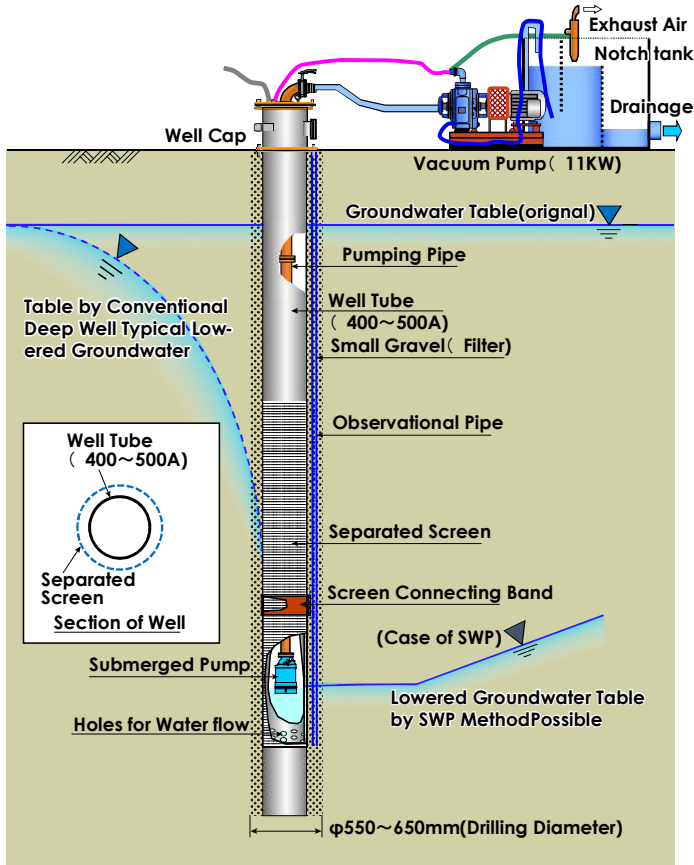


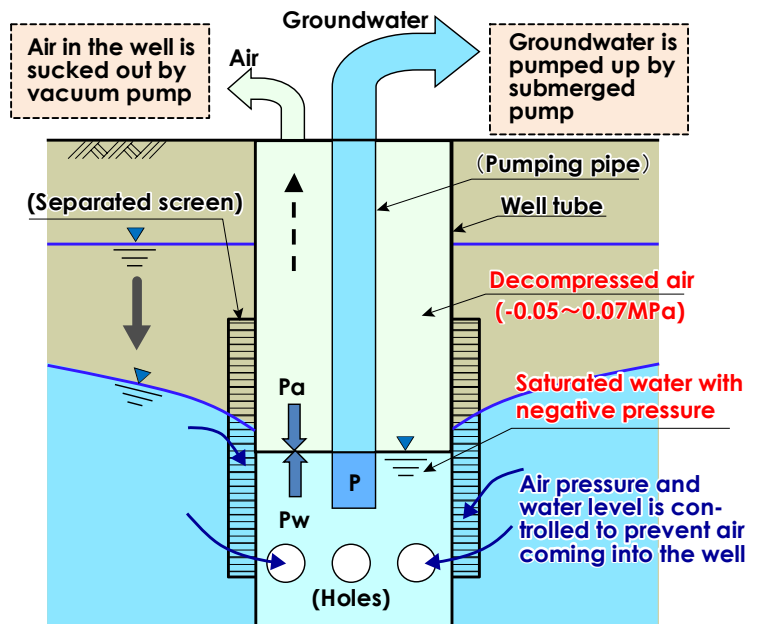
SWP Method

Newly Developed Groundwater Level Lowering Method

Equipments of SWP System



Principle of SWP Method



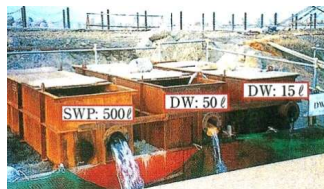
“ In the SWP method, groundwater flows toward the bottom of the well due to negative pressure and gravity, and is then pumped up by a submerged pump”

Merits of SWP Method

- A large amount of groundwater can be pumped up compared with the conventional deep well and vacuum deep well.
- Dehydrating effect of unsaturated ground (formed above groundwater table) is improved.
- If a cut-off wall is constructed around the selected site, the reduction of groundwater table can be mitigated outside of the cut-off wall.

Primary Applications of SWP Method

- Pumping up of Groundwater (Groundwater lowering method)
- Heaving Prevention
- Reduction in water content in low permeable ground



A comparison of the Pumping Amount between SWP and conventional Deep Well at Open Cut Tunnel site near Shinano River (Niigata City, Japan,2000)



Groundwater Level Lowering at a Large-scale Open Cut site (Hachioji City, Japan,2015)



Heaving Prevention with the help of Pumping up Groundwater at a Sewage Plant Building site (Ichikawa City, Japan,2014)



Dry Work at site of Tide Gate Foundation in Tide Wall (Kamaishi City, Japan, 2010, before The Great East Japan Earthquake)

ASAHITECHNO Co., Ltd.
5-16-84, Iwasakishinden,
Waga-cho, Kitakami-shi, Iwate,
024-0322, JAPAN
Tel. +81-197-73-6015
Fax.+81-197-73-7713
asahi03@carrot.ocn.ne.jp
<http://www.asahitechno.jp/>

LIEW STRATEGICS
BUSINESS • INNOVATION • TECHNOLOGY • MANAGEMENT
123 Bt Merah Lane 1
#04-118 Alexandra Village
Singapore 150123
Tel. +65-6276-4711
Fax.+65-6276-4722
liew@strategics.com.sg
Handphone:+6597346228
<http://www.strategics.com.sg>