

## 중수로 연료용 원격다발 용접기술

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## Technology of Remote Bundle Welding for CANDU Fuels

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### Abstracts

This study is to develop the resistance welding apparatus and investigate the welding characteristics of Zircaloy-4 end-plate of fuel bundle in the cases of the resistance welding and the laser beam welding. The welding parameters which affect the weld nugget and the torque values have been also compared. The effect of the torque strength of end-plate welding using by the resistance welding and the laser beam welding has been studied and optimum conditions of Zircaloy-4 end-plate welding have been found. Futhermore, micro-structures and micro-hardness of the resistance welded specimens have been also compared.

**Key Words** : Resistance Welding, Zircaloy-4, end-plate, end cap, Torque test