

VERTRIEB DURCH:



**Ihr Anbieter für Geräte im Bereich
Labor, Mikrobiologie und Industrie.**

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Duetz-System

The Duetz-System is an integrated, easy-to-use, and cost-effective technology platform for the rapid handling and growth of large numbers of microbial strains, clonal libraries, and mutant banks in 96-well microtiter plates. The system enables a single person to grow and test thousands of strains simultaneously without an excess of repetitive handlings: all handlings are performed in parallel for sets of 96 strains. No robotic equipment is required. The system was originally developed and validated at the Institute of Biotechnology of the ETH Zurich.

advantages:

- + same quality of growth as in Erlenmeyer flasks in terms of oxygen transfer rates and reproducibility low investment costs
- + various users have reported time-savings of more than a factor 10 six parallel bioreactors on one shaker

application:

- + high-throughput screening for new enzyme activities or formation of secondary metabolites (heterogeneous and homogeneous culture collections)
- + screening and distribution of clone libraries in E. coli or yeasts
- + high-throughput screening for high-activity or high-productivity mutants
- + comparative studies of e.g. clinical isolates
- + medium optimization studies

main components:

- + cryo-replicator: a spring-loaded replicator for the simultaneous and reproducible sampling of 96 frozen glycerol stocks, without melting the remaining culture (1)
- + cryo-replicator press is a guiding system ensuring an accurate vertical movement during the replication of sets of strains (2)
- + sandwich covers convert all 96 wells of a square deepwell plate into individual "mini-reactors" (no well-to-well variations) suitable for high-frequency orbital shaking, at high oxygen transfer rates, in the absence of well-to-well variations (3)
- + cover clamps secure that the deepwell plate and its sandwich cover are clamped together tightly, thereby preventing well-to-well contamination (4)

