

免挖式填海拓地 Non-dredge Reclamation

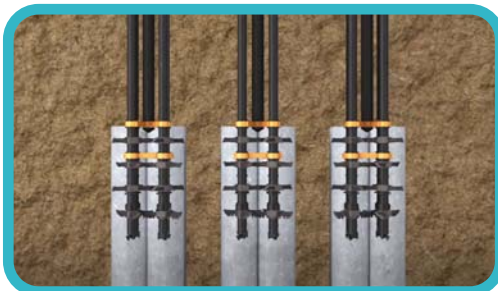


擴建香港國際機場成為三跑道系統的工程項目包括在現有機場島以北填海拓地約650公頃，其中有約四成面積位於污染泥料卸置坑之上。

The expansion of Hong Kong International Airport into a Three-runway System (3RS project) includes the reclamation of around 650 hectares of land north of the existing airport island, of which about 40% is located on contaminated mud pits.

香港機場管理局於這些範圍採用「深層水泥拌合法」的免挖式技術，令軟泥加固。

In these areas, Airport Authority Hong Kong uses Deep Cement Mixing (DCM) technology, a non-dredge method, to strengthen the soft mud for the reclaimed land.



深層水泥拌合法鑽機會鑽入預定的海床深度，然後注入水泥漿及攪拌，將水泥漿及污泥坑內的軟泥混和，使軟泥加固成為堅硬的水泥柱。

The DCM rigs are drilled into designated depth under the seabed, cement is then injected and mixed with the soft mud in the contaminated mud pits, strengthening it into cement clusters.



深層水泥拌合法鑽機
DCM Rigs



深層水泥拌合法工程船 Barge for DCM

於填海範圍透過混和水泥漿及污泥坑內的軟泥，令軟泥加固成為堅硬的水泥柱以形成穩固的地基。這些污泥會留在坑內，防止污染物質滲漏及減低對香港國際機場周邊水域的環境影響。

DCM provides a stable foundation during land formation by mixing cement into the contaminated mud to create cement clusters which strengthens the mud. The mud is retained to avoid potential leakage and minimise environmental impact in HKIA's surrounding waters.

