Good neighbours with beavers, otters and kingfishers

The construction of the new ship's hoist will not leave the landscape untouched, but the environmental aspects of this project have been taken into consideration in an exemplary manner. The planners from the Wasserstraßen-Neubauamt (Office of New Waterway Constructions) in Berlin, together with experts in the protection of nature, the environment and monuments, decided on 20 measures at the construction site and in the surrounding area that would guarantee compensation for this encroachment into nature. So to the north and south of the Havel-Oder waterway there will be reforestation with natural mixed woodland, existing biotopes will be protected, banks will be planted and barriers removed. This will primarily please the existing beavers and otters. These compensation measures, as well as the measures for species protection that started even before the first sod was turned, are being continued in parallel with construction work.

Customer service for those with a thirst for knowledge

The Brandenburgers and their guests are actively sharing in the growth and development of the new ship's hoist. Three hundred thousand tourists each year are expected during the construction work. To provide them all with information, an information centre was opened in spring 2009 on the south of the two ship's hoists.

Here, interested visitors can find models of the ship's hoist as well as information and descriptions that can be read on-site and taken away.

For those who would like to take a look at the construction site of the new ship's hoist, we recommend visiting the old ship's hoist, if necessary with an expert guide. Additional and continuously updated information is available on the Internet at www.wna-berlin.de.

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The New Ship's Hoist Niederfinow

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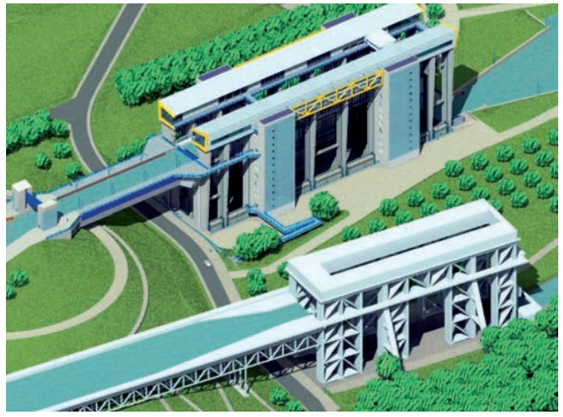
The old ship's hoist is getting on

It doesn't look 76 years old, the "Old Niederfinow Ship's Hoist", which is an industrial historical monument. Its performance also continues to impress: each year, with its help, about 20,000 water craft overcome the 36 metre height difference in the Oder-Havel canal. It radiates dignity and strength, eliciting respect and amazement even from today's computer generation.

Around 150,000 visitors from home and abroad are fascinated each year by its imposing size and its history. But in the future this "historical symbol of the art of engineering" will no longer be able to meet the challenges of ever longer and wider modern barges. The construction of a new ship's hoist is essential to get around this bottleneck on the Havel-Oder canal, which connects Berlin with Szczecin and the Baltic. Then large, modern motor barges with up to 104 TEU containers of cargo will be able to use this important waterway to the Baltic without any problems.

A new generation is taking over

The "New Ship's Hoist Niederfinow" will be modern, effective and good for the environment. Engineers, architects and planners of landscapes and green spaces spent several years honing its best features before it entered the public gaze when its foundation stone was laid on 23 March 2009. On completion, the new ship's hoist will meet the parameters of a Class V European waterway, thus meeting European standards.



The cost of € 245 million estimated in the building contract for the new ship's hoist, including the upper outer harbour, will be a good investment. The conditions have been created to increasingly shift cargo traffic onto waterways: the environmentally-friendly and economical mode of transport. In this way, the new ship's hoist will become a driver for the settlement of commerce and industry on the banks of the Havel-Oder waterway and for the creation of new jobs in the region.

Proven functions in contemporary clothing

A wide range of technical variants was examined closely, before the creators of the new ship's hoist came to the conclusion that the former mode of operation and safety concept are still a good model today. So the new structure will also work as a vertical elevator with a counterbalance, but naturally with the most modern control elements and components.

So in the next few years, a new ship's hoist, made from concrete and steel in tones of grey and blue, with accents of yellow, 54 metres high and 133 metres long, will rise up in a newly laid-out section of canal between the old ship's hoist and the disused chain of locks. In spite of its considerable dimensions, it will fit in well with the landscape, and form a visual unity with the old ship's hoist, the visitor information centre, the aqueduct and the upper and lower outer harbours.

Technology close to hand

The new ship's hoist will be a very special experience for its numerous visitors: they will be able to reconnoitre its interior via lifts, stairs, pathways, footbridges and bridges – including ones for disabled access. The fascinating processes of raising and lowering ships will be able to be experienced by visitors from the ambulatory areas at a height of almost 50 metres directly above the trough, from outside between the pylons, or from one of the three bridges directly above the trough area, or they can turn their gaze from this vertiginous height out across the Brandenburg countryside.
A rare state of unity between nature and technology – and still an experience for the whole family.

Technical details *	Old ship's hoist	New ship's hoist
Dimensions of elevator		
Height (above ground)	52.00 m	54.55 m
Length	94.00 m	133.00 m
Width	27.00 m	46.40 m
Depth (trough chamber/tank)	8.00 m	11.00 m
Building materials (with aqueduct)		
Steel (new: reinforcing steel)	18,000 t	8,900 t
Concrete and reinforced concrete	72,000 m^3	65,000 m^3
Usable dimensions: trough		
Length	82.50 m	115.00 m
Width	11.94 m	12.50 m
Permitted beam	9.50 m	11.45 m
Overhead clearance	4.10 m	5.25 m
Depth of water	2.50 m	4.00 m
Max. loaded draught of ship	1.90 m	2.80 m
Trough weight		
Weight of empty trough (incl. equipment)	1,600 t	2,785 t
Weight of trough when filled with water	4,290 t	9,800 t
Trough travel		
Lifting height	36 m	36 m
Journey time	5 min	3 min
Speed	12 cm/s	25 cm/s
Duration of lock procedure Ø	20 min	16.5 min
Aqueduct		
Length	157.00 m	65.50 m
Width	28.00 m	21.70 m
Depth	3.90 m	4.00 m

* a few selected technical details; more at www.wna-berlin.de