

The complete service offering of TITK and OMPG is listed in the following overview:

### Material testing of...

- plastics / compounds
- plastic parts
- plastic films
- fiber compounds
- foam plastics
- textile area-measured materials / nonwovens
- fibers / yarns / filaments
- leather / leatherette
- rubber
- polymer solutions
- electrical and electronic equipment with take-back obligation

### ... in the fields of

- physical - mechanical tests / rheology
- chemical analysis (analysis of materials and hazardous substances)
- microscopy
- thermal characterization
- color determination
- determination of electrical properties
- optical tests
- particle analysis
- dynamic ESR-spectroscopy

### Subsequent processing of materials

- production of nonwovens (needled, wetlaid, spunbonded nonwovens)
- composite production (compression molding, injection molding, filament winding)
- production of laminate
- melt, wet and dry spinning

Visit us on [www.titk.de](http://www.titk.de) for more details.

## Contacts

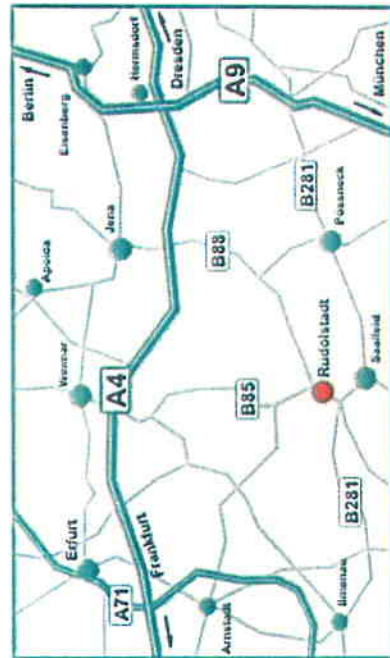
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## Wabenverbunde



**Honeycomb  
sandwich  
composites**



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## Forschung und Entwicklung Research and development

Verbundaufbau (schematisch)  
Schematic sandwich structure



Abdeckvlies  
Cover nonwoven

+



Naturfaservlies  
• Flachs, Sisal, Hanf etc.  
• Nachwachsender Rohstoff  
• Geringe Dichte

Natural fiber nonwoven  
• Flax, sisal, hemp etc.  
• Renewable resource  
• Low density

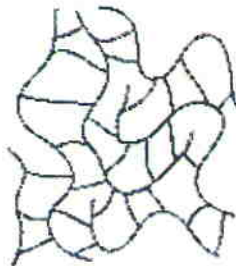
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Papierwabe  
• Günstig  
• Geringe Dichte  
• Nachwachsender Rohstoff

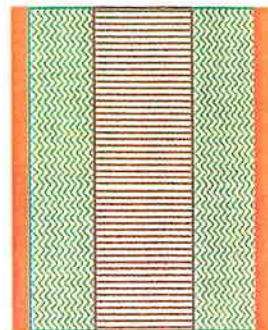
Paperboard honeycomb  
• Low price  
• Low density  
• Renewable resource

+



Duroplast  
Thermosetting material

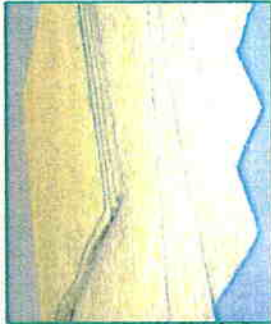
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Sandwichverbund  
• Geringes Gewicht  
• Gute mechanische Eigenschaften (hohe Steifigkeit)

Sandwich-material  
• Low density  
• Good mechanical properties (high stiffness)

## Technik Technique



Naturfaservlies  
Natural fiber nonwoven



Papierwabe  
Paperboard honeycomb



Imprägnieranlage  
Impregnating system



Laborpresse  
Laboratory press



Sandwich Bauteil  
Sandwich part

## Arbeitsgebiete Fields of work

- Herstellung von verschiedenen Probekörpern und Musterplatten  
Production of different specimen and samples

- Prüfung der Sandwichmaterialien  
Testing of sandwich-materials

- Belastung im Biegebereich  
Strain in bending range

- mehrachsiges Stoßverhalten (Durchstoßversuch)  
Multi-axial impact behavior (perforation test)

- Verformung ebener Platten bei verschiedenen Belastungsfällen und nach Lagerung (Klima)  
Deformation of even plates with different loadings and after treatment (climate)

