

Geothermal energy sytem

GeoSSum Hybrid 지오썸 하이브리드

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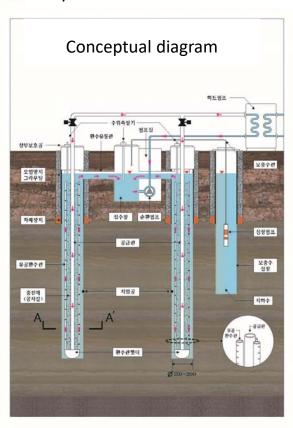
GeoSSum Hybrid

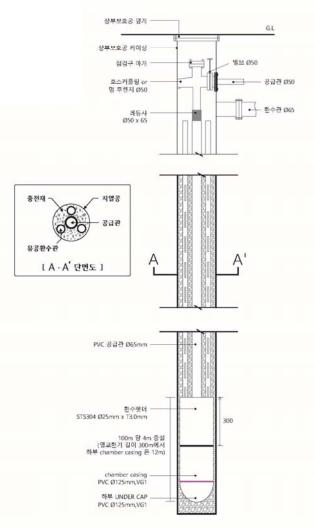
Open loop geothermal system without groundwater motor pump

New Excellent Technology(south Korea)
Patent (south Korea)

Characteristics of GeoSSum Hybrid

- Application of prevent deposition-open-loop-geothermal heat exchanger
- Open loop geothermal system without groundwater motor pump
- Reduced construction costs by up to 50% (at Smart Farm)
- Prevent the inflow of pollutants
- Prevent the leakage of brain
- Easy maintenance





Open loop geothermal system without groundwater motor pump

- Groundwater motor pump is not installed in geothermal well
- Supply and return pipes installed in geothermal well

Can be installed under building

- Because there is no groundwater motor pump in geothermal well
- Large geothermal system can be installed even in narrow areas

Reduced construction costs by up to 50% (at Smart Farm)

- Geothermal well depth(200m) → reduced construction costs
- Same heat exchange capacity to open loop system(SCW)
- Reduced number of geothermal well versus vertical loop system

For 500 usRT

Category	GeoSSum Hybrid	Open loop(SCW)	Vertical loop
Depth (m)	ф200 x 200	ф200 x 500	φ150 x 200
Length of Geothermal well (m)	10,000	10,000	34,000
# of Geothermal well (ea)	50	20	170
# of Motor pump	1 set	20 set	1 set
Operating Cost	low	high	Low
Construction Cost	Low (half of SCW)	high	high

Prevent the inflow of pollutants

- Prevent using the upper protector

Prevent the leakage of brain

- Extends ther supply pipe to the bottom of Geothermal well
- Return pipes connects to the upper protector
 - → Fundamental blockage of brain leakage

Easy maintenance

- Use single motor pump in water tank(per 1zone)
- Possible to reduce operating costs



Model	Diameter (mm)	Depth (m)	Heat capacity (R/T)
GH - 150	200	150	7.5
GH - 200	200	200	10.0
GH - 300	200	300	15.0
GH - 500	200	500	25,0

Groundwater contamination prevention facilities for Clear and Clean Groundwater, Geothermal Energy System

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