About the Project
Certain sections of the inner ring road M-30 in Madrid are constructed underground. For this purpose, large tunnel tubes with an interior diameter of 13.45 m are being built. The tunnel boring machines are driven to the tunnel using the EPB-procedure. The intention is to have a three-lane traffic flow through the tunnel.

Project Data
- Country: Spain
- Builder: Spanish Government, Madrid City Council
- Client: FCM Fuelguera Construcciones Mecanicas SA

- Tunnel length: 3650 m
- Segment lining
- Lining segment exterior diameter: 14.65 m
- Lining segment interior diameter: 13.45 m
- Individual lining segment stone: 15 t

Contract awarded to Rowa
Fuelguera Construcciones Mecanicas SA, Spain, has contracted Rowa to develop, manufacture and supply a quick unloading device for transloading the lining segments in the headings.
Quick Unloading Device, Spain

The Concept
A surface crane unloads the lining segments in the unloading station area of the back-up. To avoid having the trains waiting for the complete unloading, the lining segments are separated from the trains through a special quick unloading device. This saves trains combinations, as well as personnel expenses.

Particularities
The quick unloading device remains fully loaded on the train track. After emptying, the entire unit is rolled towards the heading which meanwhile has advanced forward.

Technical Data
Two identical units, each capable of unloading 3 lining segment stacks of 30 t each.