



Sheel **Biotech** Limited



SEED STORAGE CHAMBER (GENE BANK)

*Precision Climate Control for Long-Term
Seed Preservation*



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Seed Storage Chamber Solutions

Seeds are valuable biological assets whose viability and germination potential depend on proper storage conditions. Our Seed Storage Chambers provide precise control of temperature and humidity, ensuring the safe preservation of seeds for research, commercial agriculture, breeding programs, and long-term conservation.

Gene Banks are specialized repositories dedicated to preserving plant genetic resources for future generations. By storing seeds under carefully controlled environmental conditions, they safeguard crop diversity, rare germplasm, and valuable genetic traits. Gene Banks play a vital role in supporting agricultural research, crop improvement, biodiversity conservation, and global food security in the face of changing environmental challenges.





Gene Bank & Seed Conservation Storage Systems

The longevity of seeds largely depends on storage temperature, humidity, and moisture content. Different categories of seed conservation require different environmental conditions to achieve desired storage durations. Our chambers are designed to support international standards for gene banks and seed conservation facilities, ensuring maximum protection of valuable plant genetic resources.

Short-Term Storage

Short-term storage is ideal for operational seed inventories and frequently used seed lots. Controlled conditions help maintain seed quality and reduce deterioration during storage.

Duration: Up to 1 Year

Temperature: 5°C to 15°C

Humidity: 30–50% RH

Medium-Term Storage

Medium-term storage provides enhanced preservation for breeding programs and seed reserves. Lower temperatures significantly slow the natural aging process of seeds.

Duration: 3–4 Years

Temperature: 0°C to 5°C

Humidity: 20–30% RH



Long-Term Gene Bank Storage

Long-term storage is designed for genetic resource conservation and germplasm preservation. Ultra-low temperatures ensure maximum seed longevity and viability.

Duration: Up to 25 Years

Temperature: -18°C to -20°C

Humidity: 15–20% RH






Features & Applications

Our chambers are equipped with advanced monitoring, energy-efficient refrigeration, and precise climate control systems. Custom capacities are available to meet the needs of gene banks, universities, seed companies, and research institutions.

- ✓ PLC-Based Controls
- ✓ Data Logging & Monitoring
- ✓ Uniform Air Circulation
- ✓ Custom Chamber Sizes
- ✓ Turnkey Installation & Support

Why Choose Our Seed Storage Solutions?

- ✓ Enhanced Seed Longevity
 - ✓ Superior Germination Retention
 - ✓ Protection of Valuable Genetic Resources
 - ✓ Energy-Efficient Operation
 - ✓ Custom-Built Chambers Available
 - ✓ Installation, Validation & AMC Support
 - ✓ Turnkey Solutions from Design to Commissioning
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