HISTORY
The city of Veracruz, México, located in the heart of the State of Veracruz, is home to the fuel port terminal at the Port of Tuxpan. The port lies on the banks of the Tuxpan River, approximately 7 miles from where it meets the Gulf of México on the east-central shores. Located about 95 miles south-southeast of the Port of Tampico, the Port of Tuxpan is an important industrial, commercial, and transportation hub.

The main income of the port comes from the nearby oil fields that export petroleum. With shipyards located nearby, the Port of Tuxpan is linked to México City and the country’s southwest and coastal cities by road and air service. Ships arrive at the port via the river or through an inland canal system that goes through the oil fields from Tampico.

PROBLEM
The problem at the port was two-fold. In order to accommodate larger oil and cargo ships, the port needed rehabilitation. And, to allow for navigation and maneuverability of the larger vessels that would be using the port, the Tuxpan River needed to be dredged to a depth of 46 feet.

SOLUTION
Compania Terminal de Tuxpan’s designer, RHG Ingenieria, contacted Skyline Comercial de México for advice and design help on the projects.

Skyline Comercial de México suggested a sheet pile wall consisting of two walls; a 78 foot main wall using AZ 32-750 sheets and a 20 foot anchor wall using AZ 18-800 sheets, supplied by Nucor Skyline.

The walls were internally tied together using 82 foot long, upset threaded M80/60 tie rods, with articulating pinned connections.

The design work for the river dredging project called for a fully submerged cantilevered wall, using AZ 25-800 sheet piles, which helped to stabilize the shore during dredging, while keeping the businesses on the left bank of the river safe from impact.

PROJECT PARTNERS
Owner
INVEX Infraestructura/Grupo SIMSA – México City

Engineer
RHG Ingeniería – México

PRODUCTS
Sheet Pile: AZ 25-800 (1,912 net tons); AZ 32-750 (1,000 net tons)

PROJECT TIME FRAME
May 2018 to present