

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























DBIGruppe

Contact

DBI GUT

DBI Gas- und Umwelttechnik GmbH

Department Gas Utilization
Karl-Heine-Str. 109/111
D-04229 Leipzig



Dipl.-Ing. Marcus WiersigHead of Gas Utilization

Halsbrücker Straße 34 D-09599 Freiberg

Tel.: (+49) 3731 4195-332 Fax. (+49) 3731 4195-309 marcus.wiersig@dbi-gruppe.de



2

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.

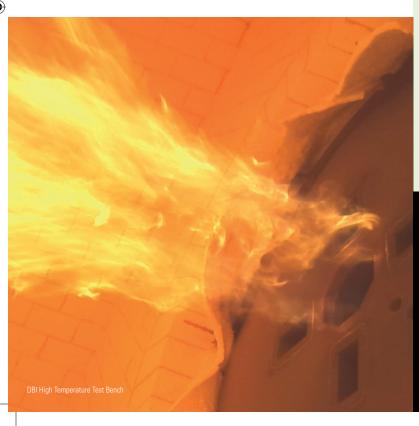






Optical probe systems & energy efficiency

- 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



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





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



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

