

DASGIP Corporate Profile

Parallel Bioreactor Systems For Unparalleled Results

DASGIP develops and manufactures technologically advanced Parallel Bioreactor Systems for the cultivation of microbial, animal and human cells at benchtop scale. Process engineers and researchers in the biotech, pharmaceutical and chemical industries benefit from increased productivity, high reproducibility and ease of scale up, resulting in accelerated innovation cycles.

Corporate Overview

DASGIP was founded in 1991 and is headquartered in Juelich (Germany), where also the research & development department and the production facility are located. Since 2003, DASGIP is additionally represented in North-America by its subsidiary DASGIP BioTools, LLC in Shrewsbury MA (USA). Taken together, an experienced team of more than 70 specialists support each customer's success with excellent products and outstanding service.

Corporate Key Data - 2010

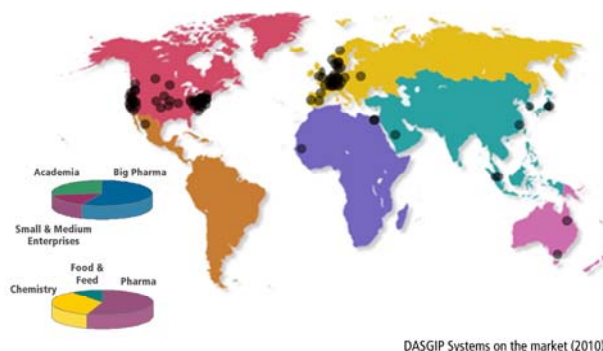
Board of Directors	<ul style="list-style-type: none"> Dr. Thomas Drescher, Chief Executive Officer Dr. Matthias Arnold, Chief Scientific Officer Dr. Falk Schneider, Executive Vice President
North American Management	<ul style="list-style-type: none"> Dr. Karl Rix, CEO at DASGIP BioTools, LLC.
Supervisory Board	<ul style="list-style-type: none"> Dr. Jürgen Kieschowitz, Chairman Rolf Geisen Prof. Dr. Wiltrud Treffenfeldt
Employees	<ul style="list-style-type: none"> Team of more than 70 In-House Experts, mainly Engineers, Scientists and Software Engineers
Compound 5 years annual growth rate (CAGR)	<ul style="list-style-type: none"> About 25%
Global Extension	<ul style="list-style-type: none"> Europe 55%, North America 40%, Asian-Pacific 5%
Customer Base	<ul style="list-style-type: none"> Almost 2500 bioreactors at over 250 locations 14 of the Top 15 Big Pharma Companies

Corporate Profile

History at a Glance

1991	Foundation as IT company
1994	Forming of the biotech business unit
1999	Innovation Prize "Brave Entrepreneurs", new company building in Juelich ISO-Certification
2003	Foundation of North American subsidiary in Shrewsbury, MA
2005	Winner of "Red Dot Design Award"
2007	Partnering with m2p labs for BioLector distribution
2008	Target new markets by distribution partners in Singapore, South Korea and Japan Integration of HyClone S.U.B. into DASGIP System
2009	OPC based integration of autosamplers and analyzers into the DASGIP System Launch of Remote Control Suite iApp Expanding the product portfolio with the DASGIP PhotoBioreactor
2010	Winner of "Innovation Award" of the Aachen region
2011	Ground breaking for New Production Hall

to cover these markets. Thus, DASGIP has established as a global provider of advanced Parallel Bioreactor Systems. In 2010, 350 systems with more than 2500 bioreactors were in operation at over 250 locations worldwide. Today, 14 of the global 15 largest pharmaceutical companies are among the DASGIP customers*.



In the recent years DASGIP has mainly focused the European and North American market. In 2008 the company started to expand its business activities to the Asian-Pacific region. DASGIP works together with reputable distribution partners in Singapore, South Korea and Japan

Technology

DASGIP Parallel Bioreactor Systems are designed to meet today's challenges in the biotech, pharmaceutical and chemical industries. Increasing demands in drug development and documentation, strict time constraints and the need for market-oriented research have to be addressed.

*For further information see www.dasgip.com.

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DASGIP provides advanced cultivation systems for microbial fermentation and cell culture: The DASGIP systems feature a truly parallel design, minimal working volumes and intelligent data management, enabling users to benefit from:

- Parallel operation of up to 16 benchtop bioreactors
- Monitoring or control of more than 30 process parameters per bioreactor
- High-Throughput analysis in 48 and 96 well format
- Different degrees of automation
- Comprehensive data management
- OPC Client/Server support
- Broad range of working volumes from 100 µL up to 5 L (extended working volumes by integration of third-party bioreactors)

Application Fields

The prime applications of DASGIP Parallel Bioreactor Systems are high-throughput screening, cell line and strain characterization, protein production as well as process development and optimization.

Application	Benefits
High-throughput-screening	Economy of time, material and resources
Cell line and strain characterization	Reproducible results in parallel operations providing reliable and comparable data
Process development & optimization	Easy scalability and acceleration of development
Protein production & cell expansion	Higher productivity of cells/organisms, media, labor

The DASGIP technology provides researchers with sophisticated solutions for the aerobic and anaerobic fermentation of microorganisms and the cultivation of animal and human cells at benchtop scale – parallel in up to 16 vessels, strictly controlled and with numerous options for



automation. Its modular design and high flexibility have made the DASGIP technology the first choice also in special applications like stem cell research, metabolic engineering or biofuels development.

In several cooperation projects DASGIP's technical innovations help reputable industrial and academic partners to take their microbial and cell culture projects to the next level.

Excellence

The DASGIP in-house competence is represented by a team of scientists and engineers working closely together with customers and renowned industrial and academic partners to explore and develop the most advanced solutions for their growing needs and technologies. Our commitment to the success of each customer includes:

- Product quality by the highest manufacturing standards (DIN EN ISO 9001: 2008 certified)
- Taking into account customer-oriented quality assurance standards (IQ/OQ)
- Regulatory Standards: DASGIP customers run processes meeting FDA's „Quality By Design“ approach and PAT requirements
- Application Workshops
- Maintenance Program