

**Commercial Buildings****Reference Details:**

Owner Trillo Nuclear Power Station, Guadalajara, Spain +++
General Contractor CONSTRUCCIONES ESPECIALES Y DRAGADOS, S.A., Spain +++
Consulting Engineer EMPRESARIOS AGRUPADOS-INITEC.

DSI Services Supply of 1,400 tonnes *GEWI*[®] bars 40 mm and 50 mm dia., 15,000 couplers and hardware accessories.



1,400 Tonnes *GEWI*[®] Bars used to safely store nuclear waste

Interim Nuclear Storage Facility in Trillo, Guadalajara, Spain

A tall tank designed to temporarily store high density heavy uranium resulted in large static internal forces in the wall and bottom plate. Allowable crack widths had to be kept to a minimum which required continuous reinforcement without lap splices. The *GEWI*[®] coupling system makes it possible to minimize bond lengths and thus was ideally suited for this project. The use of couplers in place of lap splices and the use of anchor plates in place of long embedded reinforcing bars not only alleviated reinforcing congestion, but also simplified the forming and concreting operations. Torqued lock nuts on both sides of the couplers ensured slip-free connections and virtually guaranteed no cracks in the coupling area. An average of 300 kg of reinforcing steel per cubic meter of concrete were used, in certain areas as much as 500 kg were installed.

DSC, DYWIDAG SISTEMAS CONSTRUCTIVOS S.A., supplied 1,400 tonnes *GEWI*[®] bars with 40 and 50 mm dia. and a total of 45,000 hardware accessories passing all quality assurance checks.