KUK Wijdeven

www.kukcoils.com

Innovative Winding Technology

KUK Group is a leading manufacturing partner for highly demanding coils and assemblies, from the product idea to large-scale production.

- Customized winding products
- Air core coils, bobbin coils, transformers, assemblies
- All shapes and dimensions
- Seven production sites worldwide

More information:

THE WORLD OF WINDING TECHNOLOGY

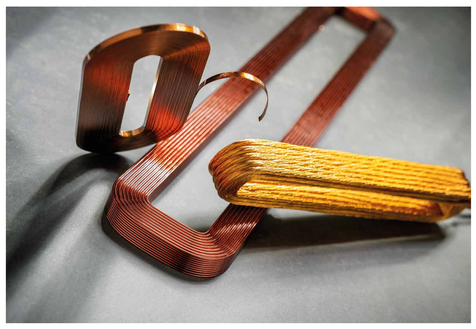
Author: Bram van Herck

KUK Wijdeven

Principle

With the high efficiency requirements of today, the demand for customer-specific coils is growing.

Through various winding techniques, we can create form-fit coils for each application, ranging from a few micrometers up to a few meters in size. To receive the best efficiency, f.i. high frequency transformers must be designed for the specific application, reducing copper and thermal loss and achieving the most energy-efficient product.



Advantages

- With access to different technologies there is always a coil that fits your application.
- High copper fill factors using flatwire or orthocylic winding.
- Availability of several materials for different applications.
- In-house automatable production process for series production.
- Complete assemblies, not only the production of the coil, but also assembly into a final product.

Disadvantages

- Customized products are more expensive compared to regular 'off-the-shelf' products.
- High tolerances: Calculating coils is still an inaccurate process, requiring prototyping.
- Complexity: The technology surrounding coils is complex and requires deep specific knowledge.

Production boundaries and limits

- Wire size, we can handle wires from 10 µm.
- Wire type and quantity: Many wires need to be produced on request and demand a minimum order quantity.
- Physical limits: We have manufactured microscopic coils and coils up to 2.5m in size, but where is the limit?

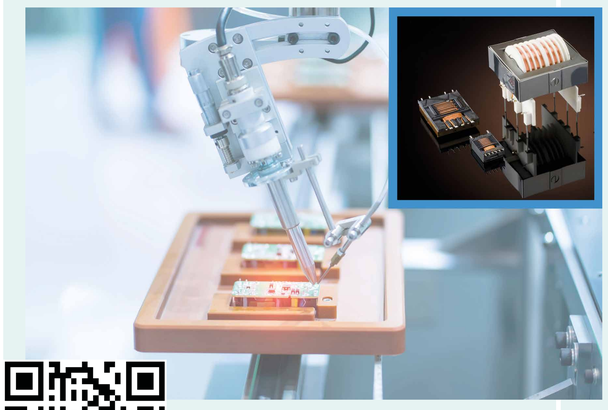
Cost

Series production based on quotation.

Examples

▲ Micro coils for medical use

▶ Electric motor assembly



◀ High frequency transformers in the industry

Source: Levitronix

www.**KSC**Conference.nl