GEOSYNTHETICS FOR AGRICULTURE

SOLMAX SYSTEMS

Today, just 11 percent of all land is arable, and countries everywhere are increasingly vulnerable to climate change. While irrigation, waste containment, and erosion control advances are radically changing global agriculture, water management remains vitally important. Growers need cost-effective, high-quality geosynthetic solutions to line storage tanks, ponds and dams for reliable water retention.

Geosynthetics are tough and flexible—designed to provide peak performance under a wide range of conditions in a number of applications. They assist farmers and agricultural operators to conserve the land, build production efficiency, sustainability, and resilience.

In agriculture, geosynthetics improve the efficiency and performance of a number of containment, storage, and conveyance solutions, from water storage tanks to dams, ponds, and canals. They also address many of the weaknesses of traditional solutions, such as structural construction materials like compacted soil, clay, concrete, or steel.

ADVANTAGES OF USING OUR GEOSYNTHETICS SYSTEMS

- High quality, reliable, cost-effective
- Outstanding chemical resistance and mechanical properties,
- Environmental stress crack resistance
- Dimensional stability
- Good thermal aging
- Excellent resistance to UV radiation
- Suitable for exposed conditions
- Quick and economical installation

SOLMAX

CANAL SYSTEMS FOR CONVEYANCING, IRRIGATION

With statistics indicating that globally about one third of the water conveyed in unlined canals is lost to seepage, the case for use of geosynthetic liners is strong. Canals are often lined with unreinforced concrete which, even under normal operating conditions, is susceptible to cracks – e.g., due to temperature variations or settlement of the subgrade. This can result in significant water loss. Geomembranes, used in combination with these traditional solutions or on their own, are a much more reliable barrier material.

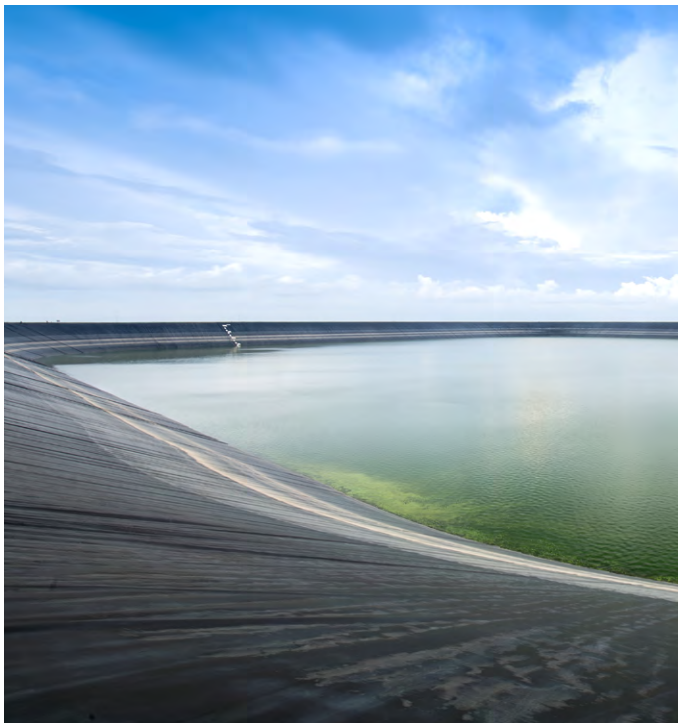
They offer superior flexibility and capacity to handle minor differential settlement, are puncture resistant, are highly resistant to UV, and come with the option of textured surfaces for improved stability and safety. Where they are exposed to potential damage, they can be covered by a protective layer of concrete, soil- or concrete-filled geocells, or other material.

GEOSYNTHETIC LINERS AND COVERS

Geomembranes have been used successfully to contain fresh water, preventing loss through evaporation and leakage, as well as to securely contain wastewater from various agricultural applications, protecting groundwater from contamination. In addition, geosynthetics can be used to improve slope and foundation stability in agriculture related structures such as dams; and waterproof and prolong the serviceability of containment structures, such as reservoirs and ponds.

- **Reservoirs and ponds**
  Geosynthetic solutions offer cost-effective, highly flexible liners suitable for both large and small-scale projects.
- **Dams**
  Geosynthetics provide cost-effective solutions for effective liquid barriers, seepage containment, drainage, structural reinforcement and erosion control functions to secure scarce water resources.
- **Floating covers**
  Floating covers facilitate evaporation control, odor suppression, thermal protection, biogas energy recovery, and even algae control.

Smart investment in geosynthetics can protect your investments, extend the service life of applications, and accelerate outputs.



Solmax's range of geosynthetics help growers conserve the land and precious natural resources like water, and build production efficiency, sustainability, and resilience.
Quality solutions that are reliable and cost effective.

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