

山坡地坡面地錨補強新工法

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摘要 地錨型框護坡是坡面穩定常見的型式，過去幾十年來台灣已發展出一套適應地質條件之地錨工法，本文考量各種施工規範之使用目的、設計需求、現場地質情況、周圍環境及施工條件，採用新方式施作，提高地錨使用年限、方便維護節省費用。

本工程地錨錨頭保護措施採用性質穩定品質較佳之防蝕膏，有效改善防鏽油滲漏問題，地錨組立全長以浪型護管作連續性保護，一次完成混凝土灌漿，避免傳統二次灌漿之滲水介面，以有效提升施工品質。

為了解採用新式地錨工法施作成效，後續利用四座地錨荷重計監測地錨受力情形，並於每支新做地錨保留一鋼鍵不上夾片，做為簡易荷重計，可透過此鋼鍵間相對變形了解地錨受力情形，全面安全監測邊坡受力情形。

關鍵詞：大地工程處、田寮橋、地錨。

New Engineering Method-Slope Ground Anchor Reinforcement

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ABSTRACT Due to different geological environment between Taiwan and foreign countries, concrete frame combined with ground anchor is widely used engineering method for slope stabilization. For the past few decades, we have developed an engineering method suitable for our local condition in Taiwan. Therefore, this engineering adopts new methods considering construction specification, design requirements and on-site geological and construction condition for extending its service life, improving maintain convenience, and saving the cost.

The protection measure of anchor head adopts stable and better corrosion cream, and it improves the leakage of anti-rust oil effectively. For consecutive protection, the assembly of ground anchor got hitched by wave-type tube. As a result, concrete grouting could be completed by this method. This way could extend its service life and save the cost.

To understand the effectiveness of new ground anchor, we use four anchor load cells to monitor force and stress analysis. What is more, we keep a steel anchor on each four ground anchor without a clip, as a simple load cell. By this way, we can get relative deflection of each steel key and fully monitor the slope stability by anchor force and stress data by relative deflection of each steel key.

Key Words : Geotechnical engineering office, tianliao bridge, ground anchor.

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