

FACT SHEET

# MetaloBond™ Technology



**Powerful and flexible**  
MetaloBond™ Rotor/Stator stacks made by ElringKlinger

**MetaloBond™ Technology: increased mechanical strength, superior sealing performance for direct cooling concepts and an enhanced flexibility and versatility of the glue to meet additional customer requirements.**

MetaloBond™ is manufactured with a full-face glue technology which is applied in an already established and well proven coating process. The full face gluing technology offers increased mechanical strength and superior sealing performance for direct cooling concepts. The enhanced flexibility and versatility of the glue allows to meet additional customer requirements.



**ELRINGKLINGER –  
YOUR PARTNER FOR LAMINATED  
ROTOR/ STATOR STACKS**

Product Development (Design, Engineering and Simulation) – Process Development – Tool Shop – Tool Sampling/Prototyping – Testing – Change-Management – Series Production – Part Measurement

# New Concept

## ROLL COATING

- + Full face coating with EK adhesives
- + Coating thickness 4-6µm

## LAMINATION

- + Combine several single layers to a multilayer laminate
- + 3 layers 0,20-0,27mm

## STAMPING

- + Stamp multilayer laminate with increased output
- + Up to 200 strokes/min
- + Up to 0,8mm "stack height" per stroke

## BONDING

- + Combine multilayer laminates to full stack in second bonding step
- + High mechanical strength

# Benefits

- + Optimal magnetic flux = highest efficiency
- + High stack stiffness allows for higher rpm and reduced NVH
- + No leakage between layers allow integrated cooling concepts
- + Temperature resistant > 180 °C
- + Oil and coolant resistant
- + Efficient production processes and maximized value add approach ensure high competitiveness
- + High flexibility in terms of raw material selection

## YOUR CONTACT

ElringKlinger AG  
Phone +49 7123 724-0  
E-mail [info@elringklinger.com](mailto:info@elringklinger.com)

ElringKlinger AG | Max-Eyth-Straße 2 | 72581 Dettingen/Erms | Germany  
[www.elringklinger.com](http://www.elringklinger.com)

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