GENETICS
MADE IN GERMANY

German Genetics International GmbH

Am Osterfeld 14 • 49661 Cloppenburg-Bethen • Germany

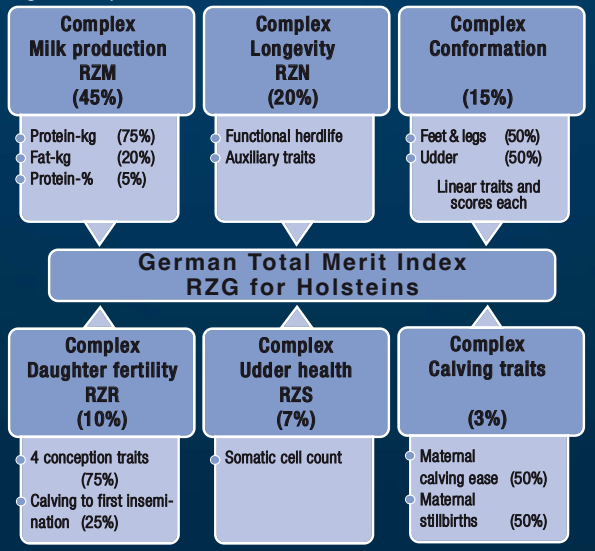
Phone +49 - 44 71 - 91 74 0 • Fax +49 - 44 71 - 91 74 74

Internet: www.ggi.de • email: info@ggi.de

Impressive Potential

- GGI is marketing semen in over 70 countries worldwide
- Characteristics of Holstein breeding in Germany:
  - More than 1,700,000 registered Holstein and 170,000 registered Red Holstein cows
  - More than 500 A.I. bulls per year selected from over 12,000 genotyped bulls
  - More than 30,000 bulls in genomic training sample for Holsteins
  - The largest registered Holstein and Red Holstein population in the world
  - The most extensive breeding programme in the world
  - The second largest test programme for Holsteins worldwide
  - The largest Red Holstein test programme worldwide
  - Strong genomic selection among thousands of candidates
  - Strong cow families with deep pedigrees
  - One of the oldest herdbooks worldwide (since 1878)
- Balanced breeding goal:
  High milk production with excellent components:
  at least 10,000 kg milk, 4.0 % fat, 3.5 % protein
- Optimum ranking of A.I. bulls according to the Total Merit Index (RZG). The RZG considers milk production and functional traits corresponding to their economic importance.

Figure: Composition of the Total Merit Index RZG



We offer

Semen and Embryos of all dairy, dual purpose and beef breeds:

- Holstein, Red Holstein and Angler
- Dual Purpose Red and White, Dual Purpose Black and White and Simmental
- Angus, Belgian Blue, Charolais, Galloway, Limousin etc.

A wide range of A.I. equipment of different manufacturers:

- MVE
- Taylor-Wharton

Consultancy and technical support for the customer through presentations, seminars and information material in cooperation with:

- The German Holstein Association (DHV)
- The German Cattle Breeders Federation (ADR)
- The herd test organizations (DLQ)
- The data collection centre (vit)
- The Zuchtvieh-Export GmbH (ZVE) *(cattle export)*
- Our member organizations

DHV ADR DLQ vit ZVE Zuchtvieh-Export GmbH

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Company & Tasks

German Genetics International GmbH (GGI) represents leading German cattle breeding organizations in the global market for cattle genetics.

Everyone in the world has the opportunity through GGI, to access the complete range of German cattle genetics and through this can achieve their individual breeding objectives. GGI combines the experience of more than 1,000 employees of its member organizations with the expertise of agricultural universities and research facilities and makes it available to customers worldwide.

For about 25 years, GGI has been an established name for the international trade of top German genetics. Semen exports to more than 70 countries worldwide, through our international agencies, make GGI a central contact point for semen enquiries and breeding projects from all continents.

Comprehensive and reliable data on transmission abilities are provided for GGI bulls. It is collected by an independently controlled centre for registration of data from dairy farms and it is scientifically analysed by an independent data centre. This analysis is based on the latest calculation models worldwide for breeding value estimation. The data collection and processing are government-controlled.

When it comes to cattle breeding, Germany is No. 1 in the world, having the largest registered herd book population of Holsteins and Red Holsteins, one of the oldest herd books and one of the most comprehensive breeding programmes. All of this puts Germany in the forefront of worldwide cattle breeding which can then be offered to customers by GGI.

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Members

DHV	Deutscher Holstein Verband e.V.
LTR	Landesverband Thüringer Rinderzüchter e.G.
RA	RinderAllianz GmbH
RBB	Rinderproduktion Berlin-Brandenburg GmbH
RSH	Rinderzucht Schleswig-Holstein e.G.
RUW	Rinder-Union-West e.G.
VOST	Verein Ostfriesischer Stammviehzüchter e.G.
ZBH	Zucht- und Besamungsunion Hessen e.G.

Reliable Data and Breeding Values

High accuracy of identification and herd test

- All animals of a herd, with no exception, get a cattle ID right after birth and are registered centrally. Government-controlled and independent herd testing organizations as well as an independent data collection centre, guarantee the correct data collection and breeding values.

Ideal conditions for daughter proofs

- The daughters of our bulls are kept under various housing and management conditions on family farms as well as on large commercial operations with more than 1,000 dairy cows. This guarantees comparable and reliable data material.

Leading classical breeding values

- The independent data centre vit set milestones in genetic evaluations. Germany has introduced the test-day-model, being the first country worldwide. Furthermore, Germany was first in evaluating all economically important functional traits based on complete data. The composition of the German total merit index (RZG) set international standards for modern dairy cattle breeding.

Reliable genomic breeding values

- Germany is the leading country in genomics. German genomics are based on the largest available training set. Germany was the first to use trait different polygenic effects. Together with unbiased sire-pedigree information instead of full parent averages, German genomic enhanced breeding values are more realistic.