

AGRUTEX®

Nonwoven Polypropylene Needle-punched Geotextile

ENVIRONMENTAL, CIVIL, AND MINING APPLICATIONS



AGRU's needle-punched nonwoven geotextiles are manufactured at a facility located in Andrews, South Carolina, whose lab has been accredited by GAI-LAP demonstrating our commitment to high-quality standards. This facility begins its manufacturing process with the production of durable fibers that are then transformed into geotextiles resistant to degradation from UV, radiation, or biological and chemical environments.

The AGRU success story has been unfolding for seven decades. Founded in 1948 by Alois Gruber, who set the company on the course for plastic manufacturing, AGRU has become one of the world's most important single-source suppliers for piping systems, semi-finished products, concrete protection liners, and lining systems made from engineered plastics. We use only top-grade thermoplastic polymers as our raw materials. When it comes to application-technical consulting, we are your best partner in the field.



Quality

Customer satisfaction comes first at AGRU. For instance, technical consultations, training courses, and on-site assistance are among the services offered by AGRU to support customers. Additionally, AGRU procedures help ensure that products comply with international norms, as monitored and evaluated on an ongoing basis according to standards set by independent testing agencies. And when it comes to our nonwoven geotextiles, our total control over all the input variables that can affect the quality of the end product helps ensure manufacturing excellence.

AGRUTEX®

AGRUTEX is a nonwoven geotextile product line specifically designed for environmental, civil, and mining applications. When in service, AGRUTEX provides filtration, separation, and/or protection for other geosynthetics. AGRUTEX is easy to install and has a track record of high performance. The geotextile possesses high strength thanks to internally produced staple fibers, which are needled together to form a stable network that retains relational dimensional stability. Additionally, polypropylene provides resistance to ultraviolet, biological, and chemical degradation.

Summary

- Stocked and readily available in AGRU's Fernley, NV and Andrews, SC facilities to effectively service customers nationwide minimizing product lead times.
- Extends the life of projects and may eliminate the need to import soils for the working or reworking of the sub base.
- Enables the use of more effective aggregates for drainage applications.
- Highly customizable to fit your specific application or project requirements.
- A critical component to AGRU's Integrated Drainage System (IDS), an advanced engineered geosynthetic solution for closure, containment, and environmental applications.







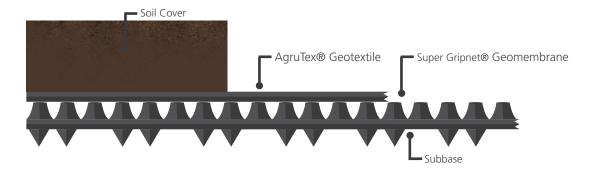
Applications

AGRUTEX geotextiles are engineered for use in three primary markets:

Environmental

AGRUTEX can take a role in filtration, drainage, separation, liner protection, or gas collection as part of an environmental liner system. This geotextile contributes to environmental applications that require high-quality products that exceed GRI standards and government regulations. AGRUTEX is utilized in environmental applications such as landfills, coal ash impoundments, and other waste containment systems. Its role can be broken down into three tasks: to protect geomembranes, to support gas collection and venting systems, and to support liquid and/or gas pressure relief systems.

Below is an example of how AGRUTEX's stability and durability lends itself to bridging across studs of the Super Gripnet[®] geomembrane enabling the built-in drainage layer of the AGRU IDS. AGRU IDS, short for Integrated Drainage System, is an advanced engineered geosynthetic solution for closure and containment applications that eliminates the need for traditional geocomposites, since the geotextile and liner work together to serve as the drainage layer. This system is exclusively engineered by AGRU, with the most significant benefits being cost and time savings during installation.



Civil

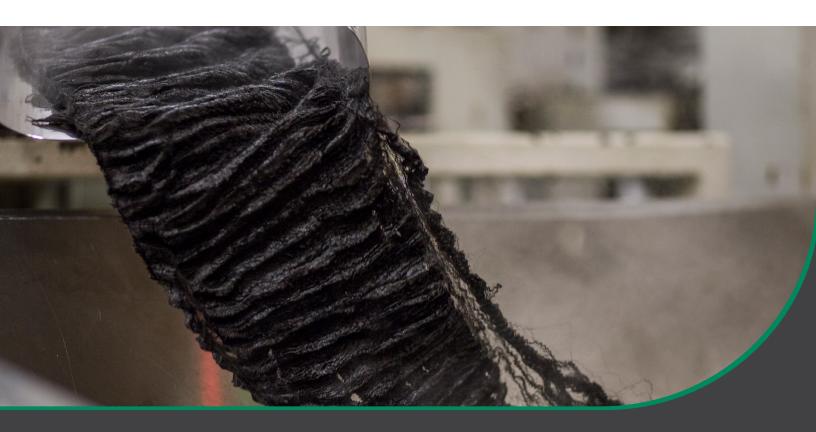
AGRUTEX can take a role in filtration, drainage, separation, and stabilization in a number of civil engineering applications. The six main civil engineering categories are: Road works, railway works, river canals and coastal erosion control, drainage, sports field construction, and agriculture. AGRUTEX can be implemented in a number of ways for these civil engineering projects, including to reinforce soil banks, to promote a firm base for roads and highways, to line ground drains, and to prevent erosion along river banks and the coast.

Mining

AGRUTEX can take a role in cushioning and liner protection, filtration, drainage, and separation in a host of mining applications. A well designed heap leach pad is essential not only to protect the environment, but also to increase your ability to recover valuable ore from your mining operation. During the preparation of the heap leach pad, AGRUTEX serves to protect the low-permeability geomembrane liner from being punctured by an imperfect subgrade. In this application, AGRUTEX is available in a range of weight classes to meet your subgrade preparation requirements.

In situations with limited availability of a drainage medium, you can incorporate AGRUTEX into a geocomposite that is capable of transmitting the pregnant solution while also protecting the underlying heap leach pad. After the heap leach pad is complete, AGRUTEX can also be used as a filter for solution trenching. In this application, AGRUTEX acts as a filter that finely sifts larger particulates from solutions as it is collected as part of the operation.

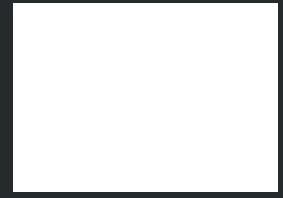
When mining operations have finally ceased and an impermeable barrier is necessary, AGRUTEX can be combined with a geomembrane or a geocomposite product. This AGRU solution, Integrated Drainage System (IDS), is a compliant closure and containment system that incorporates an advanced drainage structure within the geomembrane component. By combining multiple layers—each with its unique benefits—into one product, AGRU provides a powerful closure and containment solution that also delivers significant cost savings.











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