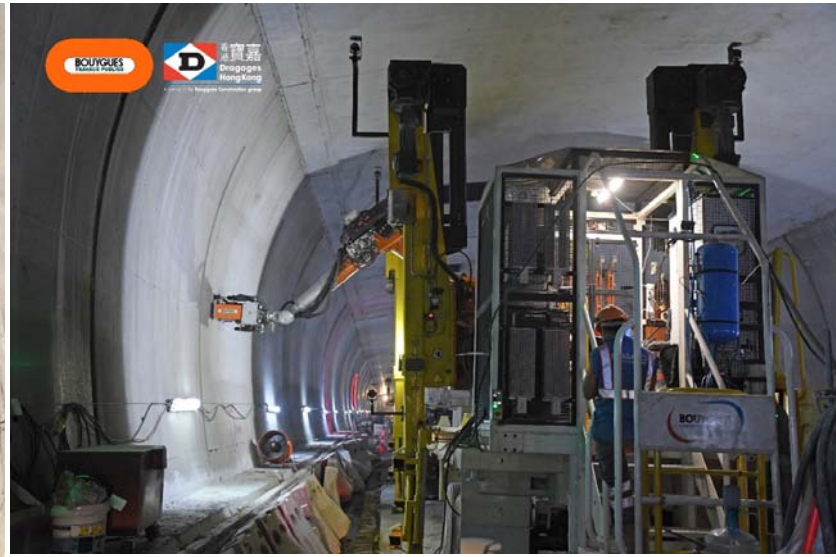


ROBY 850 - Semi-Automatic Drilling and Anchor Bolts Installation Robot

Dragages Hong Kong
Bouygues Construction



The traditional practice to install E&M services in a tunnel requires workers to perform the repetitive task of setting-out, drilling and installing anchors, also to work at height - which is one of the high risks construction activities. Bouygues Construction and Dragages Hong Kong have worked collaboratively to develop ROBY850, a specific semi-automatic drilling robot, to install anchors for E&M brackets and architectural cladding in Lung Shan tunnel of the “Liantang / Heung Yuen Wai Boundary Control Point – Site Formation and Infrastructure Works – Contract 2” project.

The revolutionary ROBY 850 has a robotic arm installed on a lifting platform which was movable along tunnel after being mounted on a specific trailer. It is capable to carry out the work in full process, including setting out, drilling, cleaning holes and then fetch anchors from anchor magazine, and install anchors in drilled holes. It is controlled by a pilot on a safe location on the ground. Through the adoption of ROBY 850, the E&M services installation no longer requires a great deal of human involvement. This innovation greatly enhances the health and safety of our people while also maximising work efficiency.

