

## 4. Development of the Polyring for Thin Final Lining of Shield Tunnel

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Recently, smaller diameter of shield tunnel by more thin lining or one pass lining is required in order to reduce construction costs especially in sewer projects. However, if steel segmental lining is employed in sewer shield tunnel, some final lining must be required to prevent corrosion or to make surface of lining smooth. For these purposes, we developed thin final lining called Polyring, which employed a high-density polyethylene as a lining material.

This paper presents the process of lining works and the characters of linings, and also shows some construction examples

**Key words** : shield tunnel, thin final lining, high-density polyethylene