







DAWELLING IS YOUR FUTURE, NOT THE FLAME

MOBILE INDUCTION HEATERS AND RESISTANCE HEATERS



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ABOUT US

DAWELL CZ s.r.o.

DAWELL CZ s.r.o. was established in 2012 with a vision of building a development, manufacturing and export company. The primary line of business therefore covered development of own products in the industrial area of mobile resistance and induction heaters, their manufacturing and sales around the world.

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Development of mobile resistance and induction heaters.

Based on a market survey made in 2011 and 2012 and DAWELL CZ s.r.o.employees' experience of previous work, the management decided to develop mobile resistance heaters in the DHM/DHC series, which were not available on the market. With the experience of mobile resistance heaters, which brought new visions and market knowledge, the development department started developing small mobile induction heaters DHI-15, designed for car repair shops and workshops, and then the larger induction heater of the DHI-4 series, DHI-45, DHI-100 a DHI-120 as well as for application in car repair shops, workshops, industrial and manufacturing plant.

Manufacturing facilities and development unit of DAWELL CZ s.r.o.

The sales of our DHC and DHI exceeded all our expectations. It helped us build the manufacturing facilities of DAWELL CZ s.r.o. in Třebíč and the development unit in Brno. The development unit focuses on complete development of new equipment for our own production needs in tight cooperation with the manufacturing and business department in Třebíč. The new business and development experience showed us an attractive mobile heater market potential, which TEAM DAWELL CZ intends to continue to grow.

- 8 years on the market
- 15 products and more to come
- More than 35.000 heaters produced
- 42 destinations of export
- 30 professionals in the company team
- 1.200m² manufacturing area
- Wide range of accessories
- Fast and reliable service

Manufacturing and Sales office area

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DAWELL INDUCTION

EFFECTIVE AND ECONOMIC REPLACEMENT OF FLAME HEATING

DEVELOPED AND DESIGNED FOR

- METAL MANUFACTURING AND WELDING
- INDUSTRIAL AND MANUFACTURING
 FACILITIES
- SOLDERING AND BRAZING
- GARAGES AND MAINTENANCE
- TRANSPORT UNDERTAKINGS
- REPAIR SHOPS FOR TRUCKS AND AGRICULTURAL AND CONSTRUCTIONS MACHINERY

- AUTOMATED AND ROBOTIC WORKPLACES
- CONSTRUCTION AND ASSEMBLY
- AVIATION AND SHIPBUILDING INDUSTRY
- ASSEMBLY, SERVICE AND INSTALLATION WORKS
- EASY AND QUICK USE
- MINING INDUSTRY









EXAMPLES OF APPLICATIONS USING DHI OR DHC



HEAVY DUTY INDUSTRY AND MANUFACTURE

- Preheating before welding
- Heating of large areas
- Spot heating
- Annealing
- Straightening (after welding etc.)
- Forging
- Hardening

HEATING OF VARIOUS MATERIALS

- Output tests (bimetal,titan)
 Heating of stainless steel, copper, aluminium,cast-iron
- Preheating before pressing
- Preheating before bending
 - Weld preheating
 - Forming



BRAZING AND SOLDERING

- Refrigeration industry
- Silver brazing of copper pipes
- Tin soldering

AUTOMOTIVE AND MAINTENANCE

- Truck services
- Heating of rods
- Driveshaft straightening
 - Bolts loosening

PORTABLE INDUCTION HEATER DHI-44F/45F WORKSHOP QUICK AND SAFE HEATING FOR WORKSHOPS AND PRODUCTION

DHI-44F/45F INDUCTION HEATERS are portable, water-cooled induction heaters with a two-metre induction burner designed for heating of ferromagnetic and conductive materials with optional replaceable extenders for focus and round induction coils. Its compact and lightweight design, power output and ease of use make it the ideal equipment for manufacturing and repair shops. It replaces naked flame in the repair and light industry, allowing machine implementation in automated operations.

IDEAL TOOL FOR MANUFACTURING AND SERVICING SHOPS

- Heating of metal sheets, sections, tubes and round metal, frame structures for straightening, forming, bending, pressing, surface hardening, defrosting and forging.
- Facilitates removal of rusty bolts and old parts, heating of exhaust pipelines, bolts, nuts, and bearings.
- Low costs, no need to train operating staff in working with oxyacetylene and Propane-butane torches.
- The device is ready for use in automated operations.
- Safety absence of flames.

EQUIPMENT

- Remote control connector pedal, ON/OFF, PC.
- Clear display capable of showing up to 26 parameters.
- Water-cooling of induction coils.
- Smooth power adjustment 10-100%.
- USB for software updates.
- LED lighting around the coil.

ADVANTAGES

- Mobility weight 12.5 kg, including water cooling .
- Power: DHI-44F 3,7kW / 4,5kVA and DHI-45F 3,7kW / 5kVA, high duty cycle.
- Easy use burner length 2 m.
- Flexibility, ease of use, safety.
- No need for user training and certification.
- Local heating repeatability + control.

COMPATIBLE ROUND COILS:

• Single-turn coil 20–53 mm

SUPPORTED TECHNOLOGIES:

DHS3, BIPT, DIPA, QST, ACMS, DFU

BASIC SET DHI-44F (order no. 07-001-01) DHI-45F (order no. 07-002-01) Side focus coil coolant liquid 2,5 I





INDUSTRIAL PORTABLE INDUCTION HEATER DHI-45C QUICK AND SAFE HEATING FOR WORKSHOPS AND INDUSTRY

DHI-45C INDUCTION HEATER is a portable, water-cooled induction heater with a two-metre induction burner designed for heating of ferromagnetic and conductive materials with optional replaceable extenders for induction coils. Its designed is optimised for use of round coils with optional specific focus coils. Its compact and robust design, versatile uses, mobility, smooth power adjustment, high power output and ease of use make it ideal for diverse applications in manufacturing operations, prototype shops, automation and other industries.

IDEAL TOOL FOR WORKSHOPS AND INDUSTRIAL OPERATIONS

- Heating of tubes, round metal, sections, sleeves, nuts, bolts and other structural elements for pressing, soldering, forming, bending, forging, surface hardening, defrosting, etc.
- Wider heating parameter setting options
- The device is ready for use in automated operations.
- Mobile soft soldering and brazing.
- Generally applicable to same uses as propane-butane and oxyacetylene torches with the advantage of a controllable process.
- High power output at power supply 1x 230 V and 16 A breaker.

BASIC SET DHI-45C (order no. 07-012-01): "U" coil Coolant liguid 2,5 I

ADVANTAGES

• Mobility – weight 13.5kg, including water cooling.

15mm

- Power: 3,7kW/5kVA, hiWgh duty cycle.
- Easy use burner length 2 m.
- Flexibility, ease of use, safety.
- No need for user training and certification.
- Wide range of accessories.

COMPATIBLE ROUND COILS:

- Single-turn coil 20-55mm
- Double-turn coil 14-26mm
- Open "U" coil

EQUIPMENT

- Clear display capable of showing up to 26 parameters
- Water-cooling of induction coils.
- Smooth power adjustment 10-100%.
- Timer and factory settings features.
- USB for software updates.
- Constant power (CP) and constant magnetic field (CF) mode
- Remote control connector pedal, ON/OFF, PC.
- LED lighting around the coil.

SUPPORTED TECHNOLOGIES:

DHS3, BIPT, DIPA, QST, ACMS, DFU



DHI 120

MOBILE, POWERFUL INDUCTION HEATER DHI-100F/120F SAFE HEATING FOR WELDING AND HEAVY INDUSTRY

DHI-100F/120F ismobile,water-cooled induction heater equipped with a 4 and potentially 6 meter induction burner with the possibility of replaceable induction adapters. The device is intended for heating of ferromagnetic and conductive materials. Thanks to the compact design high performance, versatile use with smooth output adjustment, it is suitable for various applications especially in welding industry, heavy industry, production facilities, welding workshops, car repair shops, truck and agricultural machinery repair shops etc.,

IDEAL TOOLS FOR EVERY WORKSHOP

- Heating prior to hardening, straightening, forging, bending of structural steel profiles and suitable for annealing
- Low operating costs , training of operators is not necessary like for methods working with autogenous and propane-butane burners
- Simplicity and ease of use simple operation, fast heating process
- Safety and ecology absence of flame.
- Use in the automotive, railway, aerospace, marine and industry
- in general, metal- working, maintenance.

ADVANTAGES

- Mobility- weight 58 kg including water cooling.
- Replacement of autogenous working methods (flame heating).
- Very silent operation.
- Power DHI-100F 8kW / 10kVA and DHI-120F 10kW / 12kVA, high loading factor.
- Ease of use 4 /6m long burner.
- Flexibility and ease of use.
- Robust and big wheels on the removable chassis.

EQUIPMENT

- Clear display with visualization of the parameters.
- Water cooled inductors.
- Continuous output control 10-100%.
- Mode Timer and Mode factory setting.
- USB connection for software update.
- Constant power mode CP and constant magnetic field CF mode.
- LED inductor lighting .
- Removable trolley.
- Remote control and temperature sensor terminal.

BASIC SET DHI-100F (order no. 09-001-01) DHI-120F (order no. 09-002-01) Round focus coil Coolant liquid 10 I

SUPPORTED TECHNOLOGIES

• DHS3, BIPT, DIPA, QST, ACMS, DFU





DHI 120

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- USB connection for software update.
- Constant power mode CP and constant magnetic field CF mode.
- LED inductor lighting .
- Removable trolley.
- Remote control and temperature sensor terminal.



BASIC SET DHI-100C (order no. 09-003-01)

DHI-120C (order no. 09-004-01) Round focus coil Coolant liquid 10 I

SUPPORTED TECHNOLOGIES

• DHS3, BIPT, DIPA, QST, ACMS, DFU

ACCESSORIES INDUCTORS FOR DHI-44/45F



Coil "Car Nut" (order no. 07-108-01)



Round focus coil with round coil reducer (order no. 07-110-01)



Fokus coil, side (order no. 07-103-01)



Reducer (order no. 07-105-01)



Fokus coil, inclined (order no. 07-102-01)



Single-turn coil



Fokus coil, straight (order no. 07-104-01)



Handle extension (order no. 07-101-01)

Coil	Order no.
Single-turn 20 mm	81-001-01
Single-turn 26 mm	81-002-01
Single-turn 32 mm	81-003-01
Single-turn 38 mm	81-004-01
Single-turn 40 mm	81-006-01
Single-turn 45 mm	81-005-01
Single-turn 53 mm	81-009-01

INDUCTORS FOR 45C



Round focus coil (order no. 09-102-01)



Round front focus coil (order no. 09-117-01)

Single-turn round coil



Double-turn round coil

Coil	Order no.
Double-turn 14 mm	82-014-01
Double-turn 22 mm	82-012-01
Double-turn 26 mm	82-008-01

Single-turn coil are also avaible in inclined variants (35°, 45°, Single-turn 20 mm 82-025-01 90°) and cross variants for more efficient heating. Single-turn 35 mm 82-024-01 Single-turn 42 mm 82-016-01 Single-turn 46 mm 82-015-01 Single-turn 50 mm 82-010-01 Single-turn 55 mm 82-026-01



"U" profile inductor 15 mm (order no. 82-007-01)

ACCESSORIES



Spare focus coil core (order no. 09-200-01)



Remote control pedal (order no. 80-001-01)



Coolant liquid 3 I (order no. 91-003-01) 10 I (order no. 09-201-01)



Trolley (order no. 07-400-01)



ACCESSORIES ACCESSORIES FOR DHI-100/120

Coil	Diameter	DHI-100F	DHI-120F	DHI-100C	DHI-120C
Round focus coil	32 mm	09-102-01	09-102-01	09-102-01	09-102-01
Round front focus coil	32 mm	09-117-01	09-117-01	09-117-01	09-117-01
A	14 mm	09-115-01	09-115-01	09-115-01	09-115-01
Train	17 mm	x	х	09-116-01	х
"U"profile inductor					
	22 mm	09-103-01	09-103-01	09-103-01	09-103-01
Sin.	28 mm	09-104-01	09-104-01	09-104-01	09-104-01
	34 mm	09-105-01	09-105-01	09-105-01	09-105-01
	40 mm	09-106-01	09-106-01	09-106-01	09-106-01
	47 mm	09-107-01	09-107-01	09-107-01	09-107-01
	57 mm	09-108-01	09-108-01	09-108-01	09-108-01
	67 mm	09-109-01	Х	09-109-01	09-109-01
Single-turn round coil	82 mm	Х	Х	09-110-01	Х
1	22 mm	09-111-01	09-111-01	09-111-01	09-111-01
	28 mm	09-112-01	х	09-112-01	09-112-01
\bigcirc	34 mm	х	х	09-113-01	09-113-01
Double-turn round coil	40 mm	х	х	09-114-01	х

ACCESSORIES



Spare focus core (order no. 09-200-01)



Remote control pedal (order no. 09-203-01)



Coolant liquid 3 I (order no. 91-003-01) 10 I (order no. 09-201-01)

INVERTER RESISTANCE HEATER DHC 6510R CONTROLLED PREHEATING BEFORE WELDING AND ANEALING

INVERTOR DHC 6510R is designed primarily for controlled annealing of materials after welding to reduce tension and reduce hydrogen content and for preheating before welding up to temperature of 1050°C. It has a temperature regulator and recording for higher-level programming intended particularly for weld annealing. It also allows a multi-zone mode, programme linking and copying, setting multiple regulator values, and more. The recording time is up to 1400 hours.



USES

- Energy and petrochemical industry weld annealing and preheating for pipelines, heat exchangers, boilers, steel vessels, flanges wherever welds have to be annealed.
- Frame structure construction, shipbuilding welding of long and short joints preheating, annealing.
- Extractive industries preheating of parts before welding.
- Industrial manufacturing preheating of parts to specific temperature.
- Repairs, renovations, weldons economic and technology correct preheating of parts, mobility allows inverter use in the field.
- Automotive industry entire chassis heating before welding in production.
- Wide range of accessories.

ADVANTAGES

- Mobility weight 17 kg.
- Even heating.
- Power 10,8 kW.
- Can connect up to 4 elements.
- Flexibility of use power supply 3x 400 V 32 A.
- Intuitive and easy controls easy to operate.
- Multi-zone mode can connect 9 machines with k 1application – heating control in up to zones with a total power output of 95 kW.
- Versatile uses even heating.
- 3 in 1 inverter + temperature regulator + recorder.





PORTABLE INVERTER POWER SUPPLY FOR PREHEATING OF MATERIALS BEFORE WELDING, WELD ANNEALING AND ANNEALING FURNACES

Controller and recorder DHC 6510R – easy programming of the controller. Fast download of data from recording machine and easy work with measured data. Temperature can be controlled from any of the 20 user-adjustable temperature profiles / programs with up to 180 segments or directly to a user-set temperature, which can be changed any time as needed. You can set heating or cooling rate, time over which the temperature should be maintained as well as target temperature, independently in each profile segment as well as in the manual mode of temperature control. Of course, heating power can be controlled directly.

The controller has a user lock in menu for locking settings of PID values. Digital recorder of the course of heating with the capacity of 64 hours of recording is also integrated. Data can be transferred to a PC where it can be further processed, for example for logging the course of heating or its control. Thereby, maximum complexity and simplicity of use of this device was achieved, its control can be handled by anyone.

DHC 6510R
0-60 V / 180 A, 65 V / 160 A countinuously adjustable, CV/CC
Resistance heater elements 24-60 V (type 30 / 42 / 60 V)
3~400 V, 50/60 Hz, 23 A ±15%
25 A
Thermocouple wire K, galvanized isuation
-25 až 1200 °C
2 adjustable (deviation SV/PV, temperature achieved, etc)
Thermocouple disconnection, overload, overheating, output short circuit, etc.
Yes, master / slave type, max. 9 units
-20 to 40 $^\circ\text{C}$ (with a capacity limit to 50 $^\circ\text{C})$
20 adjustable profiles in 9 segments
Digital, user-adjustable
Up to 1400 hours of recording, stores and error conditions
Using 485/USB to PC, direct import to Excel

Table with measured data

Values recorded in recording machine



Output from the bulit-in recorder of the inverter DHC 6510R

EXPANDED SET





DHC AND ACCESSORIES STRUCTURE AND SPARE PARTS FOR HEATING ELEMENTS



CERAMIC ELEMENTS 30 V

Order no.	Number of beads (AxB)	Dimensions [mm] (AxB)
88-112	3x17	75x355
88-113	3x18	75x380
88-114	4x11	100x230
88-115	4x12	100x250
88-103	4x13	100x275
88-116	4x14	100x295
88-104	5x9	125x190
88-117	5x10	125x210
88-105	5x11	125x230
88-118	6x7	150x145
88-111	6x8	150x165
88-119	6x9	150x190
88-120	7x6	175x125
88-121	7x7	175x145
88-122	7x8	175x165
88-123	8x5	200x105
88-124	8x6	200x125
88-125	8x7	200x145
88-126	9x5	225x105
88-127	9x6	225x125
88-128	10x4	255x85
88-109	10x5	255x105
88-102	11x4	280x85
88-101	11x5	280x105
88-108	12x4	305x85
88-129	13x4	330x85
88-130	14x4	355x85
88-131	15x3	380x65
88-132	16x3	405x65
88-133	17x3	430x65
88-134	18x3	455x65
88-110	24x2	610x40





DHC AND ACCESSORIES

Ceramic elements 60 V

Order no.	Number of beads [mm] (AxB)	[mm] (AxB)	Order no.	Number of beads [mm] (AxB)	[mm] (AxB)
88-033	3x32	75x670	88-015	10x10	255x210
88-034	3x33	75x690	88-045	10x11	255x230
88-035	3x34	75x710	88-046	11x9	280x190
88-036	4x24	100x505	88-047	11x10	280x210
88-026	4x25	100x525	88-030	12x8	305x165
88-037	4x26	100x545	88-007	12x9	305x190
88-018	5x18	125x380	88-016	13x7	330x145
88-022	5x20	125x420	88-048	13x8	330x165
88-031	5x21	125x440	88-023	14x7	355x145
88-005	5x22	125x460	88-049	15x6	380x125
88-038	6x16	150x335	88-019	15x7	380x145
88-039	6x17	150x355	88-008	16x6	405x125
88-006	6x18	150x380	88-050	17x5	430x105
88-014	7x14	175x295	88-001	17x6	430x125
88-040	7x15	175x315	88-051	18x5	455x105
88-041	8x12	200x250	88-013	18x6	455x125
88-042	8x13	200x275	88-017	19x5	480x105
88-043	9x11	225x230	88-003	20x5	510x105
88-044	9x12	225x250	88-052	21x4	535x85

CERAMIC "ONE LINE" AND ROPE HEATERS

Order no.	Туре	Lenght	Power input	Voltage
88-251	"One line"	4500 mm	3 kW	60 V
88-252	"One line"	2200 mm	1,5 kW	31 V
88-501	Rope heater	2135 mm	1,35 kW	30 V
88-502	Rope heater	4270 mm	3 kW	65 V

MAGNETIC CERAMIC ELEMENTS

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terminal DINSE (standard) or CamLock

Rope heater



Ceramic element "Snake" 60 V

(order no. 88-352)

Magnet for ceramic element, separate (order no. 88-751)



couple (order no. 88-752)

Magnetised insulated preheaters, 30 V and 60 V, versions, dimensions on request

ADDITIONAL ELEMENT TYPES





SPLITTING AND EXTENDING DOUBLE CABLES

Order no.	Cable type	No. of terminals	Lenght
04-132-01	Splitting	2	5 m
04-145-01	Splitting	4	4 m
04-141-01	Splitting	4	10 m
04-142-01	Splitting	4	15 m
04-111-01	Extending	1	10 m
04-113-01	Extending	1	15 m







Dinse (order no. 90-034) a CamLock (order no. 90-033)

COMPENSATION CABLES

Order no.	Cable thickness	Lenght
04-165-01	2x 1,5 mm2	1 m
04-170-01	2x 1,5 mm2	5 m
04-161-01	2x 1,5 mm2	10 m

THERMOCOUPLE WIRES

Order no.	Wire thickness	Unit of measure	Wire colour
90-002	0,711 mm	1 m	Green/white
90-030	0,711 mm	1 m	Red/yellow

INSULATING FABRIC

Order no.	Insulation type	Insulation	Width	length
04-183-01	Tygasil	12 mm	0,3 m	2 m
04-185-01	Tygasil	12 mm	0,3 m	3 m
04-182-01	Tygasil	12 mm	0,3 m	1,6 m
90-018	Tygasil role	12 mm	0,61 m	7,6 m
90-031	Ceramic fibre	13 mm	0,61 m	14,64 m
90-029	Ceramic fibre	25 mm	0,61 m	7,32 m

RESISTANCE **HEATER** TROLLEYS

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Version for 3 units (order no. 04-101-01)

Version for 6 units (order no. 04-102-01)



ADDITIONAL ACCESSORIES

no. 90-015)



Ceramic elemetns resistence wire (order no. 88-801)



Steel tape (order no. 90-011), steel tape locks (order no. 90-016)





Thermocouple connector "male" (order no. 90-005) "female" (order no. 90-006)



Magnet for thermocouple (order no. 90-026)









"Ceramic Fibre"

THERMOCOUPLE WELDER TW163V

TW163 is a capacitive rechargeable welding unit used to hold a thermocouple. This unit works with a mains connection for charging.

Dimensions: 190 mm (H) x 300 mm (W) x 100 mm (L)

Weight: 4,2 kg

Battery type: lead, sealed (impermeable) 12V 2.1Ah

Welding voltage: 37 až 60V (Output 18 to 40 jouln)



CONNECTING CABLES WITH USB



Туре	order no.
1x2	04-151-01
1x3	04-152-01
1x6	04-154-01
1x9	04-157-01

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RANGE OF MOBILE WORKSHOP AND INDUSTRIAL HEATING DEVICES – DAWELL CZ

Car repair garages and maintenance: DCI-12 PKW / DHI-15 PKW / DHI-22 PKW / DHI-2 WIN / DHI-44E LKW / DHI-120E LKW Affordable price, high mobility, quick heating, high performance, simple operation.



Welding and the industrial market: DHI-44/45F / DHI-45C / DHI-100(F/C)/120 (F/C) /

DHC-6510R Manual and automated use, connectivity with PCs, robots and manufacturing lines, high performance and load factor, variability of usage, broader setting options, temperature sensor connection option.

