

New Lock

TERNEUZEN

Ready for the future

The first ship will pass the New Lock (Nieuwe Sluis) in Terneuzen in 2024. This lock will be one of the largest in the world, with the same dimensions as the new lock chambers of the new Panama Canal Locks.

The lock complex at Terneuzen connects the Ghent-Terneuzen Canal (BE/NL) to the Western Scheldt River (NL).

The Ghent-Terneuzen Canal is the main waterway to and from the Port of Ghent (BE), and is part of the Rotterdam-Paris inland waterway route. With the New Lock on this route it's possible to transport more goods by barges rather than by trucks.

The New Lock is being built to accommodate the increasing shipping traffic and ever-larger ships. The New Lock is intended to enhance accessibility for seagoing vessels and barges, and to support economic growth in the region. Constructing the New Lock within an existing lock complex is a great achievement. Construction space is limited, the lock is partially built in the water, and shipping and road traffic must continue as usual. It is a challenging project that is constructed by the Sassevaart Consortium.

Schedule

2018 - 2024

Preparatory work and construction for the New Lock

2022 - 2024

Demolition of the Middle Lock

4th quarter 2024

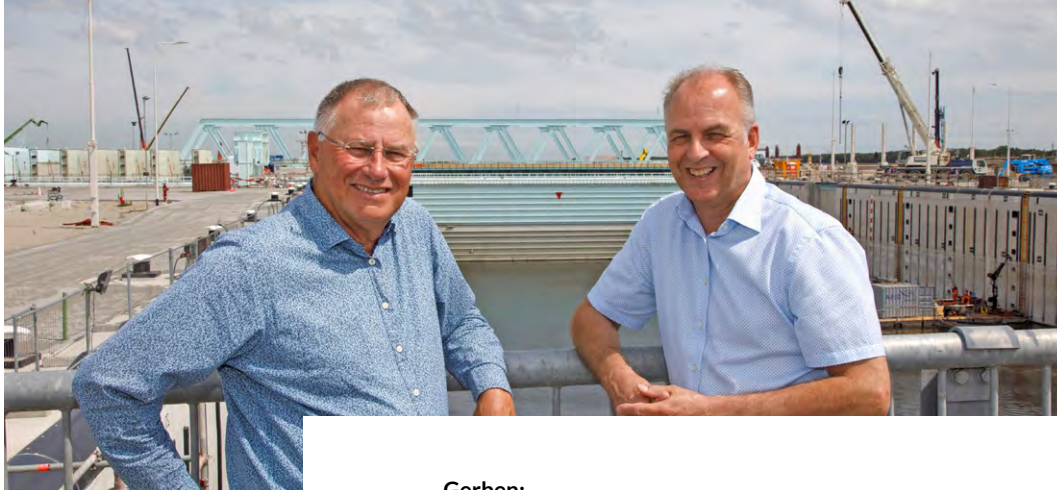
Opening of the New Lock

The New Lock

- will result in smoother inland shipping traffic between the Netherlands, Belgium and France, and a more robust lock complex;
- will improve access to the ports of Ghent and Terneuzen for large seagoing vessels;
- will provide an economic boost for the regions on either side of the Dutch/Flemish border;
- will operate for the next 100 years.



Eric Marteijn (left), the project director for the New Lock in Terneuzen and **Gerben Turkstra**, project director of the Sasvevaart Consortium.



Eric:

‘Proud of our work’

‘We have been working on this project for a few years now. And we are doing a great job. It’s not just about building the lock; it’s the whole complex around it: it’s the quays of the Schependijk and Goesekade, dredging the harbour at the Buitenhaven-West, revetments and mooring facilities and building a whole new service harbour. These are all major projects. We are working in so many places at the same time and there is still hardly any disruption affecting the local area. And that is something I’m really proud of!’

We want to have a transparent approach for everyone. The webcam shows what’s happening at the construction site. And a lot of people are using it. We have even been receiving regular compliments from other countries about the pictures of the work.’

Gerben:

‘Everyone benefits from the lock’

‘Building a lock that is one of the largest in the world is an enormous job, with gigantic cofferdams, towering cranes and large equipment. But not all the work is visible: developing the software to operate the lock is also a major challenge. We work with a large group of disciplined and committed people and use strict procedures when it comes to safety and quality.’

Local people are very happy with the New Lock. Everyone will benefit from it. We are building the gateway to Paris for inland shipping. And putting down the launch pad for an economic boost for the entire region.’



Building the New Lock

The total amounts of material needed for the construction of the New Lock:

- 325,000 m³ of concrete;
- 32,000 tonnes of concrete reinforcement bars;
- 60,000 tonnes of steel for the files, D-walls, doors and bridges;
- 11,500,000 m³ of soil will also be dredged.

During the construction of the New Lock, the four primary functions of the lock complex will have to be taken into account: flood defence (high tides), discharging water, maintaining shipping traffic and maintaining road traffic.



Building the future

With a length of 427 metres and at 55 metres wide, the New Lock in Terneuzen will be one of the largest locks in the world. The construction is in full swing. We are using proven technologies and tested construction methods. And when it's completed, the New Lock will be part of a magnificent lock complex with three locks.

The lock heads

We build each end of the lock in cofferdams. In these two cofferdams at either end of the lock, we constructed the sill, the caissons, the engine room and the levelling system. The cofferdams are 25 metres deep (NAP -22 metres).

The lock chamber

The lock chamber is the heart of the New Lock and we build it completely in the water. We used underwater concrete for the floor. We have made two large concrete floor grids and incorporated them in the floor. The floor grids will be used to raise and lower the water in the lock in line with the water level on the other side of the lock. During the operation of the lock, water flows through a culvert to the lock chamber. The top of the two floor grids looks like an enormous Swiss cheese with 688 round holes, each hole with a diameter of 30 centimetres. These openings maintain a steady flow in or out to the lock chamber.

Natural colours

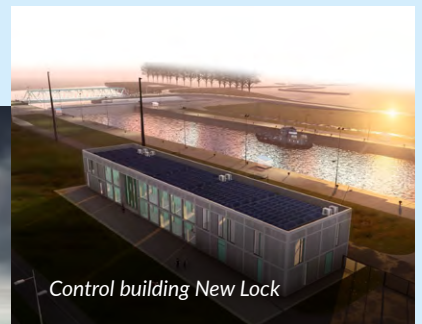
We have thought carefully about the appearance of the New Lock in the context of the existing lock complex. The colour used for the bridges is mint green. That matches the colour of the water, the surrounding nature and the trees, but it also blends with the colour of the other locks. The West Lock is blue and the East Lock is green and this is the colour in between. So the entire complex will look very natural. Fields of orchids, trees, shrubs and concrete and wooden benches will soon be placed on the lock complex. There will be room for people and nature. In addition, of course, shipping and the economy will benefit from a more robust lock complex.

War memorial

Before construction work started on the New Lock, there was a war memorial for the Rijkswaterstaat employees who were killed during the Second World War at the lock complex. There will be a specific location for the memorial on the square alongside the Buitenhaven and the East Lock. We will also be planting five trees here as a symbol for those five heroes of the resistance.



Impression New Lock Terneuzen



Control building New Lock



Mint green bridge



The war memorial



Lock complex in figures

Former Middle Lock (1910)

In 2022-2024, this lock is demolished to make way for the New Lock.

- 110 metres long
- 18 metres wide
- 7.5 metres deep

East Lock (1968)

- 280 metres long
- 23 metres wide
- 6.5 metres deep

West Lock (1968)




- 290 metres long
- 40 metres wide
- 13 metres deep

New Lock (2024)

- 427 metres long
- 55 metres wide
- 16.44 metres deep

Lock traffic

In 2022, 58.750 vessels passed through the lock complex:

	Inland shipping	48.500
	Recreational vessels	1.250
	Seagoing vessels	9.000

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