

# LINING SYSTEMS

HIGH TEMPERATURE  
RESISTANT  
GEOMEMBRANES



## HIGH TEMPERATURE RESISTANT GEOMEMBRANES

Until now 60 °C has been the recommended maximum sustained operating temperature for HDPE geomembranes. Temperatures in excess of 60 °C accelerate degradation, oxidation and lead to early failure. Consequently, traditional HDPE geomembranes cannot be used in applications where temperatures are above 60 °C.

AGRU has successfully produced hot water pipes for many years. With this vast knowledge and experience, AGRU developed the first High Temperature Resistant (HTR-PE) geomembrane in the marketplace:

- Temperature resistance up to 100 °C
- Excellent long-term strength and durability
- New applications possible



### SUPPLY RANGE

Thickness	1.0 mm – 3.0 mm
Width	5 m and 7 m
surface	Smooth and structured
Welding rod	4 mm

## Properties and Quality

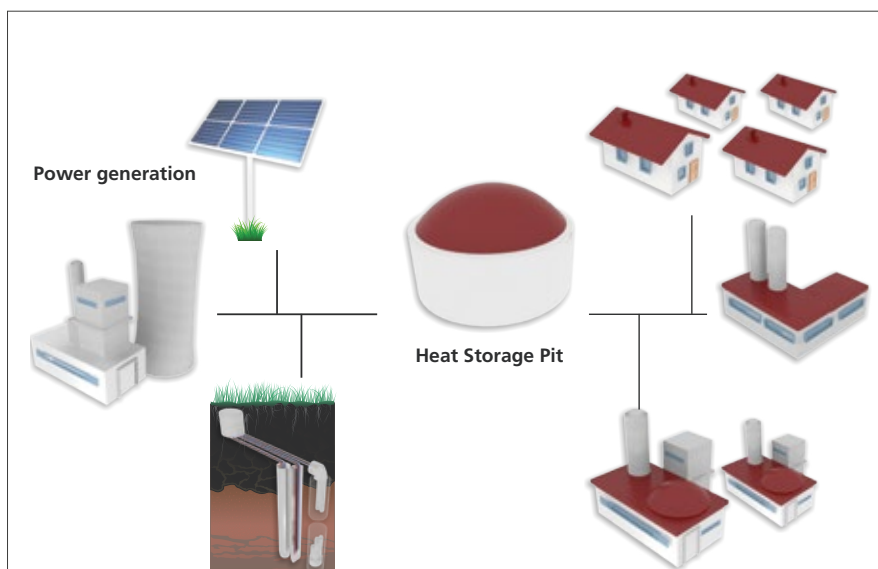
Only specially approved and selected resins are used for the production of high temperatures resistant geomembranes. A purpose built molecular structure combined with a high-quality stabilisation package prevents oxidation and leads to outstanding long-term performance at elevated temperatures. The compound used was tested according to ISO 9080 and complies with DIN 16833 (PE-RT). Thus a good long-term strength and excellent temperature resistance are confirmed.

High temperature resistant (HTR-PE) geomembranes are welded with standard welding equipment and installed like traditional HDPE geomembranes. Furthermore, they provide the same level of chemical resistance and performance properties.



Hot water storage pit lined with HTR-PE

## District heating



## Applications

Due to the improved life-time at elevated temperatures, high temperature resistant (HTR-PE) geomembranes have the ability to provide long-needed solutions for industries and applications where higher temperatures are needed.

- Power generation from renewable resources (e.g. solar thermal, biomass and geothermal)
- Hot water storage
- Industrial process water and waste water
- Bioreactor landfills
- Mining and heap leach facilities
- Oil and gas industry



The Plastics Experts.

Your distributor:

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