

# **A TUG FOR ALL SEASONS**

PICTON TERMINALS' FIRST TUG – AN ICEBREAKING STAN TUG 1606

"The ice season here typically lasts for two or three months – from January until mid-March. This was the reason that we just had to have an ice-classed tug: to allow us to keep operating and delivering our product to customers," says Hank Doornekamp, owner of Picton Terminals, located on the Canadian side of Lake Ontario. He is talking about his company's newest asset a Damen Stan Tug 1606 ICE called Sheri Lynn S.

Picton Terminals was initially established to ship Canadian iron ore to American steel mills on bulk carrier vessels that are better known in this part of the world as 'lakers'. Since buying the port four years ago, Hank has been looking to develop the port further. "There's a 70 foot face of limestone that we are taking down to a predetermined elevation to be able to more easily receive container vessels," he explains. "And we have 30 feet of water here, which is staggering for anywhere on the Great Lakes."

Most notably, though, this is a port development project that is actually creating its own revenue. "Compared to trucks, water transport is the cheapest form of moving products in this area. So we are processing the rock, putting it onto barges and shipping it out to various clients."

### Scope of duties

And this is where the Sheri Lynn S shows her skills. "She works as an assist vessel for the larger barges. And for our next job - transferring stone for an airport runway extension contract - we will match her up to a smaller barge and work her as a pusher tug."

As a matter of fact, the interview for this article was carried out while Hank was preparing for a barge push assignment. "We are loading a crane that we have rented – a 150-tonne Liebherr 120 – onto a barge here," he states. "And our new Damen tug is going to push it the 30 miles back to the port. It's a big piece of equipment that would have taken nine trucks to transport by road."

### Trust in construction

Looking at the highly competitive world of international shipbuilding, what made Hank approach Damen in the first place? "Well, I looked all over the Internet to see what options were available to us, including both new build and second-hand vessels. This was how I came into contact with Damen. I really like the lines and the features that they have. And of course availability is important. If you want to buy a tug here in Canada, you have two options. A second-hand vessel, which means it's about 50 years old, or a new build, which takes about five years from ordering. We just didn't have that time; Damen delivered the Sheri Lynn S within four and a half months."

"I wasn't involved in the construction process because of the trust in what I saw. So far this hasn't been a problem. We have a list of outstanding issues which we are currently talking to Damen about but in general we are very happy."

### Ice breaking services

The Sheri Lynn S marks an important step for Picton Terminals. "This is our first venture into owning a tug. Up until now we have rented our vessels when we have needed them. With our own tug, we can now turn that into revenue for ourselves."

Indeed, the Sheri Lynn S is already proved herself in vessel assistance, barge pushing and occasional crew boat duties. And don't forget her ice-classed hull too: "In terms of ice cover, this last winter was particularly severe, which actually worked out to our advantage as we could provide ice breaking services to other clients."

## **BUILDING BRICKS MEETING A LEGO SHIPBUILDER**

Edwin Korstanje is a professional Lego builder specialising in ships. "I do build other things like trucks and houses, but ships are where my passion is."

Working for a wide range of clients in the maritime sector, he uses his wealth of experience with the tens of thousands of different types of Lego bricks to build truly custom-made creations. As well as one-of-a-kind detailed scale models, Edwin's work also consists of construction sets, complete with building instructions. "In total, this works out to be about 3,500 ships," he says proudly.

### MOC

Every ship that Edwin builds is a MOC. "In Lego terms, this means 'My Own Creation' building something without instructions. Literally everything is possible; this includes remote-controlled moving systems like winches, anchors and propellers. And every year Lego brings new types of brick out, which lets me upgrade and improve models. It's actually very addictive.

A lot of his work involves building models of ships that are still under construction at the shipyard. "I need good drawings of the vessel, preferably with computer renderings of what the completed ship will look like, including the underwater lines of the hull."

### ...and SNOT

According to Edwin, the hull is often the most challenging part of a model. "It is so difficult because there are no straight lines involved," he says. The solution is to build using a special technique that is unique to Lego. "It's called Studs Not On Top otherwise known as SNOT - which works because working with Lego bricks sideways is totally different to building upwards. You can make many more shapes and forms, but it does take a lot of calculation work."

"In this respect, building with Lego is very much like playing chess. For example, I plan moves 20 or 30 steps ahead - you need to know exactly where you want to build."

New challenges constantly arise too: "Many new tugs have double drum winches on the Edwin's favourite Damen vessel? "Good old fashioned Stan Tugs are my favourite bow which, in reality, move independently from each other. The first models that I built rugged towing vessels. There are so many possibilities and so many nice details with a double drum couldn't do this because they only had one axle. Now, I have figured to include.' out how to build them so that both drums move separately."

When working with such detailed elements, the scale of the model influences the level of precision that can be attained. "Larger models are easier to build. You can include many more details and things become more realistic, especially the hull.

"Smaller models are often much more difficult, and that is a nice challenge, but you can still accomplish amazing things." Edwin's micromodel construction set of a Damen-built Ropax Ferry, with just 89 pieces, is a good example of this.

By getting the most out of Lego's construction system, Edwin admits that his clients challenge him with every model he makes. "By coming up with new ideas, I challenge them too," he smiles. "An open engine room, for instance. Being able to see the big 16 cylinder engines and generators is a very nice touch."

### So many possibilities

It was through a shared client that Edwin first came into contact with Damen. "I had built a large model of a Stan Tug 4011 for one of Damen's clients. After that, they asked me to be involved on some more projects. This started with a ASD Tug 3212 construction set and a one-off model of an Offshore Supply Vessel.

"I have also built a Damen Cutter Suction Dredger 500 construction set, which is available on their webshop. Just like the real vessel, this model is also modularly constructed. In fact, construction sets like this show the direct similarities between Damen and Lego. With their DTC service [Damen Technical Cooperation], they can deliver designs, materials, engineering, and building instructions of ships to any shipyard in the world."

And in the meantime, he has built numerous vessel types for Damen's clients. "Shoalbusters, Superyachts, ASD Tugs 2810, 3212, 3312 and 2913. I haven't built a Multi Cat yet though. That is one I would like to work on because it's a nice vessel with lots of equipment on deck.