# Storm Surge Barrier in the Nieuwe Waterweg, Hoek van Holland

**Client:** Ministry of Transport, Public Works and Water Management
**Design:** Joint Venture BMK
**Construction:** BAM Civiel bv (as joint venture partner)
**Contract value:** € 299.495.000 (49%)
**Contact:** (0182) 59 06 00 / info@bamciviel.nl / www.bamciviel.nl

# BAM Civiel

The new storm surge barrier in the Nieuwe Waterweg near Hoek van Holland was built to protect Zuid-Holland from flooding. Known as the Maeslant Barrier, the structure was built as a design and construct project based on a programme of functional requirements. The barrier's movable parts are easy to operate from the two control centre buildings. The innovative design produced by the joint venture partners saved the client a considerable amount of money. The partners bore all the risk involved in design development and barrier construction.
With a navigable width of 360 metres, the structure provides no obstacle to shipping in open condition. The abutments house the hinge foundations and the docks into which the two barrier doors are retracted. The threshold structure built on the bed of the Nieuwe Waterweg has stormproof aprons and a filtering system that prevents river bed material being washed out as a result of the fall in water level when the barrier is closed. When the barrier is closed, the water level in the docks is kept the same as the level in the Nieuwe Waterweg. The floating steel doors, each weighing 15,000 tonnes, are moved into position above the threshold and then submerged to form an impenetrable barrier. The doors turn on ball hinges ten metres in diameter. When the hinge foundations and docks were under construction, the steel components for the lattice arms were brought in and assembled on site. The steel doors were transported in sections to the parking docks and put together there piece by piece. The doors are expected to have to be closed about once every ten years.

bam
infra

0506-06 STORMVLOEDK. Hoek van H Eng.