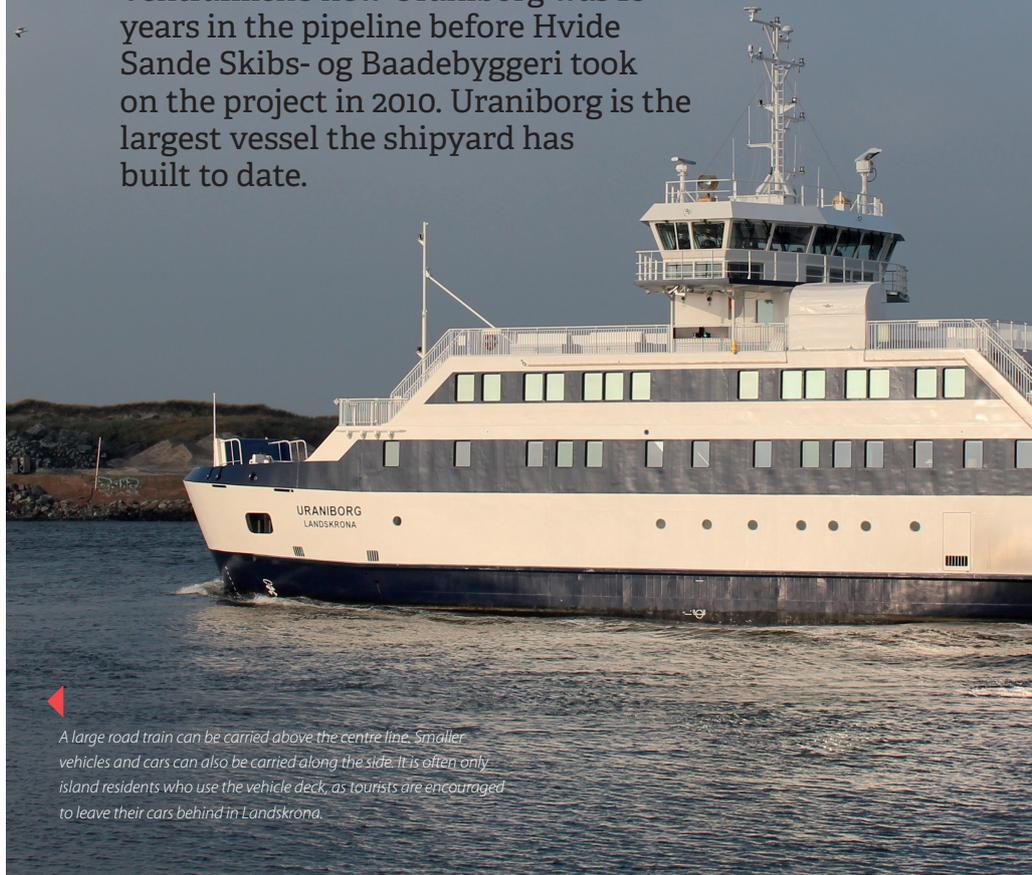


## FACTS

<b>Type:</b>	Ro-Ro ferry
<b>Design:</b>	Knud E. Hansen A/S (detailed planning/basic design) OSK ShipTech A/S (concept, tendering and consultancy)
<b>Class:</b>	Bureau Veritas
<b>Notation:</b>	Ro-ro passenger ship Coastal Area, AUT-UMS, ICE CLASS IC, MACH
<b>IMO no.:</b>	9616125
<b>Register:</b>	Sweden, SHFT, Landskrona
<b>Owner:</b>	Landskrona Stad
<b>Operator:</b>	Rederi AB Ventrafiken
<b>Shipyard:</b>	Hvide Sande Skibs- og Baadebyggeri A/S
<b>Yard number:</b>	124
<b>Hull:</b>	Crist SA, Gdansk
<b>Delivered:</b>	November 2012
<b>GT:</b>	1,151
<b>NT:</b>	345
<b>Length, LOA:</b>	49.95 m, LBP: 47 m
<b>Width:</b>	12 m
<b>Draught (max):</b>	3 m
<b>Deadweight:</b>	160 t
<b>Propulsion:</b>	Diesel-mechanical
<b>Main engines:</b>	2 X Caterpillar C32 ACERT
<b>Total output:</b>	1,418 kW
<b>Service speed:</b>	11.5 knots
<b>Passengers (max):</b>	394
<b>Passenger vehicles:</b>	14
<b>Contract price:</b>	SEK 110 million

# URANIBORG WAS 10 YEARS IN THE MAKING

Ventrafiken's new Uraniborg was 10 years in the pipeline before Hvide Sande Skibs- og Baadebyggeri took on the project in 2010. Uraniborg is the largest vessel the shipyard has built to date.



A large road train can be carried above the centre line. Smaller vehicles and cars can also be carried along the side. It is often only island residents who use the vehicle deck, as tourists are encouraged to leave their cars behind in Landskrona.



The ferry's two saloons are basically identical. ▼



## URANIBORG

the last of two sister ferries to Ærø in 1999. The Swedish municipal shipping company Rederi AB Ventrafiken officially christened their new ferry on 2 December 2012, presenting it to the local residents of Landskrona and the island of Ven in the Öresund strait. This marked the end of an unusually long process of upgrading the lifeline from Ven to the Swedish mainland.

On the morning of 17 November 2012, Uraniborg sailed north from Hvide Sande, past Skagen, to the Swedish town of Landskrona in the Öresund strait, arriving the next day at around 2.30 pm.

This marked the successful delivery of Hvide Sande Skibs- og Baadebyggeri's largest new vessel to date. It is also the largest Danish-built ferry since the EOS shipyard in Esbjerg delivered

### Capacity expansion

For Ventrafiken, it was a case of 'third time lucky' with Hvide Sande Skibs- og Baadebyggeri. When Uraniborg was commissioned in 2010 in Hvide Sande, it had been 10 years since Ventrafiken had begun the process of acquiring a new ferry to supplement Stjerneborg, from 1990 – the previous ferry on the Landskrona-Ven route.



Photo: Hvide Sande Skibs- og Baadebyggeri

Uraniborg leaves the west Jutland harbour town where it was built, heading north of Skagen for Øresund.



The island of Ven features in the floor decoration.

The aim was to decommission the backup ferry, Dumle, built in 1963 at Svendborg Skibsværft for the Svendborg-Vindeby crossing, which came to Ventrafiken i 1994 via Norway. With Stjerneborg in reserve and supplementing a much larger new vessel during peak periods, the shipping company would gain a much needed capacity expansion.

### Polish shipyard

Ventrafiken began developing their new vessel in 2000, with OSK ShipTech as consultant. Five years later, a contract had been entered into with the Remontowa shipyard of Poland for the construction of a single-ended Azipod-propelled ferry, with a design based on Stjerneborg. However, Ventrafiken had to make use

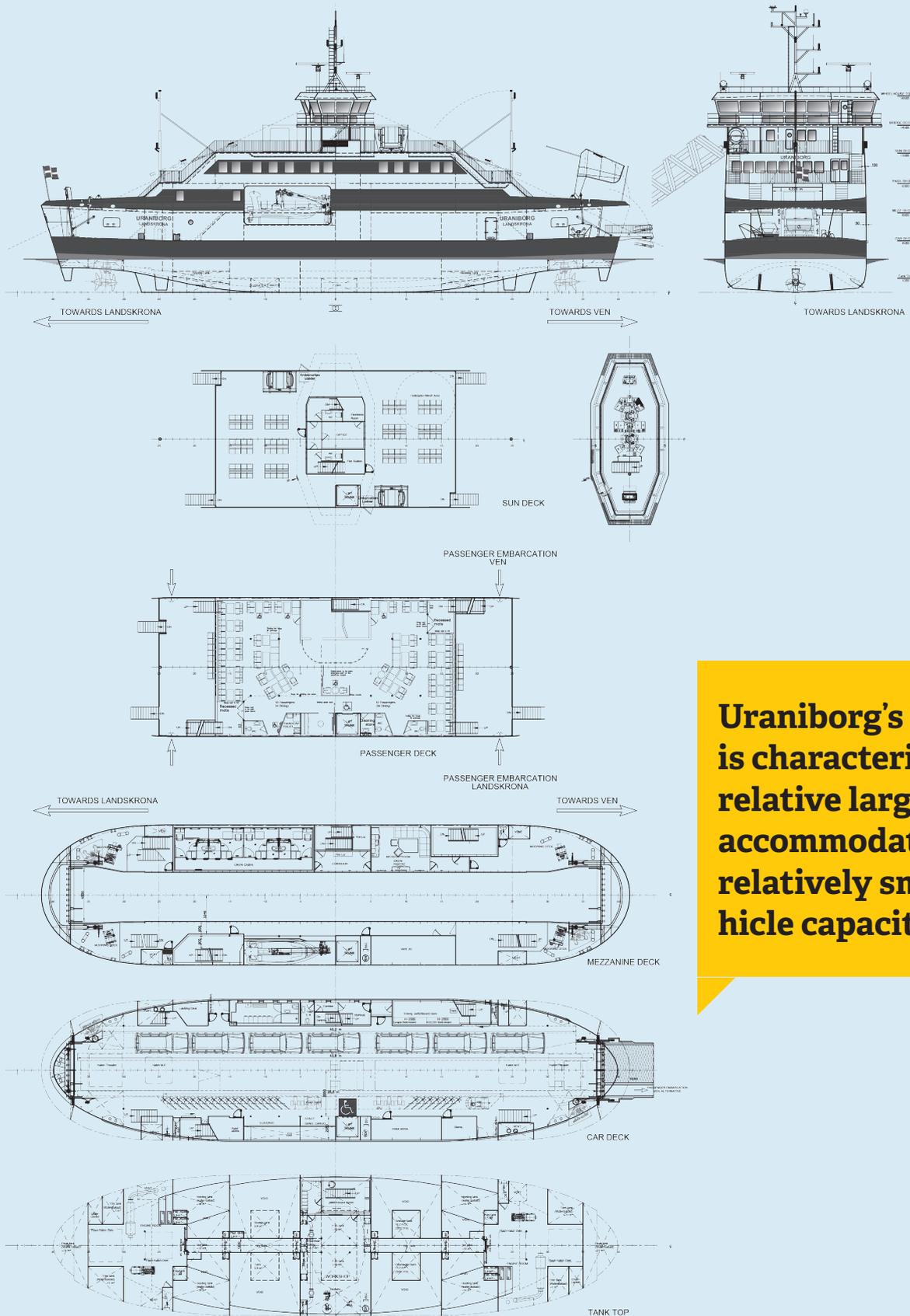
of a financing clause in the contract to cancel the order when the political wind in Sweden changed and no longer supported government financing of the new ferry.

Two years later Ventrafiken succeeded in securing government financing and initiated an EU tender – this time for a double-ended ferry. The timing of the tender was unfortunate, however, coinciding with the culmination of the overheated shipbuilding market towards the end of 2007. A second round of tenders was therefore required, as no shipyard was interested in adding a specialised vessel, such as a ferry, to already full order books.

### Astilleros M. Cies

In the second round, Astilleros M. Cies of Spain

took on the project. M. Cies is well-known in Denmark for the failed construction of Nordsøen, the inspection vessel for the Danish Inspectorate of Fisheries, which the Danish government also commissioned in the overheated market in 2007. The inspection vessel was never delivered, and Ventrafiken also lost patience with M. Cies. The ship was therefore subjected to another round of tenders. This time in a completely different market in 2010, where Hvide Sande Skibs- og Baadebyggeri ended up becoming the preferred supplier of the new Ven ferry. ■



**Uraniborg's layout is characterised by relative large crew accommodation and relatively small vehicle capacity.**

# UNIQUE AND FLEXIBLE SWEDISH ISLAND FERRY

Uraniborg falls between two categories by Danish standards, and is quite unique in a Swedish context. The pattern of operation the new ferry has been designed for is reminiscent in several respects of the Anholt ferry.

Uraniborg has basically been built to the same design as the Spanish shipyard, Astilleros M. Cies, won the tender with in 2007, but which they failed to build. However, the general layout has been reversed to match the newly established harbour system at the mainland in Landskrona.

Uraniborg is designed to be the main ferry on the Landskrona-Ven route, supported by Stjerneborg, the route's former ferry. The crossing takes 30 minutes. This places the route somewhere between the small Danish island and short-cut crossings, and the slightly longer routes traversed by the Ærø and Læsø ferries, for example. Uraniborg is also in many ways a mix of these two types of small Danish ferries. In the Swedish context, however, the ferry is quite unique. Vehicle ferries registered under the Swedish flag are basically divided into three segments: the countless small and very standardised 'vägfärjar', large ro/pax ferries, and large cruise ferries.

## Reminiscent of Anholt

The island of Ven in the Öresund strait has a differentiated transport need throughout the year, with peaks around the holiday periods. Uraniborg's passenger facilities are therefore divided into two areas, one of which can be closed off when passengers are few. The passenger facilities have been designed around good catering capabilities because catering revenue on the crossing is viewed as an important source of income, and with the aim that one of the ferry's saloon areas can be used for private events.

The layout of Uraniborg's vehicle deck is consistent with Ven's status as a virtually vehicle-free island, similar to Anholt in Denmark. There is also only one lane above the centre line with room for one truck up to B-train size, which is far more common in Sweden than in Denmark.

The vehicle capacity is primarily intended for the transport of goods to and from the island, with most tourists arriving on foot. The ferry is also boarded much like the Anholt route. Baggage is placed on trolleys on the quayside and driven on-board and then onto shore again by the ferry crew.

Passengers use the stairwells onshore, which take them up to the gangway across to the open sun deck on the saloon deck.

## Crew

The ferry is manned by a minimum crew of four,

which can be increased in line with the number of passengers permitted on board in the given period.

Ventrafiken has done away with its shore-based overnight accommodation for the crew when the ferry is laid up on Ven at night. Uraniborg therefore has a relatively large accommodation section for the crew. In addition to a large common room and office, the ferry also has four one-man cabins, with their own shower and toilet. Due to the ferry's asymmetric general layout, all the facilities are grouped on one side of the main deck, except the office, which is located on the middle deck below the wheelhouse. The regulations under the Swedish flag stipulate that all crew, irrespective of rank, must have the same accommodation space.

## Three navigators

Uraniborg was developed largely in response to the wishes and operating experiences of the crew, and with the aim of carrying on the crew arrangement from Stjerneborg. As a result, the wheelhouse on Uraniborg has both a pilot and co-pilot console.

Stjerneborg has always had a three-man crew, who were all navigators. This arrangement is now being carried over to Uraniborg, where the fourth man will presumably be a deckhand.

Ventrafiken's new ferry was built using public funding from the RTI (Regional Transport och Infrastruktur) project. The RTI project has also paid to extend the lifetime of Ventrafiken's other ferry, Stjerneborg, and to establish a new ferry terminal and associated harbour works. ■



▲ The auxiliary and main engines in one of the two identical engine rooms.



▲ Bridge wing with window in the floor.