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Tunnelling with Brokk

A 400 m tunnel is currently being excavated in Seseña (Madrid), Spain, using a Brokk 180 remote controlled demolition robot equipped with breaker and bucket.

The 2 m wide and 3 m high tunnel is part of a drainage canal system under preparation for the future industrial estate "Las Arenillas".



The rock consists of limestone, solid enough not to require reinforcement. Once ready, the tunnel will be provided with a brick lining with insulating coating to prevent leakage.



A topographical check is made on a daily basis to measure and correct any deviations in the direction.



Utilizing the 200 kg heavy, 410 Joule hydraulic breaker, the Brokk 180 cuts through the limestone. The flexible three-part arm ensures maximum accessibility also in this very restricted space.



In addition to its demolition function, the Brokk machine came delivered with a bucket attachment. After advancing 1-1.5 m, the breaker is exchanged for a bucket and the operator proceeds with clearing out the debris onto a dumper truck..



At a pace of approximately 3.5 metres a day with two 12 hour shifts Monday through Friday, the whole tunnel is scheduled to be ready by the month of May 2005.