

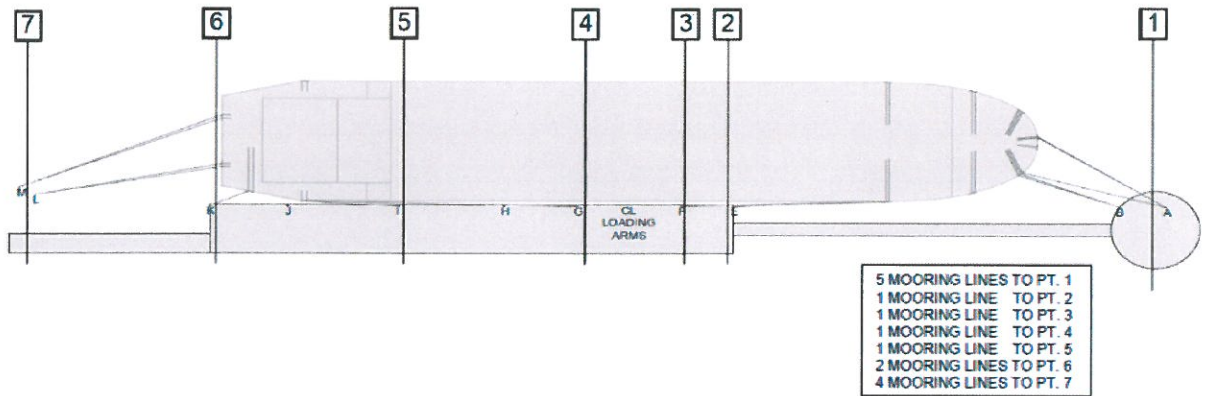
ExxonMobil Baytown Mooring Line Requirements

Number, type, and size of mooring lines. Please note minimum requirements for mooring lines:

- a) Wires with synthetic tails shall be considered as synthetic lines, unless the steel portion of the line is placed on the bollard or quick-release hooks.
- b) In the interest of safety and pollution control, it is vital that all moorings be maintained in tight conditions at all times. **FAILURE TO COMPLY WITH MINIMUM REQUIREMENTS WILL RESULT IN THE TERMINATION OF CARGO TRANSFER UNTIL COMPLIANCE IS OBTAINED.**
- c) Mooring requirements for Dock 1 - Berth 1 and 2 will consist of:
 - 1) 3 forward-breast lines,
 - 2) 3 after-breast lines,
 - 3) 3 1-1/8 inch diameter wires/Spectra or three synthetic forward-spring lines,
 - 4) 3 1-1/8 inch diameter wires/Spectra or three synthetic after-spring lines,
 - 5) For the breast line and spring lines, two of the lines must be secured to the vessel in similar fashion. (i.e. 2 lines secured on bits or 2 lines secured on winches)
 - 6) 2 bowlines,
 - 7) 2 stern lines,
- d) Mooring requirements for 2 Dock, 3 Berth will consist of:
 - 1) 5 head lines, 2 springs,
 - 2) 4 stern lines, 2 breast lines, 2 spring lines,
 - 3) 2 1-1/8 inch diameter wires or three synthetic forward-spring line
 - 4) 2 1-1/8 inch diameter wires or three synthetic after-spring lines
- e) Mooring requirements for 5 Dock, 5 and 6 Berth for vessels with beam greater than 120 ft: 2 additional forward spring lines for a minimum of 4 forward spring lines will be required. Final Mooring for 5 Dock will consist of a total of 18 mooring lines:
 - 1) 4 after stern-breast lines,
 - 2) 4 after spring lines,
 - 3) 4 forward spring lines,
 - 4) 6 total forward head-breast linesTo avoid mixed mooring, all mooring lines in the same service should be of the same construction. If the ship cannot deploy 18 lines of the same construction then the following guidelines apply:
 - f) Whenever possible all lines in a particular service should be of the same construction, BS and stretch characteristics.
 - g) When it is not possible, at a minimum any two lines leading to the same shore hook must be of the same construction.
 - h) Under normal circumstances, no more than 2 mooring lines should be attached to a single shore hook.
 - i) Automatic winches should be in manual operation while in port.

Figure 1-6 Dock 2 Mooring

Recommended Mooring Pattern
Baytown Refinery - Dock 2 Berth 3



Minimum Mooring Equipment	Stern Lines	Aft Breast Lines	Aft Spring Lines	Fwd Spring Lines	Fwd Breast Lines	Head Lines
Number of Lines	4	2	2	2	—	5
Line Breaking Strength	Minimum ≥ 82 metric tons (MR Tanker) Minimum ≥ 92 metric tons (Panamax)					
Mooring Line Material	High Modulus Fiber Ropes or Steel Wire					