Andreas Schoon, Managing Director of the Cuxhaven branch of the Pilots’ Association

“The pilots need a vessel that they can rely upon one hundred percent. The engines must not fail under any circumstances.”
Up to 40 km from port, the pilot launch Duhnen brings the pilots safely out to the largest tanker in the North Sea.

Pilots on the way to their next job. The large tanker needs to be guided safely into the nearest port. Making a transfer on the high seas is always perilous.

the Reman process like paying a deposit on bottles at the supermarket,” explains Thomas Geertz, who is responsible for service at MTU in Hamburg. “Customers who have already bought new engines from us can exchange the engine by buying a completely overhauled Reman engine.” To prevent long downtimes, the customer needs to inform MTU early on, and will then be provided with an identical engine. The customer pays for the overhauled engine and a deposit which is referred to as the core charge.

As soon as the used engine has been returned by the customer to MTU, the core charge is refunded — assuming all the specifications are complied with. For example, all parts must be fitted on the engine, and the maintenance intervals must have been complied with. “If the customer insists, it is also possible for him to get his own engine back again. However, this will take several weeks,” describes Geertz. The Pilots’ Association works with an engine pool. “We always keep a stock of engines so that if we need to exchange one, the downtime for the vessel will be as short as possible,” explains Schoon.

Harsh conditions on the high seas

Each engine clocks up between 4,500 and 6,000 operating hours per year. That corresponds to a continuously operating time of about six to nine months. However, the particular challenge is that the engines usually operate for between two and three weeks at a stretch. “And the weather can get really stormy,” says Schoon. “In good weather, we can get by using two engines on the station ships, whereas when conditions are rougher, it’s quite possible for us to need all four engines to extricate the vessel quickly and safely from a dangerous situation.” MTU engines can withstand these conditions, irrespective of whether they are new or completely overhauled Reman engines. “It makes no difference for the customer. Reman engines are as-new, and even come with the same warranty as a new engine,” explains Geertz. “As a result, you can rely on these engines in difficult situations just like new ones.”

The Reman process in-house

MTU carries out the complete overhaul of the engines using a standardized process in-house. The Technology Center in Magdeburg is geared
In the pilot launch Duhnen, two MTU Reman engines of type 12V 2000 M70, each generating 788 kW output, provide the right propulsion. MTU Field Service Inspector Detlef Paul assesses the engines. They have a harsh life, with up to 6,000 operating hours a year.

MTU is a brand of Rolls-Royce Power Systems AG. MTU high-speed engines and propulsion systems provide power for marine, rail, power generation, oil and gas, agriculture, mining, construction and industrial, and defense applications. The portfolio is comprised of diesel engines with up to 10,000 kilowatts (kW) power output, gas engines up to 2,530 kW and gas turbines up to 35,320 kW. MTU also offers customized electronic monitoring and control systems for its engines and propulsion systems.

The everyday life of a pilot with MTU
Every day, the pilots set out into the North Sea on board the Duhnen. Here, a larger pilot launch is already waiting for them at the mouth of the River Elbe. From this point onwards, vessels with a length of 90 m or more and a beam of 13 m are obliged to continue with a pilot on board. The pilot station vessels will remain here for two weeks. The Elbe or Hanse, which is the name of the station vessels, are also powered by MTU engines and have a double-hull design referred to as SWATH (small waterplane area twin hull). The pilots can wait onboard the floating pilot stations until they are needed by a large freighter or tanker. There is hot food, mess rooms, televisions, a sauna and fitness room as well as cosy pilots’ cabins for resting between duties. Pilots have to be on the job 24 hours a day, 365 days a year. As soon as a large vessel approaches, the pilots are collected from the station ship by the Duhnen and brought out to the large tanker. The pilots go on board either using a small projecting gantry or with a pilot ladder. They have to place great trust in the captains of the two vessels, because the vessels need to be making exactly the same speed so that the pilots can go across. The pilots then guide the vessels safely into the various harbors at Cuxhaven, Hamburg or along the Kiel Canal. Each of them is an experienced captain. The size of vessels that a pilot is allowed to control depends on years of service.