

HLQ INDUCTION EQUIPMENT CO.,LTD

Former Name--DaWei Induction Heating Machine Co.,Ltd

HLQ Induction

Company Profile

HLQ INDUCTION EQUIPMENT CO.,LTD

Former Name: DaWei Induction Heating Machine Co., Ltd specializes in Induction Heating machines manufacturing and marketing for more than 1 decade. The machines cover Automatic Surface Hardening & Tempering Machines, Flexible Brazing Systems, Compact Adhesive Curing Systems Efficient Tube Welders & Thermal Straightening Systems. They are wildly used in heat treatment, bonding, brazing, welding, forging, melting and heat fitting solutions. Transistor converters from 500Hz to 1100KHz frequency & power sizes from 5 to 300 KW.

Induction heating machines apply the most advanced electric components and unique high-new techniques. They can heat metal quickly and partially. They can also penetrate nonmetal to heat metals till metals fuse without contacting with metals directly. Compare with other heating methods, our induction heating machine has many advantages: self-control and self-protection function. It starts up with required pressure and water, taking up less floor space and requiring less start-up and shutdown time, heating safely, frugally without any pollution.

With the company development, our company pay more and more attention onto research& development and service after sales. We comply ISO9000-2000 strictly in our processing. Our company wins a nice fame for our high quality machine and good.

Tel: +86-131-55965571 E-mail: Inductionheating@gpgyjr.com.cn

Address: No.16,Xinle Road,1st Industrial District,Jiangbei Village,Wusha Area,Chang'an Town,Dongguan City,Guangdong Province,China,523859

CONTENTS

About Induction Heating -----	1
Induction Heating Equipment Specifications-----	2
Medium Frequency Induction Heating Equipment-----	3
Matching of Medium Frequency Induction Heating Equipment-----	4
MF Induction Forging Rod Furnace-----	5
MF Induction Forging Rod Furnace-----	6
MF Induction Melting Furnace-----	7
High Frequency Induction Heating Equipment-----	8
Ultra High Frequency Induction Heating Equipment-----	9
KGPS-MF-Furnace Generator-----	10
Vacuum Induction Melting Furnace-----	11
Pipeline Induction Heating Machine-----	12
Induction Heating Coils-----	13
Special Order-----	14

INDUCTION HEATING EQUIPMENT



(1) What's induction heating

Induction heating is a form of non-contact heating for conductive materials, when alternating current flows in the induced coil, varying electromagnetic field is set up around the coil, circulating current(induced, current, eddy current) is generated in the workpiece(conductive material),heat is produced as the eddy current flows against the resistivity of the material.

Induction heating is a rapid ,clean, non-polluting heating form which can be used to heat metals or change the conductive material's properties. The coil itself does not get hot and the heating effect is under controlled. The solid state transistor technology has made induction heating much easier,cost-effective heating for applications including soldering and induction brazing ,induction heat treating, induction melting,induction forging etc.

(2) How to select induction heating equipment

There are two main specifications of induction heating machine, one is the output power , another is the output frequency.the higher the frequency, the thinner the heating penetration. so it is important to select the frequency of the machine according to the heating desire to achieve best heating effect.

The output power decide the heating speed,so power is selected according to the weight of the parts and the heating temperature and the heating speed desired.

All our Induction heaters are divided into three major series according to the frequency:

1. high frequency series: 30~80khz (supersonic frequency induction heater / high frequency induction machines)
2. medium frequency series: 1k~20khz (medium frequency induction heater)
- 3.Ultra High frequency series: 100KHz-2MHz(Ultra high frequency induction heater)

Equipment Specifications

Series	Model	Max Input Power	Max Input Current	Oscillate frequency	Input Voltage	Duty cycle
M.F medium frequency	DW-MF-15 Induction Generator	15KW	23A	1K-20KHZ According to the application	3 X 380V ± 20%	100 %
	DW-MF-25 Induction Generator	25KW	36A			
	DW-MF-35 Induction Generator	35KW	51A			
	DW-MF-45 Induction Generator	45KW	68A			
	DW-MF-75 Induction Generator	70KW	105A			
	DW-MF-90 Induction Generator	90KW	135A			
	DW-MF-110 Induction Generator	110KW	170A			
	DW-MF-160 Induction Generator	160KW	240A			
	DW-MF-300 Induction Generator	300KW	450A			
	DW-MF-45 Induction Heating Rod Forging Fumace	45KW	68A			
H.F high frequency	DW-MF-70 Induction Heating Rod Forging Fumace	70KW	105A	1K-20KHZ According to the application	3 X 380V ± 20%	100 %
	DW-MF-90 Induction Heating Rod Forging Fumace	90KW	135A			
	DW-MF-110 Induction Heating Rod Forging Fumace	110KW	170A			
	DW-MF-160 Induction Heating Rod Forging Fumace	160KW	240A			
	DW-MF-300 Induction Heating Rod Forging Fumace	300KW	450A			
	Accessories of induction forging rod furnace	Pneumatic rod feeder				
	The attachment of Induction Heating Rod Forging Fumace	Chain conveyor for feed rod end				
		PLC controlling,Automatic material feeding device				
		Infrared thermometer and control temperature device				
	DW-MF-15 Induction Melting Furnace	15KW	23A			
U.H.F ultra high frequency	DW-MF-25 Induction Melting Furnace	25KW	36A	1K-20KHZ According to the application	3 X 380V ± 20%	100 %
	DW-MF-35 Induction Melting Furnace	35KW	51A			
	DW-MF-45 Induction Melting Furnace	45KW	68A			
	DW-MF-75 Induction Melting Furnace	70KW	105A			
	DW-MF-90 Induction Melting Furnace	90KW	135A			
	DW-MF-110 Induction Melting Furnace	110KW	170A			
	DW-MF-160 Induction Melting Furnace	160KW	240A			
	Accessories of induction melting furnace	Stationary melting furnace				
	The attachment of Induction Melting Furnace	Mechanical tilting system for less than 150kg copper or steel iron				
		Electric tilting system for less than 150kg copper or steel iron				
		Hydraulic tilting system for more than 100kg copper or steel iron				
H.F high frequency	DW-MF-110 Induction Hardening Equipment	110KW	170A	1K-8KHZ According to the application	3 X 380V ± 20%	100 %
	DW-MF-160 Induction Hardening Equipment	160KW	240A			
	DW-HF-04 Series	DW-HF-4KW-A	4KW			
	DW-HF-15 Series	DW-HF-15KW-A	15KW			
	DW-HF-25 Series	DW-HF-25KW-A	25KW			
		DW-HF-25KW-B	25KW			
	DW-HF-35 Series	DW-HF-35KW-B	35KW			
	DW-HF-45 Series	DW-HF450KW-B	45KW			
	DW-HF-60 Series	DW-HF-60KW-B	60KW			
	DW-HF-90 Series	DW-HF-90KW-B	90KW			
U.H.F ultra high frequency	DW-HF-120 Series	DW-HF-120KW-B	120KW	20-80KHZ According to the application	3 X 380V ± 20%	100 %
	DW-HF-160 Series	DW-HF-160KW-B	160KW			
	DW-UHF-3.2KW	3.2KW	13A			
	DW-UHF-4.5KW	4.5KW	20A			
	DW-UHF-6.0KW-I	6.0KW	28A			
	DW-UHF-6.0KW-II	6.6KW	30A			
	DW-UHF-8.0KW-II	6.6KW	30A			
	DW-UHF-10KW	10KW	15A			
	DW-UHF-20KW	20KW	30A			
	DW-UHF-30KW	30KW	45A			
Handheld Induction heater	DW-UHF-40KW	40KW	60A	50-200KHZ According to the application	3 X 380V ± 10%	100 %
	DW-UHF-60KW	60KW	90A			
	DW-UHF-100KW	100KW	145A			
Handheld Induction heater	DWS-10	10KW	15A	50-500KHZ According to the application	3 X 380V ± 10%	100 %
	DWS-30	30KW	45A			
	DWS-60	60KW	90A			

Medium Frequency Induction Heating Equipment

● 1KHZ - 20KHZ



3

4

● Main applications

Medium frequency machines are usually used in the penetration heating occasions, For example,

- (1)Rod heating for forging
- (2)Melting of almost all kinds of metals
- (3)Heating of stators or rotors for fitting
- (4)Heating of tube end for extrusion
- (5)Heating of moulds
- (6)Deep quenching of shafts and gears
- (7)Tempering or Preheating of weld-joint and etc.

● Technical parameters

Model	DW-MF-15	DW-MF-25	DW-MF-35	DW-MF-45	DW-MF-75	DW-MF-90	DW-MF110	DW-MF160	DW-MF300
Input power max.	15KW	25KW	35KW	45KW	70KW	90KW	110KW	160KW	300KW
Output power max.	70-550V	70-550V	70-550V	70-550V	70-550V	70-550V	70-550V	70-550V	70-550V
Input powerdesigne									
380V 50/60HZ									
Oscillate frequency	1-20KHZ according to the application, normal about:4KHZ,8KHZ,11KHZ, 15KHZ,20KHZ								
Duty cycle									
Weight	24kg	24kg	34kg	36kg	51kg	79kg	94kg	130kg	160kg
Cusage	27(W)X47(H)X56(L)cm			35(W)X65(H)X65(L)cm			40(W)X88(H)X76(L)cm		

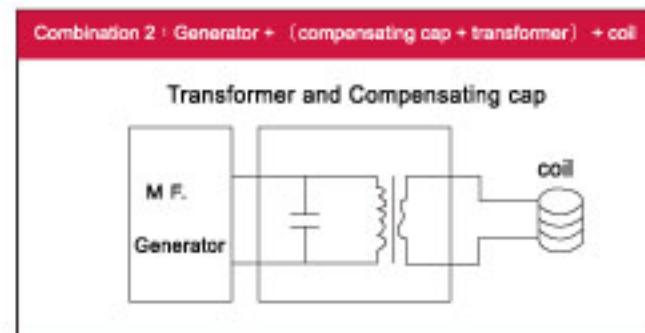
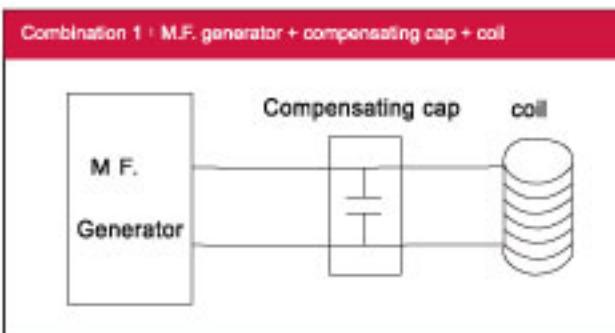
Matching of Medium Frequency Induction Heating Equipment

● 1KHZ - 20KHZ

● Main Characteristics:

- (1) In DAWEI medium frequency machines · parallel oscillating structure is used . IGBT module power components and our fourth generation inverting control technologies are applied.
- (2) Wide frequency ranges from 1KHZ to 20KHZ, it is easy to match the machine according to the parts and heating desire.
- (3) Due to the parallel oscillating structure, it is easy to get the best matching of the machine to get high heating efficiency and full power output of generator.
- (4) Due to the high technologies of our fourth generation inverting control, soft and accurate switching control is realized to assure the high reliability and low repair of the machine.

Complete sets of equipment



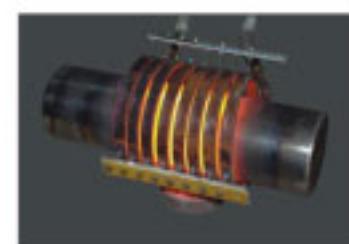
● Advantages and applications of models with Timer function:

1. Heating power, retaining power, heating time, retaining time can be preset and adjusted, this makes it possible to control the heating curve and heating time.
2. It is suitable to use in the repeated heating or high speed heating of small parts;
3. By presetting the timer and the power of the generator, retaining can be realized to a certain extent.

Applications



Induction melting furnace



hardening



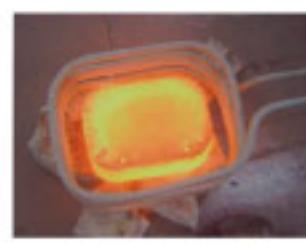
shrink fitting



forging



heating treatment



fritting furnace



soldering-brazing

MF Induction Heating Rod Forging Furnace

● 1KHZ-20KHZ



DW-MF-45 45KW
DW-MF-70 70KW



DW-MF-90 90KW
DW-MF-110 110KW
DW-MF-160 160KW
DW-MF-300 300KW

● Main parts of the rod forging furnace

- 1.M.F Induction heating generator(power supply)
- 2.Compensation capacitor unit
- 3.Heating coil and accessories
- 4.Pneumatic rod feeder(handing system)
- 5.Stand or working table

● The main types and Heating Capacity

TYPE	Heating Capacity		
	1.67kg/min	2.33kg/min	Ø 15~30mm
DW-MF-45	1.67kg/min	2.33kg/min	Ø 15~30mm
DW-MF-70	2.50kg/min	3.50kg/min	Ø 15~50mm
DW-MF-90	3.33kg/min	4.67kg/min	Ø 15~50mm
DW-MF-110	4.17kg/min	5.83kg/min	Ø 15~80mm
DW-MF-160	5.83kg/min	—	Ø 15~80mm
DW-MF-300	11.25kg/min	—	Ø 15~110mm

● Main characteristics

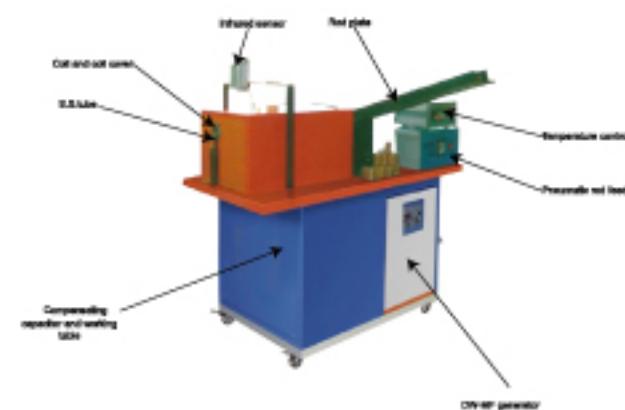
- 1.Suitable for rod heating of steel, cooper, bronze and aluminum.
- 2.Portable and light weight, easily installed beside any pressing equipment.
- 3.Installation and operation can be very easily to use.
- 4.The rod can be rapidly heated to forging temperature to reduce the oxidtin of the rod furnace and to raise the quality of the parts.
- 5.With a very large range of frequency adaptable the rod larger than 15mm can be heated, more rapidly and more evenly.
6. Designed to work continuously everyday.
- 7.Pneumatic rod feeding.
- 8.High efficiency,saving energy and cost.
- 9.Easy to change heating coil to heat rods of different size.



MF Induction Heating Rod Forging Furnace

● 1KHZ-20KHZ

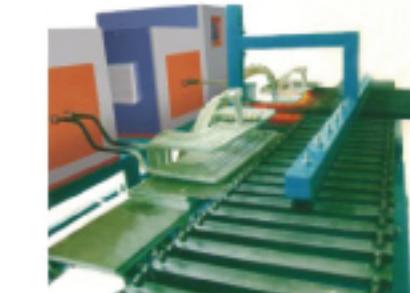
M.F Rod heating furnace with infrared controlMain structure:



1. M.F. generator
2. Compensating cap and working table
3. Induction coil and S.S. tube, etc.
4. Pneumatic rod feeder
5. Infrared sensor
6. Temperature controller

Advantages:

1. By detecting the rod temperature at the outlet of the induction coil, the heating power is controlled by the temperature controller device, such to control the temperature of the rod.
2. Melting of rods inside the induction coil will not happen any more by the using of infrared sensor and temperature control device. The operating is eased, at the same time, repair of the induction coil is decreased greatly.
3. It is especially important and necessary to use infrared sensor when heating brass and aluminum rods of which the forging temperature and melting point is very near. The forging temperature of brass is about 700°C and melting point about 900°C, in the continuously heating and feeding processes, it is likely to happen that the brass rods melt inside the induction coil due to the careless of operator. Same things may also happen to aluminum rods with forging temperature 450°C-500°C and melting point 660°C only. To install the infrared sensor is the only way to solve the problem.



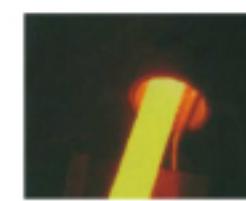
Auto feed rod heating furnace Specifications :

1. Main members :
 - (1) Medium frequency generator
 - (2) Compensating capacitor and working table
 - (3) Induction coil and S.S tubes, etc.
 - (4) Automatic feeding system
 - (5) Infrared sensor and temperature control device
 - 2 . Rod size : Ø20~60/50~250 Length
 - 3 . Temperature control : ±2°C
- Characteristics:
1. Whole processes including the rod picking up, rod selecting, rod pushing and rod sending out, heating and temperature controlling are all automatically controlled by PLC device.
 2. A wide range of Rod size fromØ20 to Ø60 and length from 50 to 250mm.
 3. The temperature of the rod can be exactly controlled to achieve high quality of the parts.

Applications :

M.F. forging rod end furnace is used for the heating of bars and rods larger than Ø12, the material can be steel, stainless steel, copper, brass ,aluminum and so on. The heating can be the whole rod, end of the rod or middle part of the rod.

Applications



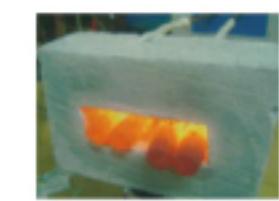
Steel rod heat forging
(cooper aluminum rod heating forging)



Bronze rod heating forging



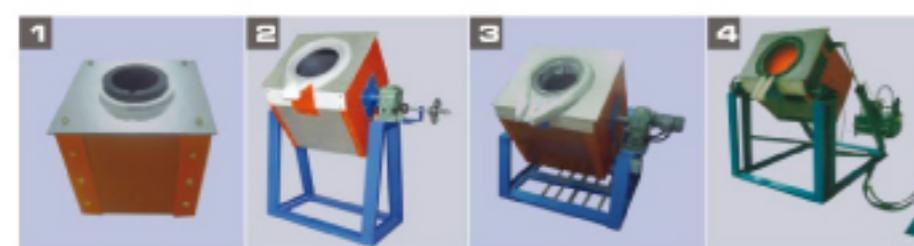
Pneumatic rod feeding heating
of bolts and nuts



Manual rod feeding

Medium Frequency Induction Melting Furnace

● 1KHZ-20KHZ

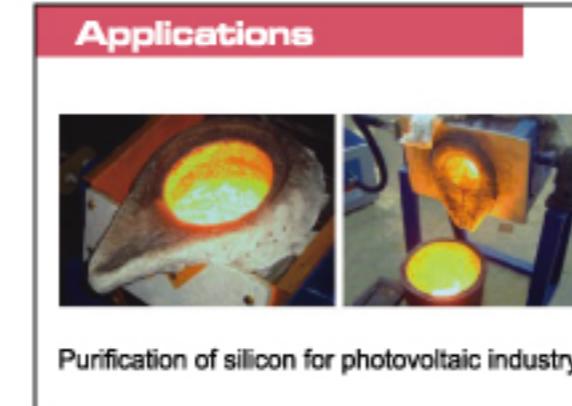


● Structure of the M. F. melting machine :

The machine set includes medium frequency generator, compensating capacitor and melting furnace, infrared temperature sensor and temperature controller can also be included if ordered. Three types of melting furnaces can be selected according to the way of pouring out, They are tilting furnace, push-up furnace and stationary furnace. According to the method of tilting, tilting furnace is divided into three kinds: manual tilting furnace, electrical tilting furnace and hydraulic tilting furnace.

● The main type and applications

Type	Steel or Iron	Copper or Precious Metals	Alloy Mg
DW-MF-15 15KW	Melting Furnace	-	10kg
DW-MF-25 25KW	Melting Furnace	5kg	20kg
DW-MF-35 35KW	Melting Furnace	10kg	30kg
DW-MF-45 45KW	Melting Furnace	18kg	50kg
DW-MF-70 70KW	Melting Furnace	25kg	100kg
DW-MF-90 90KW	Melting Furnace	40kg	120kg
DW-MF-100 100KW	Melting Furnace	50kg	150kg
DW-MF-160 160KW	Melting Furnace	100kg	250kg
DW-MF-300 300KW	Melting Furnace	200kg	500kg



High Frequency Induction Heating Equipment

● 30KHZ-80KHZ



DW-HF-4KW-A
DW-HF-15KW-A
DW-HF-25KW-A



DW-HF-25KW-B



DW-HF-35KW-B

● Main Characteristics

- 1.MOSFET and EUPEC IGBT module and inverting technologies of the first generation been used.
- 2.Simple structure and light weight and easy for maintenance.
- 3.Simple to operat, a few minutes is enough to learn it.
- 4.Shimiple to install,installation can be done by unprofessional person very easily.
- 5.Advantages of the model with timer, the power and the operating time of the heating period and the rain period can be preset repectively,to realize a simple, heating curve, this model is suggested to usefor batch production to improve the repeatability.
- 6.The separated models are designed to fit the dirty surrounding of some cases.

Model	DW-HF-4KW-A	DW-HF-15KW-A	DW-HF-25KW-A	DW-HF-25KW-B	DW-HF-35KW-B
Input voltage	1 phase 220V 50-60Hz				3 phases 380V 50-60Hz
Output oscillate power	4KVA	15KVA	25KVA	25KVA	35KVA
Duty cycle	80% 30°C	80% 30°C	100% 30°C	100% 30°C	100% 30°C
Cubage	495x240x485mm	495x240x485mm	550x240x485mm	550x240x485mm	550x240x485mm
Extension			340x205x340mm	340x205x340mm	470x265x440mm
Weight	20kg	24kg	29kg	34kg	56kg
Cable length				2-6m	
Oscillate Frequency	100K-250KHZ		30K-80KHZ		30K-80KHZ

Applications



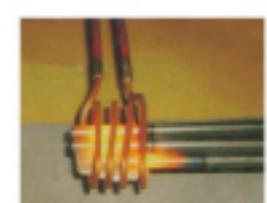
Sanitaryware Brazing



Hardware Quenching



Tubes soldering



Iron Bar forging

High Frequency Induction Heating Equipment

● 30KHZ-80KHZ



DW-HF-45KW-B



DW-HF-60KW-B



**DW-HF-90KW
DW-HF-120KW-B/DW-HF-160KW-B**

● Main Characteristics

1. 100% duty cycle, continuous working is allowed at maximum power output.
2. Light weight, 50~70kg only.
3. Constant current or constant power status can be selected accordingly to achieve higher heating efficiency.
4. Display of heating power and heating current and oscillating frequency.
5. Auto-compensation circuit of frequency modulation and frequency, the function of digital high precise power starting improves greatly the heating and brazing stability.

● Technical parameters

Model	DW-HF-45KW-B	DW-HF-60KW-B	DW-HF-90KW-B	DW-HF-120KW-B	DW-HF-160KW-B
Input voltage	380V 50~60Hz				
Output oscillate power	45KW	60KW	90KW	120KW	160KW
Output frequency	30-80KHZ	30-80KHZ	30-80KHZ	30-80KHZ	30-80KHZ
Max. input power	50KVA	68KVA	99KVA	132KVA	178KVA
Max. Cooling water flow	0.3Mpa ≥ 6L/Min	0.3Mpa ≥ 6L/Min	0.4Mpa ≥ 8L/Min	0.5Mpa ≥ 12L/Min	0.6Mpa ≥ 12L/Min
Oscillating current	15-90A	20-120A	30-180A	40-200A	50-330A
Duty cycle	100% 30°C				
Weight	64kg	64kg	95kg	105kg	135kg
Cubage	Host computer	550x240x535mm	650x285x610mm	680x370x640mm	680x370x640mm
	Extension	470x265x440mm	510x285x430mm	900x500x600mm	900x500x600mm
Cable length	2-6m				

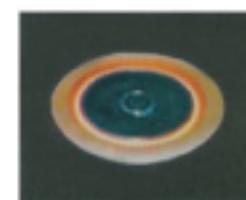
Applications



Big axes quenching



300x300x600mm
Heating steel plate



p400mm
Quenching gear



Welding sanitary ware, tap

Ultra high Frequency Induction Heating Equipment

● 1.1 -2.0MHZ



**DW-UHF-3.2KW
DW-UHF-4.5KW
DW-UHF-6.0KW-I**



**DW-UHF-6.0KW-II
200-700KHZ/1GBT**



**DW-UHF-6.0KW-III
0.5-1.1MHZ/MOSFET**

● Main Characteristics

1. With high frequency up to 100KHZ-2.0MHZ, the quenching thickness can be controlled lower than 1mm, and very tiny parts can be easily heated.
2. 1GBT and inverting technologies of third generation been used, higher reliability and lower maintenance cost.
3. 100% duty cycle, continuous working is allowed at max power output.
- 4.. Light weight, 20~70kg only, small and portable.
5. Constant current or constant power status can be selected accordingly to achieve higher heating efficiency.

● Applications

1. Harden treatment for belt of saw, knife.
2. Hardening treatment for both sides belt of knife.
3. Quenching valves.
4. Heating electrode.
5. Brazing of the saw tip.
6. Quenching of the gear.
7. Heating of the small screen.
8. Drills forging or hardening.
9. Brazing of the small PCB drills.
10. Brazing for parts of jewellery.
11. Brazing for DLC data link connector.
12. Brazing for the parts of optical spectacle frame.
13. Soldering for DLC data link connector.
14. Tin-lead bonding antennas.
15. Tin soldering coaxial cable.
16. Annealing the small parts.
17. Brazing of the tools.
18. Quenching of the small shaft.
19. Shaping of the small shaft.

Model	DW-UHF-3.2KW	DW-UHF-4.5KW	DW-UHF-6.0KW-I	DW-UHF-6.0KW-II	DW-UHF-6.0KW-III
Input voltage	220V 50~60Hz	220V 50~60Hz	220V 50~60Hz	220V 50~60Hz	220V 50~60Hz
Output power max	3.2KW	4.5KW	6.0KW	6.6KW	6.6KW
Output frequency	1100-2000KHZ	1100-2000KHZ	1100-2000KHZ	200-700KHZ	500-1100KHZ
Heat output cur	5-15A	5-20A	10-28A	5-30A	5-30A
Weight	20KG	21KG	22KG	23KG	21.5KG
Cubage	Host computer	320x190x400mm	320x190x400mm	320x190x400mm	570x260x500mm
	Transformer	240x115x120mm	240x115x120mm	240x115x120mm	140x90x90mm

Applications



Copper/steel brazing



Brazing of the communications products



Brazing of the hardware



Brazing of the capillary tube



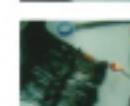
Brazing of the fishhook



Soldering of the small precision pieces



Heating electrode



Annealing sheet steel

Ultra High Frequency Induction Heating Equipment

● 100KHZ - 500KHZ



DW-UHF-10KW
DW-UHF-20KW



DW-UHF-40KW
DW-UHF-30KW

● Main Characteristics

These series are suitable for many applications, for example,

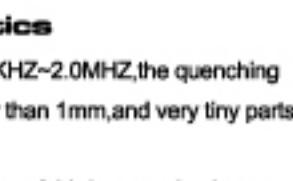
- (1) Heat treatment of gear and shaft
- (2) steel and stainless steel screw coating
- (3) floating melt for institute or college research
- (4) tiny or powder material melting
- (5) copper joint brazing and so on.



DW-UHF-100KW

● Main Characteristics

1. With high frequency up to 100KHZ~2.0MHZ, the quenching thickness can be controlled lower than 1mm, and very tiny parts can be easily heated.
2. IGBT and inverting technologies of third generation been used, higher reliability and lower maintenance cost.
3. 100% duty cycle, continuous working is allowed at max power output.
4. Light weight, 20~70kg only small and portable.
5. Constant current or constant power status can be selected accordingly to achieve higher heating efficiency.



DW-UHF-60KW

● Technical parameters

Model	DW-UHF-10KW	DW-UHF-20KW	DW-UHF-30KW	DW-UHF-40KW	DW-UHF-60KW	DW-UHF-100KW
Input voltage						
	380V 50~60HZ					
Output power max	10KW	20KW	30KW	40KW	60KW	100KW
Output frequency	50-300KHZ	50-250KHZ	50-200KHZ	50-200KHZ	30-150KHZ	30-150KHZ
Heat input current	3-15A	5-30A	7-45A	10-60A	12-90A	20-145A
Weight	28kg	53kg	53kg	77kg	77kg	120kg
Cubage	Host computer	570x260x500mm	590x300x530mm	590x300x530mm	680x370x640mm	680x370x640mm
	Extension	520x255x380mm	520x255x380mm	530x330x480mm	530x330x480mm	780x300x800mm

Applications



Quenching gear



Quenching of motor parts



Brazing of the diamond disc sawtooth



Hot spraying NYLOK (thermal spraying jam nut)

Saw blade welding machine

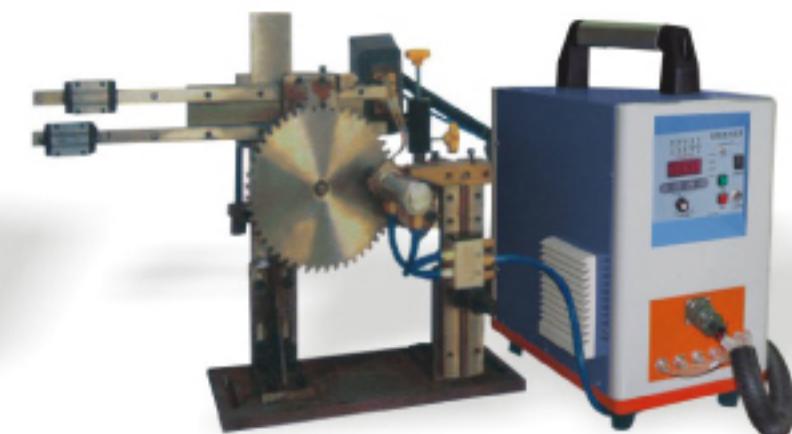
● 0.5MHZ- 1.1 MHZ

Semi automatic saw blade welding machine

● Special power supply



DW-UHF-6.0KW-III
0.5~1.1MHZ/MOSFET



12

Full automatic saw blade welding machine

● Main Characteristics

It is mechanical vibration sorting, and use photoelectricity to detect alloy. Parts feeding, measuring temperature and oil dripping automatically, using ultra-high frequency fission welding. Soldering terminal sent cutting and welding automatically. It has automatic temperature compensation to ensure the accuracy of alloy welding.

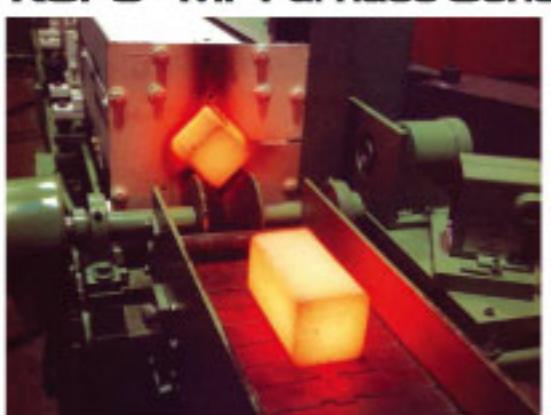


● Technical parameters

Frequency	0.5~1.1MHZ
Input Voltage	220V Single phase
Welding Diameter	150-450mm
Teeth Pith	20-70mm
Teeth Thickness	1.5-5.5mm
Alloy Length	5.5-12.5mm
Gear Welding Speed	10 teeth/min
Main Motor Power	6.6KW
Machinery Weight	620kg
Machinery Size	1100(L)X410(W)X1200(H)

E-mail: inductionheating@gpgyjr.com.cn Tel: +86-131-55965571

KGPS - MF Furnace Generator

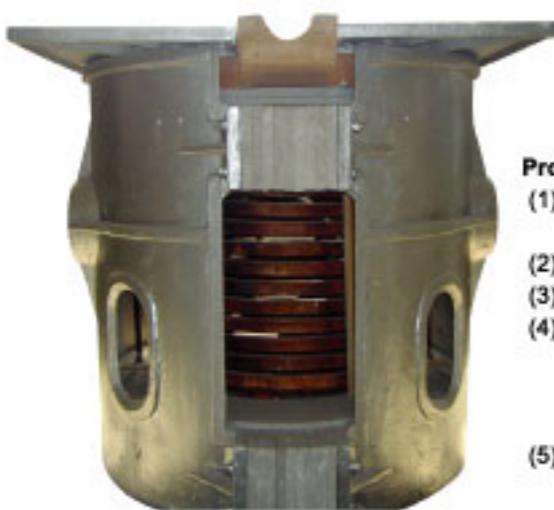


Industrial Forging Billet Furnace/Industrial Forging Furnace



Specifications

1. IF induction furnace the metallurgical industry,
2. foundry industry,
3. forging industry,
4. heat treatment industry,



Industrial Furnace/Induction Furnace/Induction Melting Furnace



Production Description:

- (1) KGPS Medium Frequency Furnace Power Supply
- (2) Wide frequency scope
- (3) Constant capacity control
- (4) Protections of over currency, overvoltage, under currency, under voltage, lack of water, default phase
- (5) Frequency-sweep zero voltage start

Rated capacity	KG	10-50	100	150	250	350	500	750	1000	1500	2000	3000	5000
Rated power	KW	50	100	100	150	180	250	450	600	1000	1250	1500	2500
Input voltage	V	380	380	380	380	380	380	380	380-2	380-2	380-2	380-2	660-2
Transformer capacity	KVA	60	120	120	150	200	315	500	800	1500	1800	2000	3500
Out voltage	V	750	750	750	750	750	250	1500	2500	2500	2500	2500	3500
Output frequency	KHZ	2.5	1	1	1	1	1	1	0.8	0.8	0.7	0.7	0.5
Melting time	Min	20-60	20-60	30-70	30-70	30-70	40-80	50-90	50-90	60-100	60-100	60-100	60-100
Power consumption(steel)	Kw.h/T	900	850	850	800	750	700	650	620	600	580	570	560
Power consumption(cast iron)	Kw.h/T	850	800	850	750	700	650	630	610	580	570	560	560
Power consumption (copper)	Kw.h/T	500	500	500	490	480	480	400	390	380	360	330	310
Power consumption (aluminum)	Kw.h/T	780	750	750	710	670	620	600	570	540	520	500	500
Water cooling	T/h	3	5	5	7	8	10	15	18	25	28	35	43

E-mail: inductionheating@gpgyjr.com.cn Tel: +86-131-55965571

Vacuum Induction Melting Furnace



Features:

- 1.High temperature:up to 3000 celsius ;
- 2.Far Infrared thermometer;
- 3.Water Cooling;
- 4.PID controll;
- 5.Graphite crucible.

Main technical parameters:

Maximum temperature: 3000 °C
High-temperature zone volume: 0.01m3, 0.02m3, 0.03m3, 0.05m3, 0.1m3, 0.15m3, 0.2m3, 0.3m3
Furnace working atmosphere: vacuum, hydrogen, nitrogen, inert gases

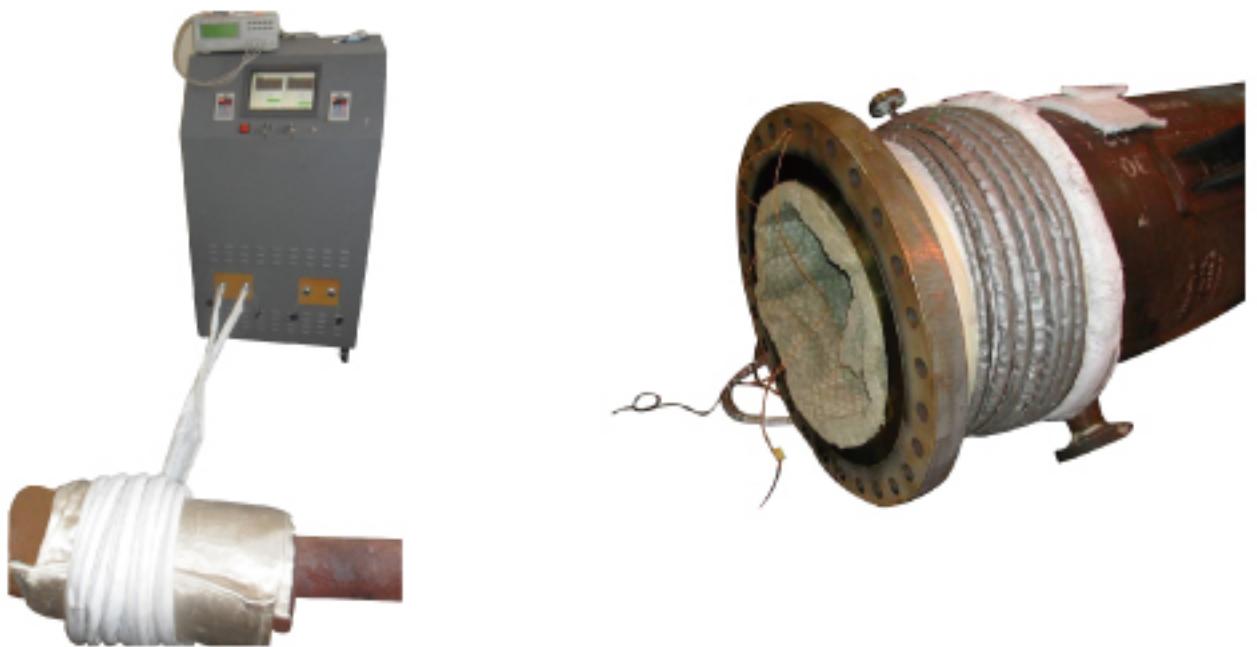
Temperature uniformity: $\leq \pm 10^{\circ}\text{C}$
Temperature measurement: infrared optical temperature measurement range of 800 ~ 3500 °C temperature or 0 ~ 3500 °C;
Accuracy: 0.2 ~ 0.75%
Temperature control: process control and manual control; control accuracy: $\pm 1^{\circ}\text{C}$
Limit heating rate: 200 °C / min (air furnace, depending on the volume and the high temperature furnace configuration).

Product Description

Vacuum Melting Furnace is periodic operating, providing vacuum or protective atmosphere, in which the alloy steel, lanthanum and others can smelt and cast. Besides, it can be also used in metal materials' refining.

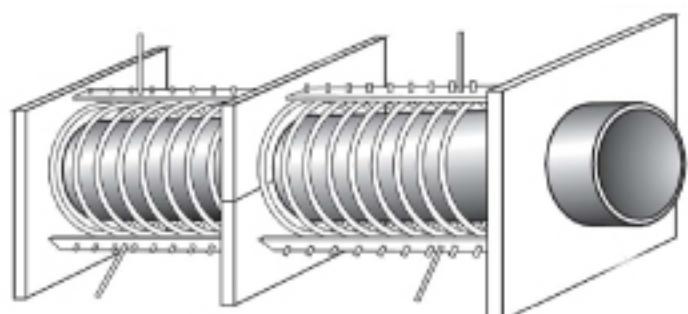
Model	Electric Power	Frequency	Maximum Working Temperature	Capacity	Ultimate Vacuum	Pressure Rising Rate	IF power supply
	30kw	4000hz	3000 degrees	3 kgs	6.67x10-3Pa	6Pa/hr	IGBT
ZG-10	60kw	1500hz	3000 degrees	10 kgs	6.67x10-3Pa	6Pa/hr	IGBT
ZG-25	100kw	2000hz	3000 degrees	25 kgs	6.67x10-3Pa	6Pa/hr	IGBT
ZG-50	100kw	1500hz	3000 degrees	50 kgs	6.67x10-3Pa	6Pa/hr	KGPS
ZG-150	200kw	1500hz	3000 degrees	150 kgs	6.67x10-3Pa	6Pa/hr	KGPS
ZG-200	250kw	2500hz	3000 degrees	200 kgs	6.7x10-2Pa	6Pa/hr	KGPS

Pipeline Induction Heating Machine



15

All air-cooling induction heating equipment



Applications and Specifications:

1. IT is widely used for large pipeline heating treatment, such as preheating of the oil pipeline, postweld heating treatment, stress relieving and so on.
2. Input Voltage: 380V, 3phase, 50/60HZ
3. Output Power: 15KW -320KW , 100% duty cycle.
4. Output frequency: 16KHZ-40KHZ
5. Cooling: Air cooling

Model	DWP-10KW	DWP-20KW	DWP-30KW	DWP-40KW	DWP-60KW	DWP-80KW	DWP-160KW
Input Power	AC 3X380V	AC 3X380V	AC 3X380V	AC 3X380V	AC 3X380V	AC 3X380V	AC 3X380V
Output Frequency	16-36KHZ	16-36KHZ	8-36KHZ	8-36KHZ	8-36KHZ	8-36KHZ	8-36KHZ
Output Power	Single output	10KW	20KW	30KW	40KW	60KW	80KW
	Double output	5KW	10KW	15KW	20KW	30KW	40KW
Input current	15A	30A	46A	60A	90A	120A	238A
Output voltage	1500-3000V	1500-3000V	1500-3000V	1500-3000V	1500-3000V	1500-3000V	1500-3000V
Output current	Single output	20-32A	30-60A	40-70A	60-90A	90-130A	120-170A
	Double output	10-16A	15-25A	20-35A	30-50A	40-70A	60-90A

Induction Heating Coils



16

In a sense, coil design for induction heating is built upon a large store of empirical data whose development springs from several simple inductor geometries such as the solenoid coil. Because of this, coil design is generally based on experience.

Special Custom

- The generator is available with two heating head



● Special order, suitable for different countries

- 1.The Flexible Induction Coil is longer with 2 meters.
2. 3X220V 50-60HZ input power desire
- 3X380V 50-60HZ input power desire
- 3X415V 50-60HZ input power desire
- 3X440V 50-60HZ input power desire
- 3X480V 50-60HZ input power desire



● Infrared radiation thermometer



Model

- Laser A01-50°C~650°C
- Laser A02-250°C~800°C
- Laser A03-400°C~1200°C
- Laser A04-700°C~1600°C
- Laser A05-1000°C~2000°C

● Crucible

- 1.Graphite crucible
- 2.Clay graphite crucible
- 3.Silicon carbide crucible
- 4.Corundum crucible
- 5.Ceramic crucible



● Water Cooler



● Silver Solder



● The parts of M.F hardening furnace



Special Custom

● Automobile hub intermediate frequency heating furnace



DW-MF-160KW

● Golden melting machine



Melting Gold,Silver,Platinum,precious metal.

● Full automatic high speed Cathode tab welding machine for lithium battery



DW-UHF-6.0KW-I

● CNC quenching machine(Trip:1~1.5m)



18

● Handheld induction heater DW610/DW630/DW660



Applications:
Used for brazing on site such as the brazing of copper cable connectors, copper joints in the air conditioner, copper connectors of the transformer and so on.

● Communication connector welding production line



Brazing of the communications products