## Rozelle Interchange WestConnex





## **Improving Systems**

## **Rozelle Interchange Innovation: Cable Bolt Misters**

In total, the excavation of 29km of tunnel for the Rozelle Interchange and Western Harbour Tunnel Southern Projects will require over 8000 cable bolts. Cable bolts are flexible rods inserted into tunnel roof structures to provide structural support and control ground movement. They are typically used in wide-span excavations where standard rock bolts are unsuitable.

Due to their long length (6.5m-8.5m) and requirement to be used at work fronts where they are susceptible to mud splashing, keeping cable bolts clear of debris prior to installation can prove a challenge.



Click the image to see the cable mister in action



However, a clean surface is necessary to ensure a good grouting application that will endure over the bolts' 100-year lifespan.

Innovatively, the Project's Tunnelling Team devised a cable bolt mister that attaches to one of the bolting rig's arms, which clears the bolts of any unwanted material prior to installation.

This solution has resulted in enhanced quality outcomes for the Project's construction works and saved time and resources in manually washing down the bolts.

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Controlling Critical Risks

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