



Minac®

Mobile heat generators



Introducing the Minac



Mobile, flexible and easy-to-use. The Minac brings the benefits of induction heating to tough-to-access workpieces.

The Minac range of complete mobile induction systems is even easier to use than its acclaimed predecessor. A ready-to-use system, all that has to be done upon delivery is: 1) attach a coil, 2) connect supply voltage, 3) connect cooling water. In models with closed cooling systems, only the supply voltage needs connecting.

Once installed, the Minac's clear, menu-based and multilanguage control panel ensures maximum ease-of-use. Moreover, this simplified control/user interface is common to all Minac equipment.

Many Minac models come in 'Twin' versions offering two independent power outputs. The Twin versions feature split control panel displays—one for each power output.

Minac is simple to operate. Handheld transformers (HHT) feature on/off and precise power controls. In fact, the HHT is as easy to operate as a regular electric drill. Flexible, water-cooled cables connecting the HHT to the converter allow easy access to workpieces.

FIVE KEY BENEFITS

Minac increases throughput.

Fast, easy, accurate and repeatable heat delivery improves productivity.

Minac improves quality.

Minac's microcontroller feature lets you pre-set temperatures and ramp-up and dwell times. Precise repeatability of heating cycles is assured.

Minac is environment friendly.

No flames, no gas and virtually no radiant heat mean a more comfortable, more productive working environment. Good news for the natural environment, too.

Minac lets you do more.

Minac's mobility and application versatility let you perform practically any heating task.

Minac reduces costs.

Precise heat delivery means you get things right the first time. Scrap, re-working and energy costs are minimized.

Meet the Minac

The Minac range can heat practically any electrically conductive material: copper, aluminum, steel, stainless steel, titanium, brass, etc. It can also be used with a wide variety of coils—even ‘one-off’ coils that have been tailored to your specific needs.

Packing more power into smaller cabinets has made the Minac more mobile than ever. This, together with integrated output matching (a feature standard to all Minacs), makes Minac ideal for a wide range of applications: brazing, shrink fitting, hardening, curing, straightening, heat treatment, etc.

Continuous automatic output matching ensures optimal power output for various heating operations, coils and materials. A wide range of different coil configurations can be used without having to change a converter's set-up. Simply change the coil and keep on working. The operator does not even have to shut off the water supply during changes—the Minac does it automatically when the mains are turned off.

The Minac range

Minac is available with maximum output power ranging from 10–220 kW at intermittent operation. Under continuous operation, the maximum output ranges from 6–140 kW. Minac systems have a standard frequency range of 10–25 kHz.



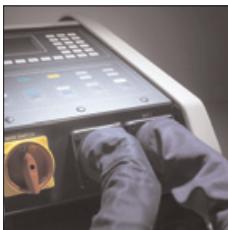
MINAC SERIES TECHNICAL DATA

| Model | 6/10 | 6/10 Twin | 12/18 | 12/18 Twin | 18/25 |
|-------------------------|-----------|-----------|-----------|------------|-----------|
| Max. output power | 10 kW | 2x10 kW | 18 kW | 2x18 kW | 25 kW |
| Continuous output power | 6 kW | 2x6 kW | 12 kW | 2x12 kW | 18 kW |
| Supply voltage | 400-480 V | 400-480 V | 400-480 V | 400-480 V | 400-480 V |
| Recommended fuse | 16 Amp | 32 Amp | 32 Amp | 32 Amp | 63 Amp |
| Coolant | 3.5 l/min | 7 l/min | 5 l/min | 10 l/min | 6 l/min |
| Weight | 50 kg | 76 kg | 52 kg | 76 kg | 64 kg |



Mobile induction

Many Minac models are light enough to be carried in a normal car. You no longer have to transport workpieces to the induction system—often a costly and time-consuming process.



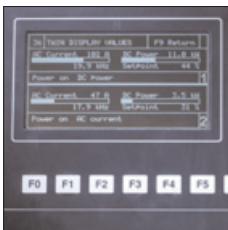
Twin power outputs

Many Minac models come in a 'Twin' version featuring two independent power outputs that can operate simultaneously under identical or different parameters.



Range of coils

Minac systems can be fitted with a practically limitless range of coil designs. EFD Induction are specialists at designing, testing and delivering customized, long-life coils.



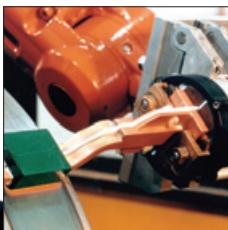
Split display

Twin versions feature two independent control panels. Each displays data for its power output. Functionality is based on our specially designed microcontroller.



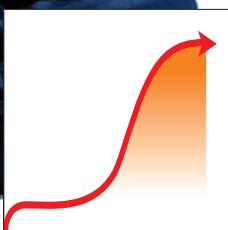
Remote control

A remote control unit lets you control heating cycles via feedback to the microcontroller. Minac is available with field buses and is compatible with Profibus-DP, Interbus, Ethernet, etc.



Robot compatible

Minac can be adapted to any robot, allowing quick, no-fuss integration into automated production lines. The HHT can easily be mounted on a robot arm.



Maximum output power

With Minac's maximum power feature you can, for limited periods of time, operate with an output power far in excess of the continuous output power.

| 18/25 Twin | 25/40 | 25/40 Twin | 50/80 | 70/110 | 70/110 Twin | 140/220 |
|------------|-----------|------------|-----------|-----------|-------------|-----------|
| 2x25 kW | 40 kW | 2x40 kW | 80 kW | 110 kW | 2x110 kW | 220 kW |
| 2x18 kW | 25 kW | 2x25 kW | 50 kW | 70 kW | 2x70 kW | 140 kW |
| 400-480 V | 400-480 V | 400-480 V | 400-480 V | 400-480 V | 400-480 V | 400-480 V |
| 63 Amp | 63 Amp | 100 Amp | 100 Amp | 125 Amp | 250 Amp | 250 Amp |
| 12 l/min | 12 l/min | 24 l/min | 22 l/min | 20 l/min | 40 l/min | 40 l/min |
| 85 kg | 67 kg | 86 kg | 80 kg | 170 kg | 200 kg | 200 kg |

EASY. FAST. ACCURATE.

Minac's handheld transformers (HHT) combine maximum efficiency with maximum ease-of-use. Simply turn on, and accurately regulate power by pressing the trigger. Operator convenience is enhanced by sturdy hand grips and a removable support wire. The flexible connector cable allows easy, unhindered access to work-pieces.



MINAC AT WORK

Minac is mobile, you can move it around a workshop or factory floor when working on hard-to-reach workpieces. Many Minac models can be loaded into a car or van and transported to work sites.

On the left, Minac at work brazing generator windings.

On the right, a Minac is hardening dies.



A family for every need

Minac is one of five product families from EFD Induction. Together, these product families let you perform virtually any industrial heating task. And in the unlikely event they don't meet your specific needs, we can sit down with you and devise your own customized induction heating solution.

EFD Induction also develops, commercializes and supplies mechanical handling equipment, coils and software control systems. We also offer a comprehensive, worldwide service program. To learn more about EFD Induction—and how we can help your business—please contact your nearest EFD Induction office.



Sinac

Universal heat generators



Weldac

High-output solid-state welders



Minac

Mobile heat generators



HardLine

Industrial heat treatment systems



HeatLine

Industrial heat processing systems