

免挖式填海拓地 Non-dredge Reclamation



扩建香港国际机场成为三跑道系统的工程项目包括在现有机场岛以北填海拓地约650公顷，其中有约四成面积位於污染泥料卸置坑之上。

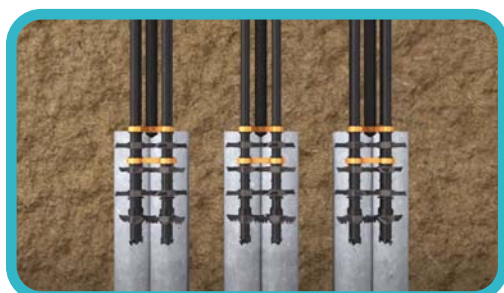
The expansion of Hong Kong International Airport into a Three-runway System (3RS project) includes the reclamation of around 650 hectares of land north of the existing airport island, of which about 40% is located on contaminated mud pits.

香港机场管理局於这些范围采用「深层水泥拌合法」的免挖式技术，令软泥加固。

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.



深层水泥拌合法钻机
DCM Rigs



深层水泥拌合法钻机会钻入预定的海床深度，然後注入水泥浆及搅拌，将水泥浆及污泥坑内的软泥混和，使软泥加固成为坚硬的水泥柱。

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.



深层水泥拌合法工程船 Barge for DCM

於填海范围透过混和水泥浆及污泥坑内的软泥，令软泥加固成为坚硬的水泥柱以形成稳固的地基。这些污泥会留在坑内，防止污染物质渗漏及减低对香港国际机场周边水域的环境影响。

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.

