

Quality and performance features

Highly efficient "long-life heater cartridge"

Long term guarantee because we believe in it



Advantage based on a sustainable approach:

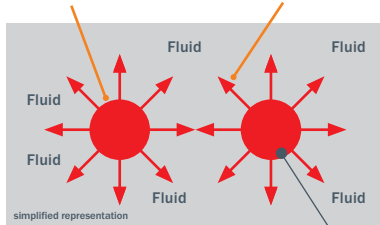
- **Best efficiency rate** - Zero-loss heat transfer based on direct medium contact
- **Long service life** without stress cracks and corrosion because of the use of optimised material alloys and perfected heat management
- **Safe investment** due to the use of gwk lifetime guarantee on our "long-life" heating cartridges

Heating strategies compared:

Direct heat transfer with gwk "long-life" heating unit

large heat-transfer surface

consistent and extensive heat dispersion range



- Ultra-fast heating
- Excellent heating rates in a small installation space
- Easy mechanical cleaning
- Sustained high efficiency
- Small heat output gradations possible
- Very light
- Manageable insulation costs

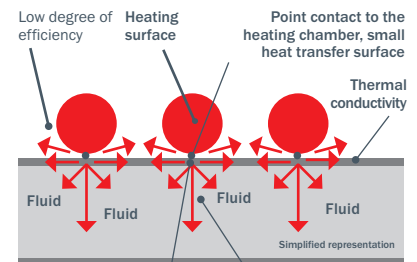


- Minimal energy losses
- High degree of efficiency
- "Low carbon footprint"
- Long service life due to gwk "long-life" technology

Heating surface



Indirect heat transfer



Transfer resistance Point contact and small heat dispersion range



- Energy loss
- Low degree of efficiency
- "High carbon footprint"

Efficiency is the key to direct transmission:

In the last 20 years the understanding of the users of temperature control units and the handling of the units, as well as the water quality used, has changed significantly. With this understanding, higher quality stainless steel materials and innovative design solutions such as solid state relays, multiple safety circuitry and guided flow, the failure rate of direct heat transfer when using heater cartridges has been reduced to a minimum.

Due to the significantly improved heat transfer and thus higher efficiency compared to indirect heating, this method is still the preferred method at gwk.

In this context, the efficiency and reliability speaks a clear language.

10-year guarantee on our "long-life" heating unit:

Not only does gwk offer a reliable and highly efficient equipment technology, but also a corresponding safe investment option.

For example, gwk offers a **10-year guarantee** on its "long-life" heating cartridges made of stainless steel, which are used in many compact temperature control units*.

* Applicable unit series on request

gwk technologies with CO₂-neutral production with a safe investment option

