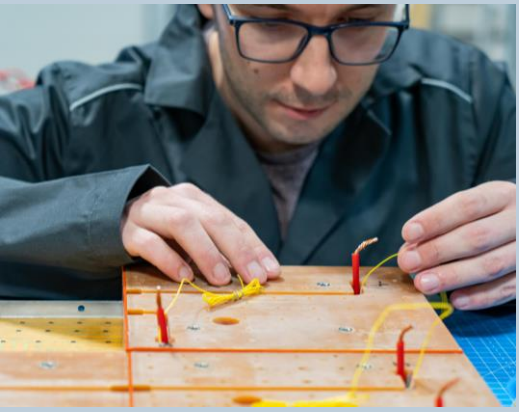
DYNAMIC HEATING

Dynamic, on-demand heating as the solution for a more sustainable and efficient way of working in the field of packaging materials processing and packaging production.



Minimum heating times, dynamic temperature adjustments and homogeneous results are the focus of our dynamic surface heating. Thanks to a specifically designed technology, homogeneous and rapid heating with low waste heat into the environment becomes possible.

In combination with a precise control system, the individual heating circuits of the surface heating are controlled separately, and individual areas are heated more than others if required. When heating evenly, ATT technology creates a particularly homogeneous heating pattern for optimum results.

The technology also makes it possible to heat specific areas while directly adjacent areas remain cold - an advantage, for example, when packaging food or medicines.

Precise heating of the surface significantly reduces energy consumption, a factor that is reflected in the carbon footprint.

BENEFITS

- **Faster cycle times in comparison to common solutions**: 20-30% increase thanks to a faster heating process and no machine down times due to overshooting thanks to precise control systems
- **Minimum scrap material** thanks to individually controllable heating circuits and the resulting homogeneous surface temperature
- **Homogeneous heating power distribution** / Optimizes heating picture
- **Reduced material input** as the precise control system allows the usage of thinner packaging foils
- **Usage of recycled packaging materials,** e.g., polypropylene and bioplastics thanks to a higher heating power density
- **Low power dissipation** as the used material is heated with low waste heat thanks to the optimized layering

APPROACH

- **Step 1: Feasibility study** – the implementation for a respective application is evaluated.
- **Step 2: Concept study** – serves to develop a concrete concept and its realization.
- **Step 3: Development project** – the surface heating technology is tailored to a respective application, including all necessary calculations and simulations.
- **Step 4: Prototype development and series production.**

ABOUT ATT

ATT is a leading provider of surface heating systems utilizing thermoelectric heating polymers. In addition to surface heating systems, ATT is continuously advancing their offerings with the development of advanced sensors including ultrathin real-time temperature sensors, hot-spot sensors for batteries, icing sensors for aircraft wings, and printable NTC sensors based on proprietary technologies.

MARKET

Mobility | Healthcare | Traditional Electronics | Furniture & Building | IoT Antennas | **Industry** | Consumer Goods

FURTHER READING:
https://www.thermaltech.at/dynamic-heating/