

VERTICAL DRAINS



GFWA

SUSTAINABLE TECHNOLOGY



Vertical drainage can be used to accelerate the consolidation of impervious soft silts and clays. Prefabricated vertical drains (PVD) are flat or round flexible polymer tubes.

MENARD has developed its own range of PVD installation equipment to cope with a wide variety of subsoil conditions and is able to install drains as deep as 45 m using the static cable leader machine which can be equipped with a vibrator.

A temporary surcharging embankment is commonly used in conjunction with the vertical drains to pre-load the ground and to reach the primary consolidation. PVD spacing and fill height depends on the soil properties, load intensity and specified consolidation.

The MENARD VACUUM consolidation process is a modified preloading system that supplements the vertical drains with an innovative time and surcharge saving vacuum system.

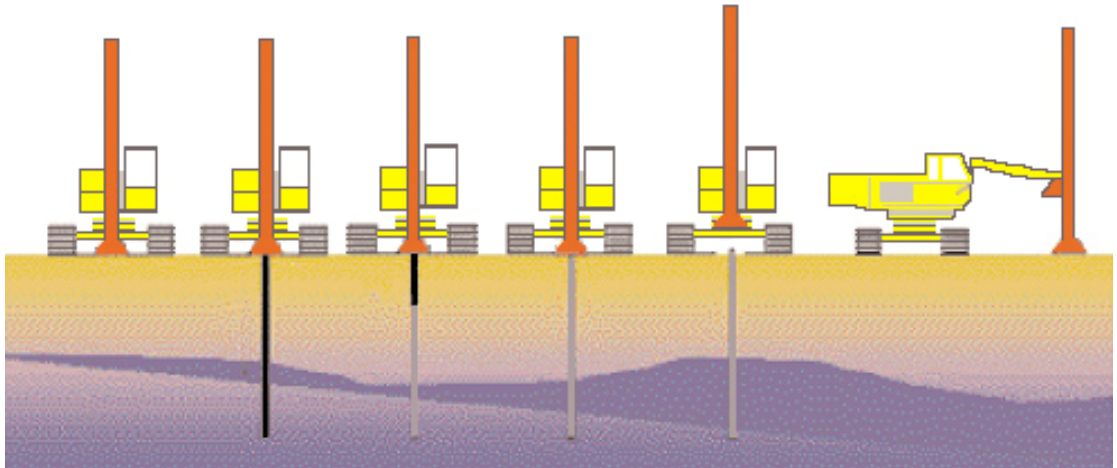
Real time consolidation is monitored by installing appropriate instruments.



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Vertical Drains Installation

The illustration shows a 12 to 24 m hydraulic jack mast mounted on an excavator.



EADS Airbus A380 Factory

30,000,000 m of PVD was installed in for the platform preparation works of EADS Airbus Plant in Hamburg.

The site was reclaimed from the Elbe River and was to be built on more than 15 m of very soft river mud.

17 rigs were mobilised and implemented to complete this project on time.



Recent References

Port Saeed Power Plant (Egypt) - 3EC - Platform and buildings - 1,600,000 lm
Alexandria City Center (Egypt) - Majid Al Futtaim- Platform and building - 1,500,000 lm
Pearl of the Gulf (Qatar) - Qatar - Platform and villas -700,000 lm
Changi Airport (Singapore) - P.S.A. - Airport - 700,000 lm
Fisherman's Island J2S2 (QLD, Australia) - Port of Brisbane Corporation
Fisherman's Island S3A & S3B (QLD, Australia) - Port of Brisbane Corporation
Otway Gas Project (VIC, Australia)

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