

Research & Development

Industrial gas application

- Hydrogen compatibility of piping systems and fittings within the scope of DIN EN 746 / ISO 13577
- Development and testing of industrial combustion systems for fuel flexibility
- Development of concepts for industrial combustion control of firing processes with variable gas properties

Household and commercial

- Hydrogen compatibility of piping systems and fittings within the scope of DVGW G 600 (TRGI) / Gas installation
- Evaluation of the pipeline dimensioning in case of a fuel change
- Hydrogen compatibility of gas appliances
- Behavior and calibration validity of gas meters under hydrogen
- Investigation of flame monitoring systems in volatile gas conditions

Selected references

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SWT STAHLWERK
THÜRINGEN

GMH GRUPPE

FERALPI
GROUP

HKMN
Hüttenwerke
Krupp Mannesmann

SALZGITTER
FLACHSTAHL
Ein Unternehmen der Salzgitter Gruppe

MANNESMANN. Das Rohr.

thyssenkrupp

LAMTEC

ArcelorMittal

Independent company group of DVGW

DBI
Gruppe

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Gas Utilization

Domestic, commercial end use & industrial thermoprocessing
Fuel flexibility & hydrogen compatibility
Energy efficiency & emission reduction



www.dbi-gruppe.de

www.dbi-gruppe.de/gasanwendung



Energy with Future. Environment and Responsibility.

Optical probe systems & energy efficiency

- Performance of optical condition assessments, thermographic and vibration analyses on and in industrial thermal process and boiler plants during operation
- Diagnostics of plant vibrations and combustion pulsations on boiler plants
- Carrying out exhaust gas analyses on thermoprocessing and power generation plants to increase efficiency and reduce emissions
- Consulting, engineering and testing on energy efficiency improvement and fuel flexibility in industrial thermoprocess technology
- Mobile inspection or permanent process monitoring
- Live monitoring at the customer's plant
- Expert opinion in case of malfunction and damage



DBI High Temperature Test Bench

Hydrogen in gas applications

- Years of experience with hydrogen suitability studies for gas and combustion plants from installation to process
- Testing of your heating equipment in our pilot plant under defined fixed/high volatile hydrogen contents in the fuel gas
- Development and evaluation of concepts for alternative energy supply of industry and quarters
- Investigation of the hydrogen suitability of existing household and commercial appliances on site or in our own technical center
- Evaluation and cataloging of energy-intensive industries and their processes with regard to hydrogen compatibility
- Support in the maintenance of the DVGW adjustment database
- Support for obtaining the „H2ready“ test seal



Hob in hydrogen mode

Engineering

Combustion technology & burner development

- Optimization of product quality and product throughput in industrial thermoprocessing plants
- Development of low-emission industrial firing systems in our own technical center
- Consultation and testing for the development of domestic and commercial heating equipment
- Quality assurance in the market area conversion L-/H-Gas in household and commercial applications
- Consulting and realization of the industrial market area conversion L-/H-Gas



DBI technical center industrial thermoprocess technology

Maintenance & Service

- Burner and valve maintenance
- Modernization of firing control systems
- Assessment of the conformity of gas installations to standards
- Preparation of plant and safety documentation for gas pressure regulating stations