
Range of current output	A	200~1000	250~1250	400~1600
Dimensions	mm	700*745*1420	700*745*1420	700*745*1420

Applications

Especially suitable for box girder/column welding.

Efficient Trolley Type Double Arc Double Wire Submerged Arc Welding System



Description

This automated dual-arc dual-wire submerged arc welding system delivers high efficiency and precision, making it ideal for heavy-duty industrial applications. The MZ DC submerged arc welding power source features advanced three-phase circuit control to enhance dynamic characteristics, ensuring stable power output. The MZE AC square wave welding power source provides high-performance AC welding with support for single-wire, narrow-gap, overlay, and manual arc welding, and can be combined with DC or AC sources for multi-wire welding configurations.

The WT-DA dual-wire submerged arc welding carriage is designed for efficient filling and overlay welding, supporting a wide range of welding positions, including butt, lap, and fillet welds on both flat and inclined surfaces up to 10°. It is compatible with carbon steel, low-alloy steel, stainless steel, heat-resistant steel, and composite materials.

Specifications

1.1.WT-DA Trolley

Item	Parameter
Travel Motor Rated Voltage	DC 90V
Wire Feeding Motor Rated Voltage	DC 90V
Wire Diameter	3~6mm
Welding Speed	20~205 cm/min
Wire Feeding Speed	20~200 cm/min
Rated Welding Current	1600A 60%
Lateral Adjustment Stroke of Column	78mm
Vertical Adjustment Stroke of Beam	170mm
Synchronized Vertical Adjustment Stroke of Two Heads	100mm
Vertical Adjustment Stroke Between Two Heads	±50mm
Horizontal Adjustment Stroke Between Two Heads	100mm
Beam Rotation Angle	360°
Head Rotation Angle	±45°
Torch Rotation Angle	±45°
Flux Capacity	9L
Wire Capacity	25Kg × 2
Dimensions (L×W×H)	1044×705×976mm
Weight (excluding flux and wire)	101Kg

MZE AC Square Wave Submerged Arc Welding Machine

Item	Unit	MZE-1250
Weight	kg	600
No-load Voltage	V	AC: 80, DC: 85
Duty Cycle Adjustment Range	%	36.67-63.33
Rated Welding Voltage	V	44
Rated Input Current	A	190
Rated Input Capacity	KVA	125
Rated Welding Current	A	1250
Current Output Range	A	250-1250
Output Frequency Adjustment	Hz	7.89-13.64
Voltage Output Range	V	CC: 30-44, CV: 26.5-44
Rated Load Duty Cycle	%	AC: 100, DC: 60
Welding Cable Cross-sectional Area	mm ²	140 or 70×2
User Air Switch Capacity	A/V	250/380
Power Input Voltage/Frequency	V/Hz	AC 3×380/50
External Dimensions (D×W×H)	mm ³	713×679×1468
Machine Three-phase Input Wire Cross-sectional Area	mm ²	35
User Grid Equipped with Three-phase Power Cable	mm ²	50

Applications

Deep penetration welding for H-beam/column web plates
 High-efficiency welding for box columns and beams
 Longitudinal and circumferential seam welding for cylindrical components
 High-efficiency splicing of medium and thick plates

Efficient Trolley Type Double Arc Double Wire Submerged Arc Welding System (IGBT)



Description

The main features of IGBT inverter double-wire arc welding are the use of IGBT inverter technology and double-wire arc. The power supply adopts IGBT technology to reduce the size of the equipment, provide more stable arc intensity and output power, and effectively reduce the loss of components such as metal oxides.

Specifications

MZ-E Series Submerged Arc Welding Power Supply (IGBT)

Item	Unit	MZ-1250E	MZ-1600E
Power Supply Input Voltage/Frequency	V/Hz	AC3X380/50	AC3X380/50
Grid	KVA	100	120
Minimum Generator Capacity	KVA	150	150
Rated Input Current	A	120	154
No-load Voltage	A	Rated Welding Current	1250
Rated Welding Voltage	%	100	100
Rated Duty Cycle		44	44
Voltage Output Range	CC:23.6~44 CV:22~44	CC:22.4~44 CV:15~44	
Current Output Range	A	90~1250	120~1600
Full Load Efficiency	%	89	89
Full Load Power Factor		0.88	0.88
User Air Switch Capacity	A/V	160/380	200/380
Three-phase Input Wire Cross-sectional Area	mm ²	25	35
Welding Cable Cross-sectional Area	m	140 or 70×2	140 or 70×2
Dimensions (L×W×H)	mm ²	823×371×840	944×583×1414.5
Weight	Kg	105	242

Applications

- Using IGBT inverter technology to ensure that the welding specifications are highly stable when the grid voltage and arc length change.
- High efficiency and power factor, thus having significant power saving effects and high grid utilization.
- The welding current can be preset with the control box.
- With the control box, 12 sets of welding parameters can be stored.

MZE-B Submerged Arc Welding Power Supply

Item	Unit	MZE-1250B
Rated Input Voltage	V/Hz	AC380V
Frequency	Hz	50
Rated Input Current	A	118
Power Supply Capacity	KVA	78
No-load Voltage	V	88
Rated Welding Current	A	1250
Rated Welding Voltage	V	44
Rated Duty Cycle	%	60
Voltage Output Range	V	24~44 15~44
Current Output Range	A	100-1250
Full Load Efficiency	%	78
Full Load Power Factor		0.83
User Air Switch Capacity	A	125A
Three-phase Input Wire Cross-sectional Area	mm ²	25
Welding Cable Cross-sectional Area	mm ²	140 or 70×2
Dimensions (L×W×H)	mm	630×720×1417
Weight	Kg	210

- The control box and the host are photoelectrically isolated to avoid damage to the control line and burning of the mainboard.
- The fan starts when welding and stops after 10 minutes of welding, which can reduce noise, save electricity and increase the life of the fan.
- No magnetic blow: Due to the use of AC square wave output, the arc is stable, the weld is beautiful, and it is not easy to produce welding defects.

Efficient Suspended Double Arc and Double Wire Submerged Arc Welding System (IGBT)



Description

This system adopts a suspended structure, which is more convenient to operate and can be adjusted according to actual needs. The double-wire welding wire speeds up the welding speed, while the IGBT inverter technology ensures the stability of arc intensity and output power, greatly improving production efficiency.

Specifications

MZE-B Submerged Arc Welding Power Supply

Item	Unit	MZE-1250B
Rated Input Voltage	V/Hz	AC380V
Frequency	Hz	50
Rated Input Current	A	118
Power Supply Capacity	KVA	78
No-load Voltage	V	88
Rated Welding Current	A	1250
Rated Welding Voltage	V	44
Rated Duty Cycle	%	60
Voltage Output Range	V	24~44 15~44
Current Output Range	A	100-1250
Full Load Efficiency	%	78
Full Load Power Factor		0.83
User Air Switch Capacity	A	125A
Three-phase Input Wire Cross-sectional Area	mm ²	25
Welding Cable Cross-sectional Area	mm ²	140 or 70×2
Dimensions (L×W×H)	mm	630×720×1417
Weight	Kg	210

MZ-E Series Submerged Arc Welding Power Supply (IGBT)

Item	Unit	MZ-1600E	MZ-1250E
Power Supply Input Voltage/Frequency	V/Hz	AC3X380/50	AC3X380/50
Grid	KVA	100	120
Minimum Power Supply Capacity	KVA	150	150
Generator	KVA	150	150
Rated Input Current	A	120	154
No-load Voltage		78	78
Rated Welding Current	A	1250	1600
Rated Welding Voltage	V	44	44
Rated Duty Cycle	%	100	100
Voltage Output Range	CC:23.6~44 CV:22~44	CC:22.4~44 CV:15~44	
Current Output Range	A	90~1250	120~1600
Full Load Efficiency	%	89	89
Full Load Power Factor		0.88	0.88
User Air Switch Capacity	A/V	160/380	200/380
Three-phase Input Wire Cross-sectional Area	mm ²	25	35
Welding Cable Cross-sectional Area	mm ²	140 or 70×2	140 or 70×2
Dimensions (L×W×H)	mm	823×371×840	944×583×1414.5
Weight	Kg	105	242

Applications

- The advanced inverter power supply technology can quickly and stably control the current and voltage, thus achieving high-speed, efficient and high-quality welding.
- This system is very flexible and can be used for different welding tasks, and can meet the requirements of complex welding tasks.
- The double-wire submerged arc welding can weld two welds at the same time, improving production efficiency.