



## **Ground Stabilisation using Grout Injection**

| Location            | Japan   | Hydra-Cell model | G10XKSGSNECB x 112 /<br>P400MSGSCA05S x 60 |
|---------------------|---|------------------|--|
| Type of application | Ground Stabilisation using<br>Grout Injection     | Flow rate        | 15 L/min (4 gpm)                           |
| Liquid              | Sodium Silicate<br>Sulphuric Acid<br>Liquid Glass | Pressure         | 40 bar (580 psi)                           |

## **Application details**

After the huge earthquake in March 2011, soft ground improvements in public infrastructure, such as airport runways and harbours, have been given the highest priority in the Japanese grouting market.

In soft ground improvement, grouting material must be constantly and slowly injected into the targeted areas.

The main concerns of the applications is how to let grouting material permeate into the pore spaces and replace the pore water without breaking the soil structure.

Hydra-Cell G10 & P400 pumps were selected for their ultra-low pulsation levels and know reliability. These coupled with the compact design of the pump, allows for up to 24 x pumps to be installed on a single 4T flatbed truck.

Usually working unsociable and limited hours, the pump and associated systems but operate as & when required for as long as is needed.

Maintenance during these times cannot be allowed, something that Hydra-Cell achieves time & time again.

## Advantages of Hydra-Cell pump on this application

Hydra-Cell was chosen for this application for the following reasons:

- Ability to offer precise flow rate at stable pressure.
- Known reliability for continuous operation with limited working hours.
- Compact design, allowing for 24 x pumps and associated equipment to be installed on each 4T www.hydra-cell.coatset truck.