



# CRUISE SHIP DOCKING FACILITY

## SHIP DOCKING FACILITY PROJECT

Project Name	Amber Cove, Dominican Republic
Client	Carnival Cruise Line
Contractor	Orion Marine Group
Location	Bahia De Maimon, Dominican Republic
Product	SSAW Pipe
Total Tonnage	4,346 MT

### ESC SCOPE OF SUPPLY

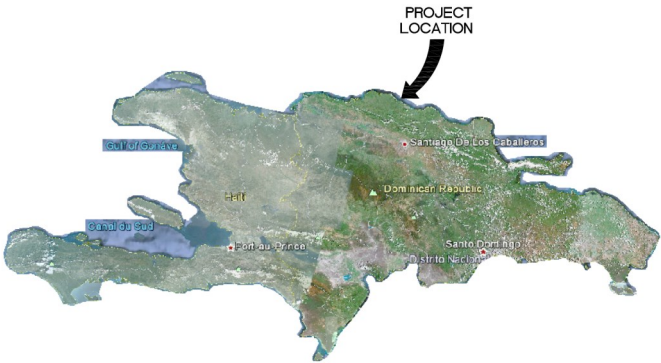
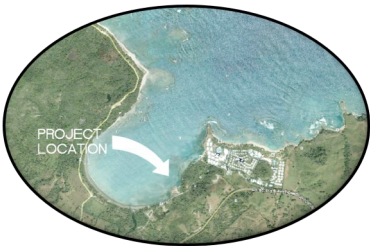
#### SSAW PIPE

ESC was awarded the job to supply painted tubular pile for the construction of a cruise ship docking facility located in the Dominican Republic.

ESC supplied the required SSAW pipe with outside diameter range from 508mm ~ 1371.6mm at a thickness of 16mm. Length of pipe varies from a range of 31.396m ~ 54m.

The entire 4,346 tons of painted pipes were delivered to site within 90 days of order.

ESC coordinated with the contractor to ensure the vessel was able to directly unload to their



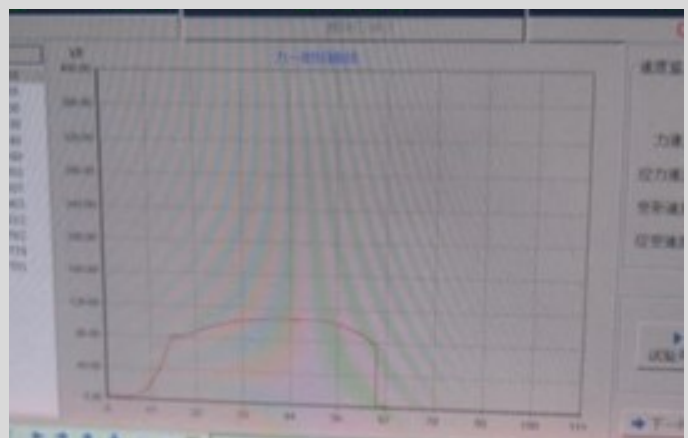
Overall site map.

# RAW MATERIAL INSPECTION



The quality of the raw material is critical to ensure the final product meets the project specification. Thickness of each coil is inspected and the identity of the material shall be traceable with each coil.

Raw material (hot rolled steel coil) for the project supplied in accordance with ASTM A1018 Gr50 at a thickness of 16mm.



Mechanical properties test and chemical composition analysis is carried out on each available heat number. Each test is performed with the witness from ABS (third party inspector).

Raw material must pass dimensional inspection, visual inspection, traceability inspection, mechanical properties test, and chemical composition analysis before the production process can be started.



# PIPE FORMING

Traceability: Stencil marking on the pipe inner surface once the pipe is formed to ensure traceability is under control throughout the whole production process.



A third party inspector was present during the entire production process including all quality control processes, ABS (American Bureau of Shipping) was the third party inspector.

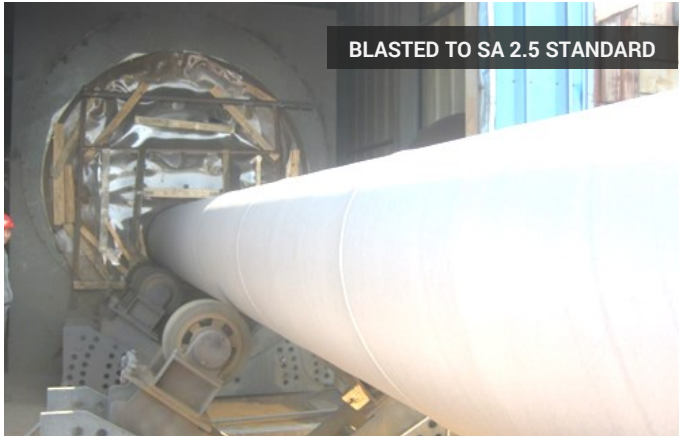
Quality Control: 100% visual inspection, online UT as well as manual UT performed on both spiral and plate end welds, 100% dimensional inspection including ovality, straightness, diameter, length, and squareness of pipe ends.



# SURFACE PREPARATION & PAINTING



AMBIENT CONDITION MEASUREMENT



BLASTED TO SA 2.5 STANDARD



BLASTED PIPE



PAINTED WITH BLACK COLOUR COAL TAR EPOXY  
PAINT WITH TOTAL DRY FILM THICKNESS OF 410µM



CHECK SUBSTRATE TEMPERATURE  
PRIOR TO EACH LAYER OF COATING



RANDOM SAMPLE ADHESION TEST



DFT INSPECTION IN ACCORDANCE WITH SSPC PA2



100% HOLIDAY TEST

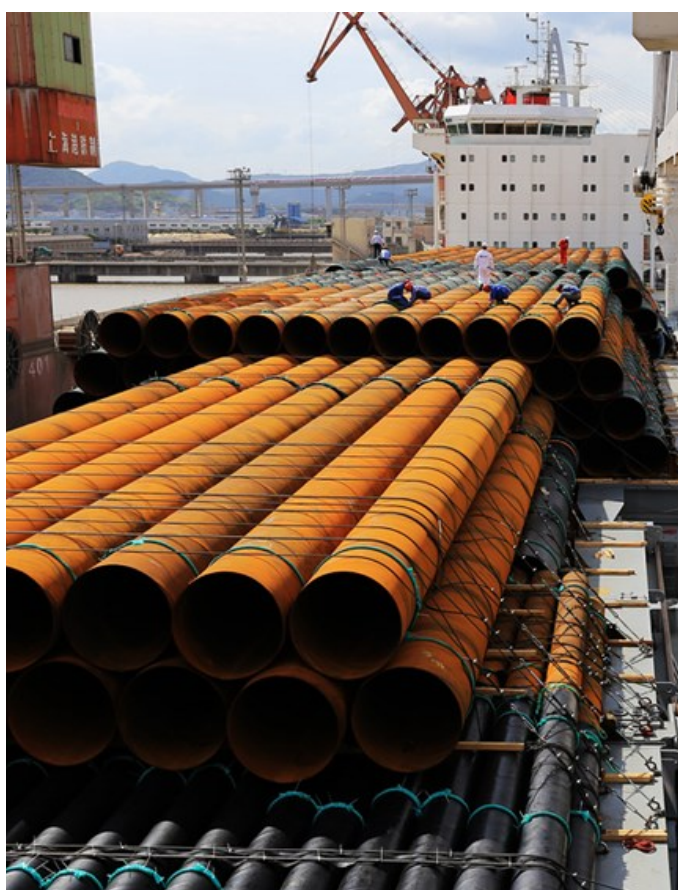


# PACKING, STACKING & SHIP LOADING



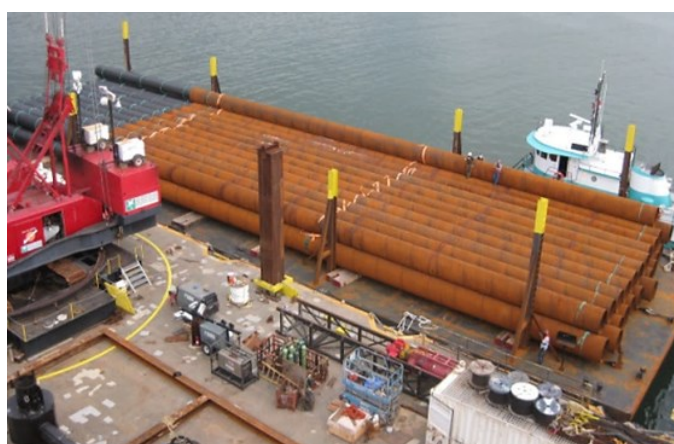
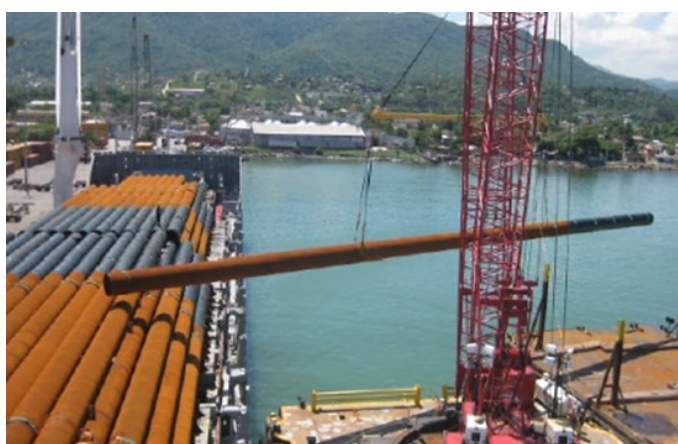
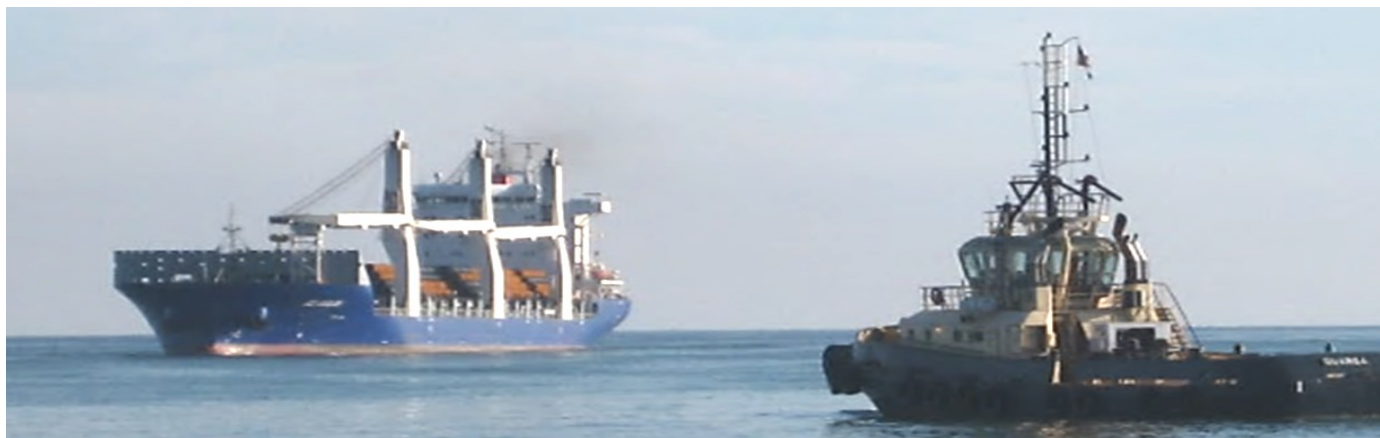


# SHIP LOADING





## ARRIVAL AT DESTINATION



## DOMINICAN REPUBLIC CRUISE SHIP DOCKING FACILITY

