



Project News

## **thyssenkrupp ships 5500 t Iron Ore Handling System to Baffin Island, Canada**

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thyssenkrupp Industrial Solutions is developing and building a new materials handling system for one of the most remote and challenging locations in the world: an iron ore port in northern Canada. Recently, the first plants were shipped completely pre-assembled from Bremerhaven, Germany, to Baffin Island.



Baffinland Iron Ore Mines Corporation's (Baffinland's) Mary River mine is one of the world's richest iron ore deposits with iron contents more than 65 percent. At the same time, the port on Baffin Island is one of the most demanding locations in the world. It is only free of ice and accessible to shipping between the end of July and the beginning of October. With thyssenkrupp's new material handling system Baffinland aims to triple its material handling capacity to 12 million tons of iron ore per year. The project generates a major potential for the economic development of the region and will create jobs for the local population. Christof Brewka, Head of Materials Handling at thyssenkrupp Industrial Solutions: "Ambitious projects like this require a deep understanding of local conditions, close collaboration with the client and efficient global project management. One of our strengths is that we can bring together our experts at different locations around the world. Teams from Germany, Canada and the USA have pooled their know-how to develop the best solution for Baffinland. At the same time, our proven technologies will guarantee the highest productivity even under extreme

climatic conditions.”thyssenkrupp supplies a complete system for the processing, storage and transport of iron ore. This includes a complete railcar unloading station, a crushing and screening plant, a stockpile system including a combined stacker/reclaimer, a ship loader as well a conveyor plant connecting all components. Due to the difficult logistical and climatic conditions on site, the plants are pre-assembled at a total of four locations in Europe, Canada and the Middle East. The first delivery including a crusher, a screening system and a railcar unloading station was shipped from Bremerhaven to Canada in July 2019. While the railcar unloading station was preassembled in Stettin and transported to Bremerhaven, the crushing and screening system was assembled in Bremerhaven. The crusher building is 23.5 meters wide, 33 meters high and weighs 1,470 tons. The screen building is 30 meters wide, 34 meters high and weighs almost 1,800 tons. The BigLift Barentsz reached port on Baffin Island with its roughly 5500 ton freight in the beginning of August. Two more cargo ships are scheduled to deliver conveyors during the current shipping season. The remaining units will be delivered in 2020. When it goes into operation in 2021, the system will crush, screen and store the ore produced in the Mary River Mine all year round and load it onto Panamax or Capesize ships during the ice-free season. For example, the system can fully load a Capesize ship in just one day.

### **About Baffin Island**

Few people outside Canada know much about Baffin Island, the fifth largest island in the world with a surface area of over 500,000 km<sup>2</sup> (almost 1.5 times the size of Germany) and a population of under 12,000. One reason for the low population figure is the harsh climate roughly 600 kilometers north of the Arctic Circle. Spring arrives in mid-July and winter returns in September. Baffinland Iron Ore Mines operates the Mary River Mine at the northern end of Baffin Island in the Canadian Nunavut territory. At a latitude of around 72°, it is one of the northernmost mines in the world and has been producing high-quality iron ore for 12 months a year since 2015. The ore is transported from the mine to Milne Inlet port on the northern coast around 100 kilometers away. As part of the overall project, this transportation will be converted from road to rail.