# **BBS CONSULT**



Engineering consultants for Building constructions Building physics Reconstructions

Institute for Research and Materials Testing in Applied Building Physics and Building Materials



Germany China

# About Us



The BBS is anxious to convert the current state of art into practice and consequently to give recommendations to the implementation.

The BBS INSTITUT supports the BBS ENGENIEERING with laboratory tests when working on projects. The characteristics of the building materials and their dependence on the characteristic of the building material are checked in order to develop an optimal concept dense on the locations and under an economic point oft views.





Complementary, we give advice on the development of new structures and materials. These new structures and materials will be optimised on the basis of preliminary studies which are based on scientific and practiceorientated researches; also we attend them until launch. We work on public promoted themes of research as well as on concrete (kind of) questions of the industry and economy.



BBS founded 1990 20 employees

BBS INTERNATIONAL GmbH (2009) BBS INTERNATIONAL China Co. Ltd (2009)

#### mit

BBS INGENIEURBÜRO Engeneering Niedersachsen (1990) Thüringen (1993) Schleswig-Holstein (1996) Baden-Württemberg (1998) Berlin (2005)

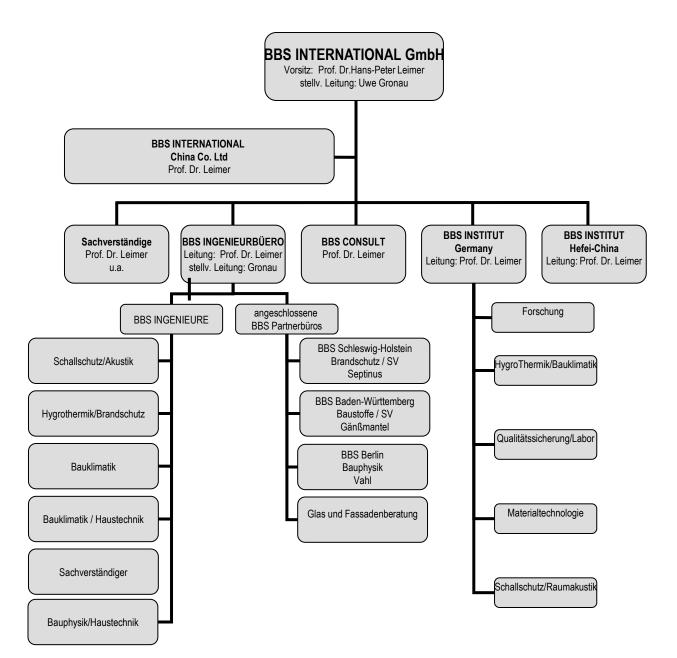
### **BBS INSTITUT**

Research and development of building materials Wolfenbüttel (before 2001) Hildesheim (2001) Hefei – China (2007)

Cooperation with the research institute of the University of applied Sciences and Arts Hildesheim IFPB

Consulting more than 20 noted companies Cooperation with e.g. WTA, QIM AG Network with more than 50 universities, universities and research institutes at home and abroad







### **Research and development**

- BBS INSTITUT connected with
  - ADIFICAT Institute, Prof. Wittmann, ETH Zürich
  - MFPA Weimar, Prof. Gronau
  - IPFB University of Hildesheim, Prof. Leimer

#### Studies

- BBS INSTITUTE
  - Products and constructions, procedures
- BBS INGENIEURBÜRO
  - Products and Procedures, Dipl.-Ing. Gänßmantel
- University of Hildesheim
  - Theses
  - Checking different versions

### Tests

- Building materials
  - BBS INSTITUTE
    - Certifications, approval of new developed building materials and constructions, IBMB + MPA BS
    - Timber and derived timber products, WKI BS
    - Building constructions
  - BBS INSTITUTE
    - Fire protection requirements; Knauf
    - Sound insulation; IPFB, Knauf
    - Outdoor tests; BBS, IBP Holzkirchen
    - Driving rain; BBS, TU Berlin
    - Statics, dynamics; IBMB, IPFB
- Measurements in situ
  - BBS INSTITUTE
    - Sound insulation and room acoustices, IPFB

#### Engineering

- Building physics and building constructions
  - BBS INGENIEURBÜRO
    - Wolfenbüttel
    - Weimar
    - China

#### Working on projects

- BBS INGENIEURBÜRO,
  - Wolfenbüttel
  - Weimar
  - Flensburg
  - Bahlingen
  - Berlin
  - Shanghai

## BBS Partner Universities / Institutes



Nordostni Fachhoch
Fachhoch
Fachhoch
Fraunhofe Stuttgart /
Fraunhofe Braunsch
MFPA We
Politechni
Politecnic
Staatliche
Rostow-a
Technical for Constr
Technical
Technisch

hschule iedersachsen hschule Rosenheim hschule Wiesbaden er Institut für Bauphysik / Holzkirchen er Institut für Holzforschung nweig 'eimar ika Gdanska co di Torino e Universität für Bauwesen am-Don al an Testing Institute tructions Prague I University of Denmark he Hochschule Karlsruhe he Universität Berlin he Universität Braunschweig he Universität Brno he Universität Budapest Technische Universität Cottbus

Technische Universität Darmstadt Technische Universität Dresden Technische Universität Eindhoven Technische Universität Hamburg-Harburg Technische Universität Wien Technische Universiteit Eindhoven Universitá di Ancona Universität der Bundeswehr München Universität GH Kassel Universität Innsbruck Universität Leipzig Universität München Universität Rostock Universität Siegen Universiteit Delft Universiteit Gent University of Auckland University of Lulea

University of Waterloo

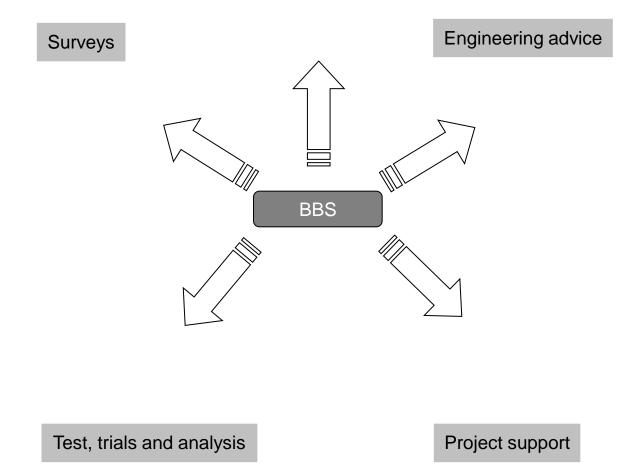
# References



- Knauf
- Knauf Marmorit
- Interpane
- Colfirmit Rajasil
- Haacke+Haacke
- Caplast
- Lafarge Braas
- BBA Nonwovens
- Icopal
- URSA International
- Transpac
- Weiß Chemie
- Deutsche Pittsbourgh Corning
- Wayss & Freytag
- Bilfinger + Berger
- Müller- Altvatter
- Strabag
- Wiemer + Trachte
- Nileg
- Öffentliche Versicherung Braunschweig
- Nord/LB
- LBS



Research and Development





## **R&D** Practiced research and development

- New building systems to reduce the consumption of energy
- Stabilization of the climate- and room situation with structural measures
- Progressing of the buildings' sustainability
- Increasing of the physical health regarding habitation with the help of building- and ecological methods of construction
- Decrease of the investive and operating costs regarding the buildings' handling by applying optimized climate concepts
- Innovation with new developed building materials

### Tests

- Tests of building materials and constructions at the BBS- or another involved (test-) institute
- Assessment of building materials and proposals for optimizing
- Test certifications at the BBS- or another accredited institute
- Expert monitoring when getting a license of building systems at the DIBT or another regional admission office
- Test engineering assistance at present projects
- Quality assurance regarding the internal and/ or external quality control

#### Studies

- Preliminary studies regarding project drafts
- Studies concerning product inquests
- Market enquiry
- Interviews with customers
- Feasibility studies
- Implementation studies
- Product analysis

### Working projects

- Support at projects
- Assumption of technical achievement
- Optimization of national projects with the help of network management
- Developing strategies/ concepts to realize projects and ideas
- Optimizing the connection of technique and marketing
- Training and consulting when launching

### Energering

- Processing of projects regarding building physics
- Surveyor
- Buildings' optimizing with the help of sustained yield concepts
- Optimizing the buildings' serviceability
- Developing economical concepts
- Outcourcing
- External processing of orders

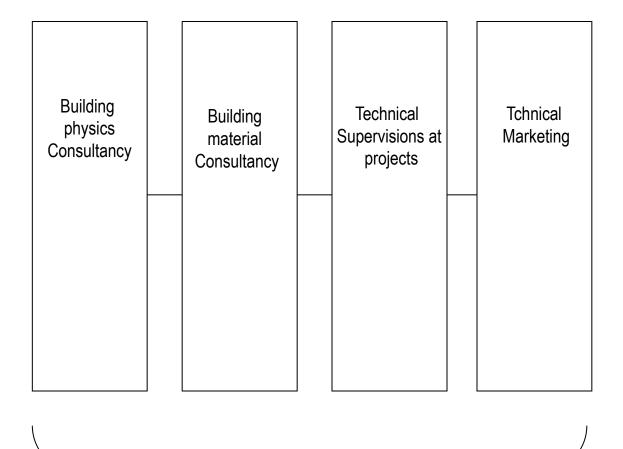


BBS as a Technical services Provider leads independently with its network or under coordination of the customer extensive project-treatments or supports the customer by his development.

Studies and market-analyses are the basis that on this occasion through research - and developments is supplemented. In own or foreign laboratories, materials or constructions are tested for its application-efficiency. With classical engineer-planning's buildings are planned.

With the direct access in BBS during the development, the customer keeps to reproach the area of authority by himself without high costs for research and development departments.





4PE = 4 Party Engineering

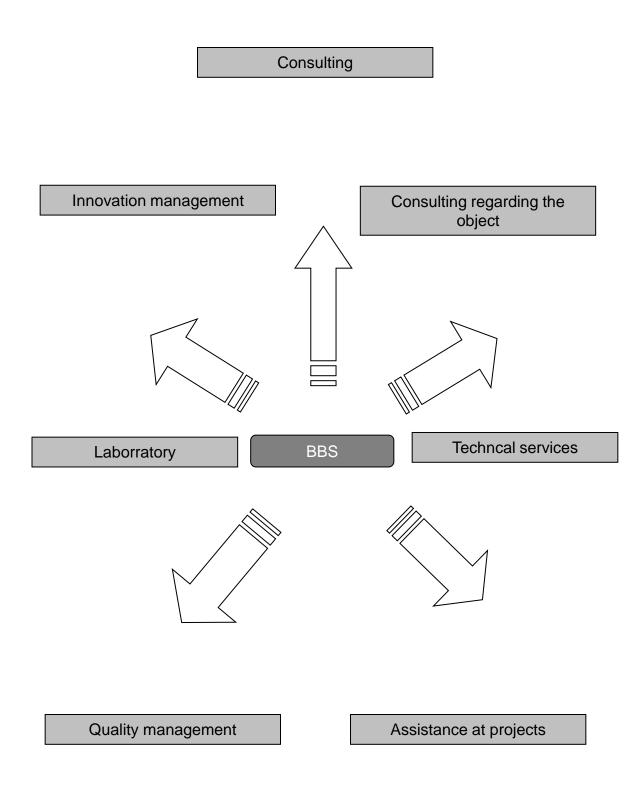
# TSP / 4PE



4PE is an integrator which bundles capabilities, competence and know- how to develop and actuate extensive solutions for technical assistance.

- Creating transparency regarding test demands
- Containment of the complexity of building physics
- Assistance in developments regarding standards and rule types







#### Innovation management

- Development of new building techniques
- Making proposals to complete the product line
- Updating product- databanks
- Initiation of research projects
- Dissertations at conferences and conventions

#### **Development of products**

- Supervision and having account for the development
- Preliminary studies and analysis of competition products
- Conducting conversation with producer of "sub- products"
- Tests of "sub- materials"
- Tests of the new developed product
- Developing launching concepts
- Optimization and coordination of building products
- Coordination of the involved parties
- Quality assurance and quality surveillance

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#### Laboratory

- Tests at the BBS- laboratory
- Assistance of tests at other institutes
- Analysis of tests
- Reception inspection of products

#### Quality management

- Quality surveillance
- Assistance at claims
- Assistance to get a certification

#### **Technical support**

- Support at the technical marketing
- Contacting other technical areas/ themes

#### Consulting at technical problems

- Hotline
- Courses of instructions
- Testing details and doing the further development of these construction details
- Experts on location
- Checking the sales documentation
- Checking the web presence
- Consulting of marketing and public appearances



Due to our technical know-how in testing and certification of building products in Europe and Russia, we support our partner-colleges, - universities and -research establishments in the countries by advising them on the implementation of products.

In following countries, we can offer our help

- China
- Austria
- Russia, as well as former Soviet-Republics
- Poland
- Hungary
- The Czech Republic
- Slovenia
- Switzerland
- France
- Benelux
- Denmark
- Sweden
- Finland
- Turkey
- Indonesia
- and from foreign countries to Germany.

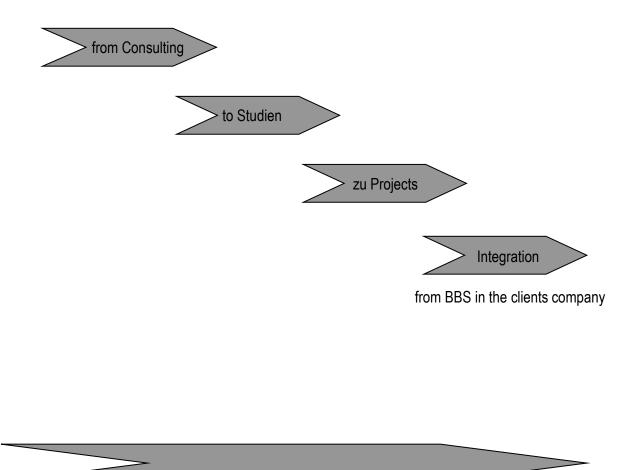
Our performances are particularly

- Creating of explanations to tests- and application-standards
- Formulation of the foundation for the admission and aptitude of the products on the foundation of the respective valid test- and -application-standards
- Performance of laboratory and application-examinations on the foundation of the respective valid
- test- and -application-standards
- Creating of certificates for the serviceability of the products in the respective climate-regions
- Formulation of comparison-certificates with the respective country to determine the conformity
- Creating of test certificates
- Performance of accreditations

On this occasion, we impart our good contacts not only to our partners in the colleges, universities, research-establishmens and Chambers of Crafts, but also to established and interested companies, sales-partners and distributors. On demand, we lead the conversations and correspondence for you or we help you with the local linguistic peculiarities in the respective countries.



Surplus value

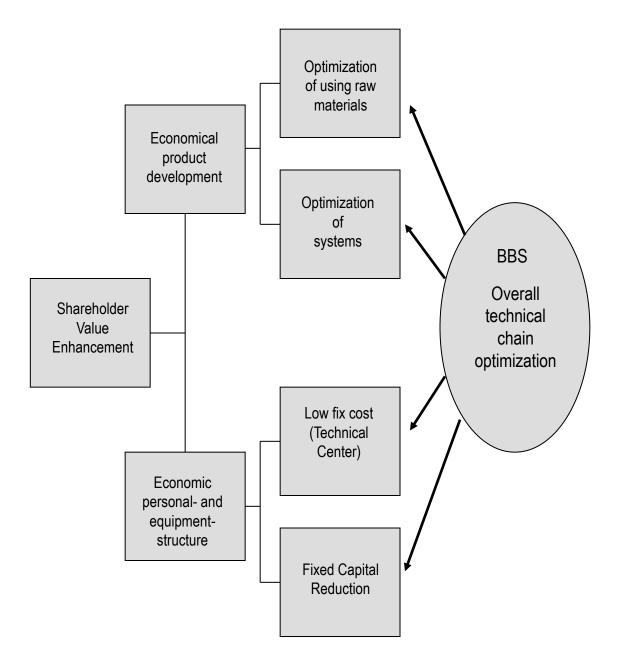


Increasing the potential for development using and integrating the technical competence of BBS



# Customer

BBS



# **BBS INSTITUT**



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