Operating Instructions

Induction heating system

IHG 1500

IHG 1500

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Imprint

Product identification

Induction heating system	Item number
IHG 1500	6400015

Manufacturer

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Indications regarding the operating instructions

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Indications regarding the copyright

Content

1 Introduction

You have made a good choice by purchasing the UNI-CRAFT induction heating system.

Read the operating manual thoroughly before commissioning the machine.

It gives you information about the proper commissioning, intended use and safe and efficient operation and maintenance of your Induction heating system.

The operating manual is part of the induction heating system. Always keep this operating manual in the location where your Induction heating system is being operated. All local accident prevention regulations and general safety instructions for the operating range of your Induction heating system must also be complied with.

1.1 Copyright

The contents of this manual are protected by copyright. Their use is permitted when using the induction heating system. Any further use is not permitted without the written permission of Stürmer GmbH.

We report for the protection of our products brand, Patent and design rights, if this is possible in individual cases. We vigorously oppose any infringement of our intellectual property.

1.2 Customer service

Please contact your dealer if you have any questions about your induction heating system or technical information. There you will be happy to help with expert advice and information.

Germany:
Stürmer Maschinen GmbH
Dr.-Robert-Pfleger-Str. 26
D-96103 Hallstadt

Repair-Service:
Fax: 0951 96555-111
Email: service@stuermer-maschinen.de
Internet: www.unicraft.de

Ordering spare parts:
Fax: 0951 96555-119
Email: ersatzteile@stuermer-maschinen.de

We are always interested in information and experiences that arise from the application and can be valuable for the improvement of our products.

1.3 Limitation of liability

All information and instructions in this manual have been compiled taking into account the applicable standards and regulations, the state of the art as well as our many years of knowledge and experience.

In the following cases, the manufacturer assumes no liability for damages:

- Non-observance of the operating instructions,
- Inappropriate use
- Use of untrained staff,
- unauthorised modifications
- technical changes,
- Use of not allowed spare parts.

The actual scope of delivery may deviate from the explanations and presentations described here in case of special models, when using additional ordering options or due to latest technical modifications.

The obligations agreed in the delivery contract, the general terms and conditions as well as the delivery conditions of the manufacturer and the legal regulations at the time of the conclusion of the contract are applicablen.

2 Safety

This section provides an overview of all important safety packages for the protection of the operating personnel as well as for safe and fault-free operation. Other task based safety notes are included in the paragraphs of the individual phases of life.

2.1 Symbol explanation

Safety instructions

The safety notes in these operating instructions are highlighted by symbols. The safety notes are introduced by signal words which express the concern of the risk.

DANGER!

This combination of symbol and signal words indicates an imminently dangerous situation which may lead to death or severe injuries if they are not avoided.

WARNING!

This combination of symbols and signal words indicates a possibly dangerous situation which may lead to death or severe injuries if they are not avoided.

CAUTION!

This combination of symbol and signal words indicates a possibly dangerous situation which may lead to minor or light injuries if they are not avoided

ATTENTION!

This combination of symbol and signal words indicates a possibly dangerous situation which may lead to property and environmental damages if they are not avoided.

NOTE!

This combination of symbol and signal words indicates a possibly dangerous situation which may lead to property and environmental damages if they are not avoided.

Tips and recommendations

Tips and recommendations

This symbol highlights useful tips and recommendations as well as information for all efficient and trouble-free operation.

To reduce the risk of personal injury and property damage and to avoid dangerous situations, you must observe the safety instructions in this operating manual.

2.2 Personal protective equipment

The personal protective equipment serves to protect persons against impairments of safety and health while working. The staff member has to wear personal protective equipment while performing different tasks on and with the machine which are indicated in the individual paragraphs of these instructions.

The personal protective equipment is explained in the following paragraph:

Head protection

The industrial helmet protects the head against falling objects and bumping against fixed objects.

Ear protection

The ear protection protects against hearing damage caused by noise.

Protective goggles

The safety glasses are used to protect the eyes from flying parts.

Protective gloves

The protective gloves are used to protect the hands from sharp-edged components, as well as from friction, abrasions or deeper injuries.

Safety boots

The safety shoes protect the feet against bruising, falling parts and slipping on slippery surfaces.

Protective clothing

Protective clothing is tight-fitting work clothing, with no protruding parts, with low tear resistance.

2.3 Safety information

The induction heating system has various safety markings that must be observed and followed.

The safety labels must not be removed. Damaged or mis-sing safety markings can lead to malfunctions, personal injury and property damage. They are must be replaced immediately.

If the safety markings are not immediately recognizable and comprehensible, the induction heater should be taken out of service until new safety markings have been affixed.

The following safety labels and symbols are appropriate:

Fig. 1: Safety markings on the Induction Heater I 1 Warning of dangerous electrical voltage I 2 warning of hot surface I 3 Warning of magnetic field I 4 Warning of flammable substances I 5 warning explosive substances I 6 prohibition for persons with Pacemaker I 7 Prohibition access Unauthorized I 8 Mandatory signs: observe operating instructions, eye protection wear protective clothing, wear protective gloves, Wear respiratory protection, unplug the power cord

3 Intended use

The induction heating system IHG 1500 serves exclusively for use in the automotive and engineering industries. It is suitable for removing parts such as glass panes, cladding, strips and stickers from metallic surfaces, as well as for loosening stuck and rusted parts and for repairing small dents in metallic surfaces, e.g. Hail damage.

The induction heating system may only be operated by persons who have been instructed in the device.

Proper use also includes compliance with all information in this manual. Any use beyond the intended use or otherwise is considered misuse.

For structural and technical changes to the induction heating system, the company Stürmer Maschinen GmbH assumes no liability.

Claims of any kind due to damage due to improper use are exclude

4 Technical Data

4.1 Table

Model	IHG 1500
Electrical Voltage	230 V / 50/ 60 Hz
Input	1,7 kVA
Induction power	1,5 kW
Fuse	16 A
Protection	IP 21
Output frequency	25 - 60 kHz
Dimension (LxBxH) [mm]	200 x 75 x 140
Weight	4,5 kg

4.2 Typen plate

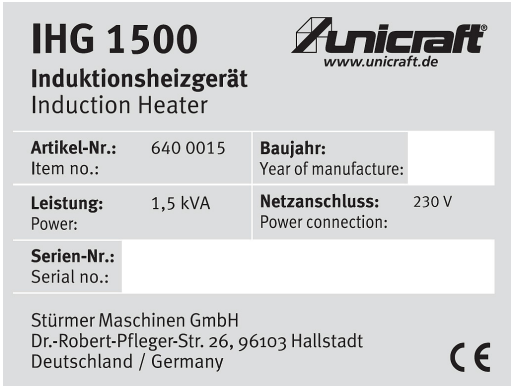

Fig. 2: Type plate IHG 1500

5 Transport, Packaging and Storage

Delivery

Check the induction heating system after delivery for visible transport damage. If you discover any damage, immediately report it to the transport company or the dealer.

Transport

NOTE!

Protect the device from moisture.

Tips and recommendations

For longer transports, make sure that the corrosion protection is intact or renewed if necessary.

Packaging

All packaging materials and packaging aids used are recyclable and must always be recycled.

Packing components made of cardboard are shredded for waste paper collection.

The foils are made of polyethylene (PE), the upholstery parts made of polystyrene (PS). You can hand over these substances to a recycling center or to the disposal company responsible for you.

Storage

Make sure that the device is switched off, not connected to the mains and cooled down. Use a dry, clean cloth or paper towel to remove grease, oil, and other contaminants from the machine, attachments, and cables before packing the IHG 1500 into the case.

Use available non-volatile detergents for grease, oil and dirt. Prior to the first reuse of the IHG 1500, all components should be allowed to air dry. No part of the device may be submerged in water or other liquids.

Store the induction heater in a dry, clean and frost-free environment.

6 Description of device

6.1 Illustration

Illustrations in this manual may differ from the original.

Fig. 3: Induction heating system IHG 1500

1 fan
2 carrying handle
3 housing
4 cables
5 induction heating gun - coil holder
6 heating coil
7 clamping screw
8 LEDs

The LED displays the following information:

- Green = Standby
- Green flashing = cooling down phase
- Yellow = heating is on
- Yellow flashing = device is overheating
- Flashing red = Bad coil or overvoltage
- Red light = error

6.2 Scope of delivery

Fig. 4: Scope of delivery

- Induction Heater in plastic case
- (1) Front coil M 8
- (2) Front coil M 12
- (3) Focus coil
- (4) Winding cord

6.3 Equipment

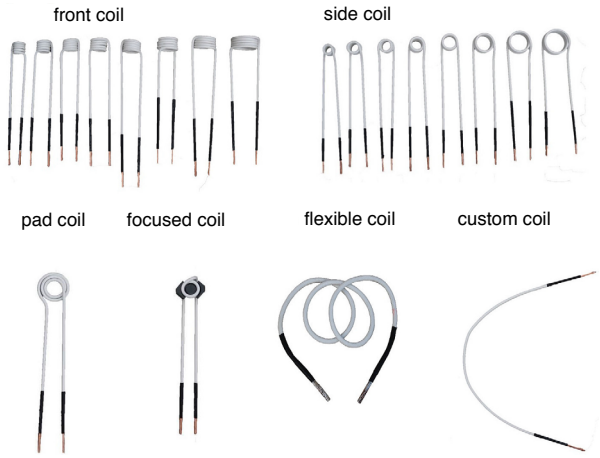

Fig. 5: Equipment

Name	Item number
Heating coil user-defined,, D = 4 mm, L=750 mm	641 1001
Flat spiral coil (PAD-Spule)	641 1002
Flexible heating coil L = 800 mm	641 1003
Focus coil D = 20 mm	641 1004
Ceramic heating coil flexible L= 800 mm	641 1005
Front coil L=220mm M6 (15)	641 1015
Front coil L=220mm M8 (19)	641 1019
Front coil L=220mm M8 (20)	641 1020
Front coil L=220mm M10 (23)	641 1023
Front coil L=220mm M12 (26)	641 1026
Front coil L=220mm M16 (32)	641 1032
Front coil L=220mm M20 (38)	641 1038
Front coil L=220mm M22 (45)	641 1045
Side coil L=220mm M6 (15)	641 1115
Side coil L=220mm M8 (19)	641 1119
Side coil L=220mm M8 (20)	641 1120
Side coil L=220mm M10 (23)	641 1123
Side coil L=220mm M12 (26)	641 1126
Side coil L=220mm M16 (32)	641 1132
Side coil L=220mm M20 (38)	641 1138
Side coil L=220mm M22 (45)	641 1145

7 Set up and Connect

ATTENTION!

All activities for installation and preparation for connecting the device to the power supply may only be carried out when the device is switched off and disconnected from the mains supply.

The power connections may only be made by professionals.

The place of installation of the induction heater should be chosen so that the openings for the inlet and outlet of the cooling air are not restricted. At the same time it must be ensured that no conductive dusts, corrosive vapors, moisture or the like are sucked in. Around the device at least 250 mm must remain free.

ATTENTION!

Park the unit on a level surface or place it on a trolley with sufficient load capacity to prevent it from tipping over.

7.1 Electrical connection

DANGER!

Danger to life due to electric current!

There is an immediate danger of electrocution on contact with live components.

- Work on the electrical system should only be carried out by qualified electricians.

This is a safety class I device that can only be supplied with power from a socket with protective conductor. The mains cable must under no circumstances be interrupted (e.g. by an extension cable)! Any disconnection of the protective conductor or its disconnection creates a risk of electric shock, which can cause injury. Make sure that the device (device chassis) is properly grounded.

ATTENTION!

The device may only be connected to a power supply with a grounded neutral conductor!

Step 1: Before connecting to the mains, check whether the mains voltage corresponds to the voltage indicated on the type plate.

Step 2: Connect the power cord to the mains.

The power cord must not be twisted or kinked, as this may damage the internal wiring. Never use the IHG 1500 if the power cord shows signs of damage. Keep the power cord away from heat, oil, sharp edges, or moving parts. Never repair the power cord - if it is damaged, the power cord must be replaced. Damaged cables create a risk of electric shock.

Before replacing the application (coil), disconnect the IHG 1500 from the power source (socket).

If you are not using the IHG 1500, unplug the power cord from the wall outlet.

ATTENTION!

This product is a Class A product. It is designed for industrial use. It can lead to radio interference in residential, commercial and light industrial environments. This product is not intended for use in residential, commercial and light industrial environments connected to the public grid. The operator may be required to take appropriate measures to reduce the interference.

7.2 Fire protection

Do not heat aerosol cans or other cans, metal containers and any type of pressure vessels used for storage of fuel, compressed gases and liquids. The heat generated by heating with the IHG 1500 may cause it to explode and its contents to ignite.
Do not use the heating coil (coil) if its insulation is damaged. A defect in the insulation can cause sparks in contact with metal parts or between the turns of the winding. In particular, when working on / or near gas lines and / or gas tanks, this may pose a danger of explosion or fire. The use of coils with damaged insulation voids the warranty.
Do not use the IHG 1500 near a pyrotechnic device (such as an air bag). The resulting heat can cause an unexpected explosion. Keep a minimum distance of 10-20 cm from these devices.

7.3 Safety in use

Never leave the switched-on IHG 1500 unattended.

Make sure the power supply unit and bobbin holder have sufficient air supply for cooling. Make sure that the ventilation slots are clean and free of dust and dirt that obstruct the flow of cooling air.

Do not try to repair the IHG 1500. The unit contains no user-serviceable components, except replaceable heating coils.

ATTENTION!

Before connecting the IHG 1500 to the mains, make sure the socket voltage matches the voltage on the nameplate. Failure to match the voltage indicated on the rating plate may result in serious damage to the equipment

ATTENTION!

The operating cycle of the IHG 1500 - 1 minute heating (on) and 2 minutes cooling time (off, LED flashes green) - must not be exceeded. The most important parts of the device are protected against overheating, but not the heating coils, which can possibly lead to damage.

Extension cable:

If necessary, you can only use the following extension cords:

•up to 5 m with 2.5 mm² diameter

•up to 15 m with 4 mm² Diameter

Use only one extension cord - you must NOT connect two or more extension cords together. Do not use any extension cords other than those mentioned above. Unroll the extension cable completely - a rolled-up extension cord may overheat and cause a fire.

Generators:

If you use the device with an alternative energy source - e.g. With a mobile power generator - it is necessary to ensure quality control of alternative sources with sufficient power and AVR. Use a generator of at least 3-4 kW or DC / AC inverters with a power output of 2-3 kW and only one sine wave - do not use inverters with a square or quasi-sine wave. Failure to comply with the above requirements may result in damage to the unit and void the warranty.

8 Operating principle

The operating principle is based on the generation of a changing magnetic field, which is concentrated by the inductor on the metallic workpiece to be heated: eddy currents are generated in the workpiece, which heat it very quickly.

In insulating materials, these currents do not flow, which is why materials such as glass, plastic, ceramic, wood or fabric are not heated by this system.

Although the inductor generates eddy currents in non-magnetic materials such as aluminum, copper or silver, they heat only slightly due to their low electrical resistance.

In contrast, the inductor generates strong eddy currents in all ferromagnetic materials such as iron, steel or cast iron, which become extremely hot due to their high electrical resistance. The different forms of inductors concentrate the magnetic flux and thus the heat depending on the intended use in different ways. The generated flux can be used to heat metals that are no further than 2 to 2.5 centimeters away from the tool. The heating power is greater the closer the inductor is to the workpiece.

9 Operation

Before using the device, carefully inspect the cable, carrying handle and bobbin holder to make sure they are not damaged.

Step 1: Unplug the device from the mains and loosen the screws on the coil holder.

Step 2: Insert the work coil into the holes in the coil clamp and tighten the locking screws on the sides.

Step 3: Connect the power cord of the unit to a grounded normal ~ 230V, 50 / 60Hz socket and turn on the unit with the main power switch. Before switching on, make sure that the heating button is not pressed and the bobbin holder is stored in a safe place.

Step 4: Bring or place the working coil at the point to be heated and press the button on the coil holder. When the button is pressed, the heating remains activated. The working cycle of 2 minutes heating and 2 minutes cooling must not be exceeded.

Step 5: When finished, release the button on the bobbin holder and remove the working coil from the heated material.

NOTE!

When heating, a gap of approximately 3 to 5 mm should be maintained between the coil and the heated material to avoid excessive wear of the heating coil. A gap of more than 3-5 mm reduces the heat efficiency and extends the heating time.
After heating is complete, place the coil holder with the heating coil in a safe, non-combustible place until the heating coil has cooled completely. Then switch off the device via the main switch and disconnect it from the mains.

ATTENTION!

The coil and the heated object reach a very high temperature and can cause burns or fire if handled improperly.

10 Tools and Application

WARNING!

Risk of injury!

There is a risk of injury if you do not follow these rules.

- Never work with the induction heater if you are under the influence of alcohol, drugs or medicines and / or you are overtired or have concentration-impairing illnesses.
- The induction heater may only be operated by one person. Other persons must keep away from the work area during operation.

WARNING!

Magnetic field

- Do not bring objects near the device that could be damaged or altered by magnetic fields.
- Keep the head and trunk as far away from the inductor as possible.
- During heating, at least 50 cm distance from the generator must be observed.
- The inductor may only be aimed at metal parts that are to be heated. Never aim the inductor at body parts!
- Do not wear metal objects such as watches, rings or piercings because the inductor can heat up the metal very quickly and cause burns.
- Do not wear clothing with metal zippers, buttons or other linings because the inductor can heat up the metal very quickly, inflaming and burning clothing.

ATTENTION!

Prohibition for persons with pacemakers!

The inductor may only be aimed at metal parts that are to be heated. Never aim the inductor at body parts!

WARNING OF HOT SURFACE!

Risk of burns!

Do not touch the hot workpiece with your bare hands. Wait until the workpiece has cooled down.

ATTENTION!

- Remove all flammable substances (e.g wood, paper, cloth) from the work area.
- To reduce the build-up of smoke during heating, it is advisable to clean the workpieces (eg workpieces that are soiled by lubricants or thinners).
- The flue gases generated during the heating process can be toxic. Wear a suitable respirator with a mask that protects against dust and smoke (double filter)
- Only work in well-ventilated areas.

ATTENTION!

- The induction heater must not be used in humid environments, wet or rainy conditions.
- Do not use cables with damaged insulation or loose connections.
- Do not heat containers, vessels or piping containing or containing liquid or gaseous explosives.
- Avoid working near chlorinated solvents or on materials that have been cleaned with these substances.
- Do not heat pressure vessels.

ATTENTION!

- Do not heat the inductor when it is near or touching the generator.
- Do not use the inductor near „FAHRZEUGAIRBAGS“. Keep the inductor at least 10 cm away from the airbag: The heat from the tool may cause the airbag to trip abruptly. Refer to the vehicle manual to find out exactly where the airbags are.

Class A device:

This machine meets the requirements of the technical product standards for the exclusive commercial and professional use. Electromagnetic compatibility in residential buildings and buildings in which the devices are connected directly to a low-voltage power supply typical for residential buildings is not ensured.

Wear safety gloves!

Wear eye protection!

Wear respiratory protection!

Wear safety shoes!

Wear protective clothing!

NOTE!

Before using the induction heater for the first time, perform the following steps:
Check all connections and lines.

There must be a safety distance (Fig. 6, d) of min. 20 cm between inductor and body!

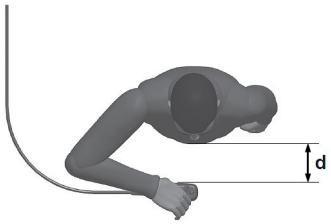

Fig. 6: Keep safety distance

10.1 Attachable front and side heating coils

The attachable front and side coils are standard applications for heating nuts, sleeves, gaskets, hinges, exhaust pipes, screws, etc. in easily accessible locations.

Fig. 7: Attachable front coils

Fig. 8: Attachable side coils

NOTE!

The life of the coils can be increased by cleaning rust, paint, oil from the heated material, etc.

When heating, a gap of about 3 to 5 mm should be left between the coil and the heated material to avoid excessive wear of the heating coil. Holding the coil directly on the hot material can cause the coil insulation to burn, thereby shortening the life of the coils. We recommend to keep the direct contact of the coil with the hot material to a minimum.

TIP! When heating, a gap of about 3 to 5 mm should be left between the coil and the heated material to avoid excessive wear of the heating coil. Holding the coil directly on the hot material can cause the coil insulation to burn, thereby shortening the life of the coils. We recommend to keep the direct contact of the coil with the hot material to a minimum.

10.2 PAD-Coil

The flat spiral pad coil is designed for heating flat sheets and for directing small dents in car bodies by heating. The flat coil is also intended for easy detachment of the stickers, sealants, fillers, etc. from the steel sheet by heating the base material.

Fig. 9: PAD-Coil

1. Insert the spool into the spool holder.
2. Hold the bobbin surface over the material.
3. Press the power button and guide the coil with a rotary motion over the material.
4. After heating the material, leave the coil Cool for at least 2 minutes.

NOTE!

It is possible to use the coil to remove various stickers, sealants and gaskets stuck on metal or metal. The coil uses heating of the base material and thus softening, or alternatively, curing of the adhesive substance. We recommend to keep the coil between 5 and 15 mm far from the material to be heated. The required temperature and heating time can be regulated by changing the distance.

10.3 Custom heating coils

Custom coils can be shaped according to the needs of each application and customized directly by the user. They can be used for the same purposes as the attachable coils.

Fig. 10: Custom coils

10.4 Flexible heating coils

The flexible coil is used to release axle components, stiffened sensors, ball joints, etc., and in applications where it is not possible to use the attachable coils.

NOTE!

When overcharging the device (the LED warning light on the front panel flashes red), unwrap the loop to relax and repeat the process until the heater operates without overloading and turning off the device. If the heating power is too low, wrap an additional loop.

Fig. 11: Flexible heating coil

Step 1: Close one end of the spool to the spool holder and secure it with the help of the locking screw.

Step 2: Wrap the free end of the spool 2-4 times over the part that needs to be heated.

Step 3: Insert the second free end of the spool into the spool holder and secure it also with the locking screw.

Step 4: Press the button to activate the heating.

Step 5: When the heating process is complete, remove one end of the bobbin from the bobbin holder and unwrap the bobbin from the heated material.

NOTE!

When overcharging the device (the LED warning light on the front panel flashes red), unwrap the loop to relax and repeat the process until the heater operates without overloading and turning off the device.

If the heating power is too low, wrap an additional loop.

10.5 Focus Coil

The focus coil allows a higher intensity of heating on a small area and is particularly suitable for attachment to the heated material.

Fig. 12: Focus coil

1. Connect the coil to the coil holder.
2. Attach the coil to the circular surface of the coil on the material.
3. Press the button for max. 5 seconds.
4. After heating the material, leave the coil for Cool for at least 2 minutes.

11 Care, maintenance and Repair

ATTENTION!

Before starting any cleaning, maintenance or repair work, make sure that the device is switched off and disconnected from the mains.

11.1 Care by Cleaning

The induction heater should always be kept in a clean condition.

Wear safety gloves!!

NOTE!

Never use harsh cleaning agents for any cleaning work. This can lead to damage or destruction of the device.

All plastic parts and painted surfaces should be cleaned with a soft, damp cloth and some neutral detergent.

11.2 Maintenance and Repair

ATTENTION!

The following maintenance work can be performed by the operator of the device.

- Check the supply cable and the tool cables. They must be insulated and in perfect condition. Pay particular attention to the bending points.
- Check the tool. Do not use inducers with obvious defects of insulation or sheath.
- Protective tapes of the tools that have become unusable must be replaced.
- The plug of the tool must be able to be held by the associated locking lever.
- Keep the plugs of the tools clean.
- Prevent dirt, dust and filing from entering the machine.
- The unobstructed cooling air circulation must always be guaranteed.
- Check if the fan is working properly.

ATTENTION!

The following maintenance work can be performed by the operator of the device.

If the induction heater does not work properly, contact a dealer or our customer service. The contact details can be found in chapter 1.2 Customer Service.

All protective and safety equipment must be reinstalled immediately after repair and maintenance work has been completed.

ATTENTION!

Before starting maintenance and repair work, check that the following conditions are met:

- The machine switch is set to "O".
- The main switch is set to "O" and secured by keys or, in the absence of key lock, the connections of the supply cable are physically disconnected.
- Because of the existing capacitors, maintenance must not be performed until the generator has been off for at least 5 minutes.

ATTENTION!

Checks inside the live machine can cause serious electric shocks caused by direct contact with live parts.

Periodically, depending on the intensity of use and the dustiness of the environment, inspect the inside of the machine and remove dust with a dry compressed air jet (10 bar maximum). Do not aim the compressed air jet at blanks. These should be cleaned with a very soft brush or suitable solvents.

On this occasion, check that the power connections are tight and that the cables are damaged in the insulation.

ATTENTION!

Under no circumstances should the machine be operated in the open state.

To finish these operations, replace the plates of the machine and tighten their fixing screws.

After completion of the maintenance or repair, the connections and wiring must be returned to their original state. Make sure that they do not come into contact with moving parts or parts that can reach high temperatures. Reconnect all conductors as before, taking care to keep the high voltage terminals of the primary transformer separate from the low voltage terminals of the secondary transformers.

Use all original washers and screws to close the housing.

12 Troubleshooting

If the operating results are not satisfactory, check the following before carrying out systematic checks and notifying the after-sales service center:

Disorder	Possible cause	Solution
The green power indicator does not light up.	1. Power cord is defective or not plugged in. 2. Fuse defective or triggered. 3. Power supply defective.	1. Plug in the mains cable or have it replaced by an electrician. 2. Switch on or replace the fuse. 3. Inform electrician.
Yellow LED flashes.	Thermal protection device or machine protection device has tripped.	Allow the device to cool. Eliminate the cause of overheating or overload. After complete cooling of the device, turn it on again.
Insufficient results	The inductor is not positioned close enough to the workpiece to be heated.	Position the inductor close to the workpiece to be heated.

13 Disposal, Recycling of old equipment

For your own sake and in the interests of the environment, please ensure that all components of the equipment are disposed of in the proper and approved way.

13.1 Decommissionn

Disused equipment must be taken out of service immediately in order to avoid later misuse and endangering the environment or people.

Step 1: Remove all environmentally hazardous fluids from the old unit.

Step 2: If necessary, dismantle the devices into manageable and usable components and components.

Step 3: The device components and operating materials must be routed to the appropriate disposal routes.

13.2 Disposal of lubricants

Remove the leaking, used or excess grease at the lubricated lubrication points.

The disposal instructions for the lubricants used are provided by the lubricant manufacturer. If necessary, ask for the product-specific data sheets.

14 Spare parts

DANGER!

Risk of injury by using wrong spare parts!

The use of incorrect or faulty spare parts may cause risks for operating staff and damage as well as malfunctions.

- Exclusively genuine spare parts made by the manufacturer or spare parts authorised by the manufacturer shall be used.
- Always contact the manufacturer if you are unsure.

Tips and recommendations

Using non-approved spare parts voids the manufacturer's warranty.

14.1 Spare parts order

The spare parts can be obtained from the dealer or directly from the manufacturer. The contact details are in chapter 1.2 Customer Service.

Specify the following key data for inquiries or when ordering spare parts:

- Device type
- Article number
- Position number
- Year of manufacture
- Quantity
- Desired shipping type (post, freight, sea, air, express)
- Shipping address

Spare parts orders without the aforementioned data cannot be taken into account. The supplier shall determine the shipping type if no relevant data was provided.

Information about the device type, item number and year of manufacture can be found on the type plate. The type plate is mounted on the device.

Example

The pedal control for the Induction heating system must be ordered. The pedal control has the number 6 in the spare parts drawing.

By ordering spare parts, send a copy of the spare parts drawing with the marked part (pedal control) and marked positon number (6) to the dealer or spare parts department and provide the following information:

- Type of device: **Induction heating system IHG 1500**
- Item number: **6400015**
- Position number: **06**

The following spare parts drawing is intended to help identify the necessary spare parts.

The item numer of your device is:

Induction heating system IHG 1500: **6400015**

15 Spare parts drawing IHG 1500

Fig. 13: Spare parts drawing

16 Electrical wiring diagram IHG 1500

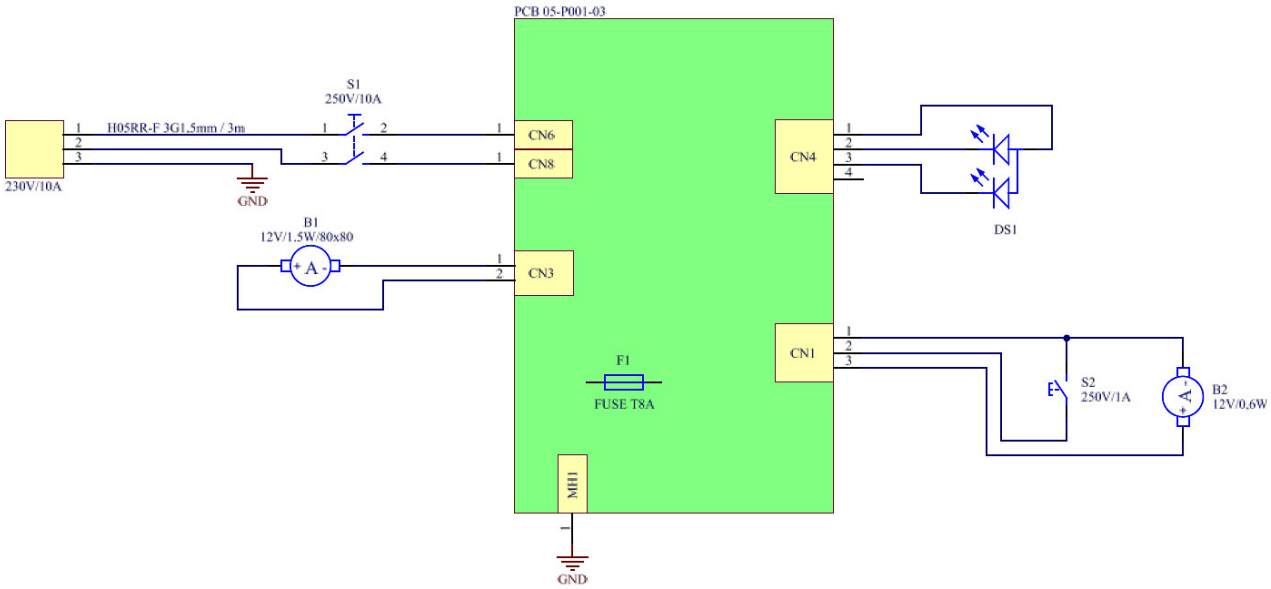

Fig. 14: Electrical wiring diagram

17 EC Decleration of Conformity

According to machine directive 2006/42/EG Annex II 1.A

Manufacturer:	Stürmer Maschinen GmbH Dr.-Robert-Pfleger-Str. 26 D-96103 Hallstadt

herewith declares that the following product

Product group:	Unicraft® Werkstatttechnik
Type of machine:	Induction heating system
Designation of the Machine:	IHG 1500
Item number:	6400015

complies with all relevant provisions of the above-mentioned Directive as well as the other applicable Directives (hereafter), including any changes in force at the time of declaration.

EU directives:	2014/30/EU	EMC directives
	2011/65/EU	RoHS directive

The following harmonized standards were applied:

DIN EN ISO 12100:2010	Safety of the Machine - General design principles - Risk assessment and risk reduction
DIN EN 60335-1:2012-10	Safety of electrical appliances for household use and similar purposes - Part 1
DIN EN 55011:2018-05	Industrial, scientific and medical devices– Radio interference - limits and measurement methods
DIN EN 61000-3-2:2015-03	Electromagnetic Compatibility (EMC) - Part 3-2: Limits - Limits for harmonic currents
DIN EN 61000-3-3:2014-03	Electromagnetic Compatibility (EMC) - Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low voltage power supply networks for Devices with a rated current <= 16 Aper conductor, which are not subject to any special connection conditions
DIN EN 61000-6-2:2006-03	Electromagnetic compatibility (EMC) - Part 6-2: Generic Standards - Emitted interference for industrial areas
DIN EN 61000-6-4:2011-09	Electromagnetic compatibility (EMC) - Part 6-4: Generic Standards - Emitted interference for industrial areas

Responsible for documentation:	Kilian Stürmer, Dr.-Robert-Pfleger-Str. 26, D-96103 Hallstadt

Hallstadt, 16.11.2018

Kilian Stürmer
CEO, Director

CE


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