

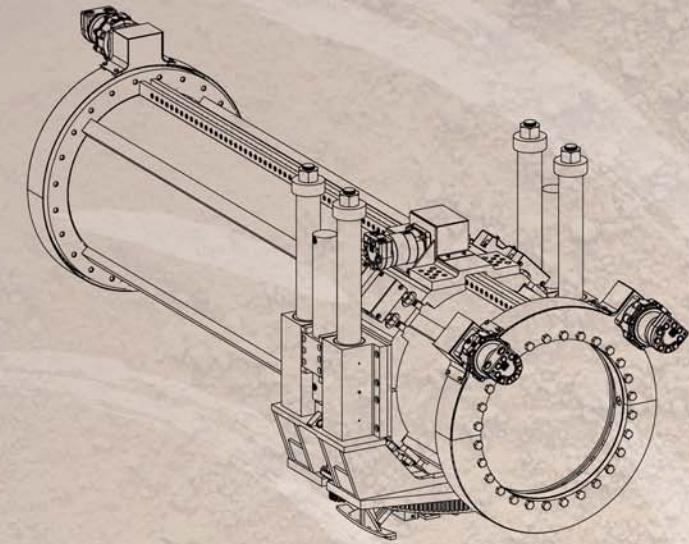
Earth Pressure Balance Segment Erecting Systems



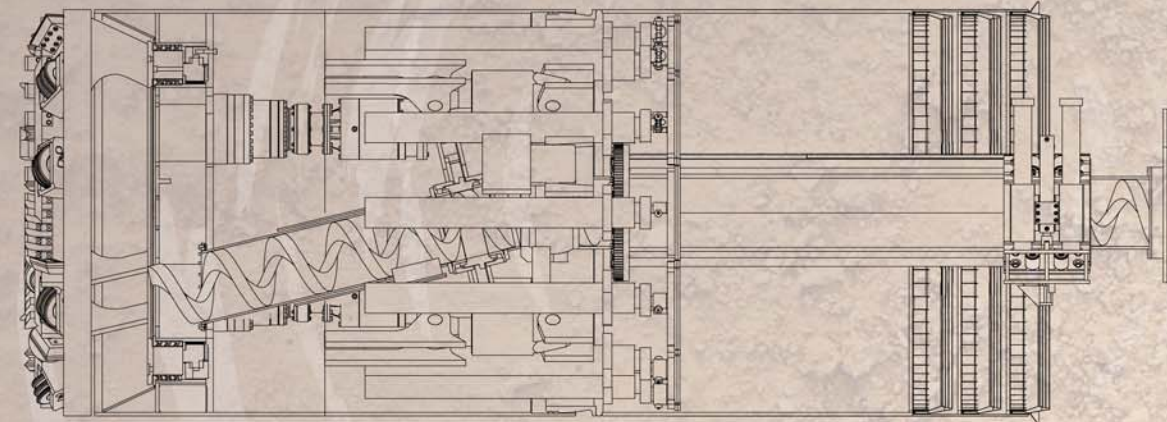
Segment erecting EPBMs are the next generation of Akkerman equipment. Designed for customer project alignment, each segment erecting EPBM is custom built to job specifications.

The main distinction between pipejacking EPBMs and those designed for segment erecting is the machine's capability to install concrete segments. Curved tunnels and extended drive lengths can be achieved with this method. The spoil removal process through a screw conveyor is essentially the same as other applications. A series of back-up cars follow behind the EPBM, housing the operator station, segment handling, hydraulics, VFD, transformers, and blower cars.

Segment erecting machines are complex in design and performance. Customers work closely with our team of sales and design engineers on their project needs to create a customized solution to accommodate project demands.



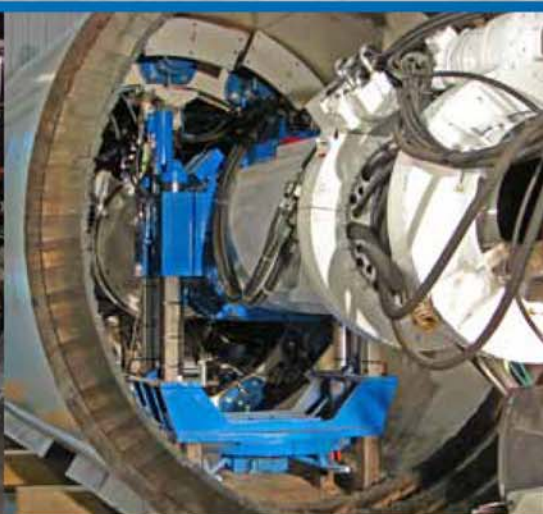
Performing one of the most essential functions, the segment erector is positioned around the screw conveyor. The segment erector lifts and installs each concrete segment in a specific sequence. When one ring is completed, the EPBM advances itself off of this section.



This cross-section view of the EPBM displays the front section up to the segment erector. Back-up cars would follow behind. The cutter head (far left) excavates spoils where they are ground and mixed with foam and slurry in the mixing chamber. Spoils then enter the front gate of the screw conveyor for transport. Steering and jacking cylinders surround the perimeter of the EPBM jacking can. The wire brush tail seal ensures that spoils can not enter the EPBM.



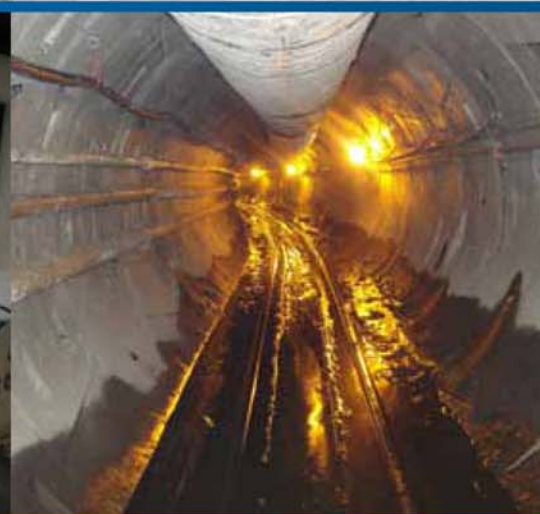
Many specialized back-up cars are needed to perform the complex operations of the segment erecting EPBM.



The segment erector places tunneling segments in the appropriate position then the EPBM advances off of the tunnel to advance forward.



The control console car is where the operator monitors and adjusts all EPBM functions.



This completed tunnel shows the unique capability of the EPBM to create curved tunnels on line and grade.



Akkerman custom manufacturers most components for all of our equipment lines. Welding of the EPBM screw conveyor is shown here.



A knowledgeable and highly trained team of field technicians are dispatched whenever and wherever customers need them.