

Galveston Texas City Pilots Tug Matrix

Section Updated: 11 Oct 2023

The following guidelines have been developed to determine adequate assist tug assistance in the Ports of Texas City and Galveston. Similar docks have been grouped and coupled with vessel size and draft information. Assist tugs are then specified on the basis of bollard pull and maneuverability based on the expected circumstances of the order. The tug's design type: tractor, z-drive, or conventional, has a definite bearing on effectiveness and safety of the associated evolutions. Tugs' listed bollard pull dimensions are per area operators.

Tug Class Ratings:

Class

TSFR (Twin Screw Flanking Rudders)
T (Tractor)
C (Z-TECH 24-60)
Z (Z-TECH 30-75)

Ahead

43
52
60
73

Minimum Bollard Pull (Metric Tonnes):

Astern

33
48
52
67

Notes:

Z can substitute for any class (for horsepower—verify space constraints before substituting)

C can substitute for T

T can substitute for TSFR

Bow thrusters:

The ship's bow thruster, if operable, may substitute for smallest tug, except that thrusters must meet the following minimum requirement of available horsepower to substitute for a tug.

(1 KW equals 1.35HP)

<u>Vessel LOA</u>	<u>Thruster Horsepower</u>	<u>Thruster kW</u>
More than 900'	2,500	1,852
751'—900'	2,000	1,481
551'—750'	980	726
451'—550'	730	541
350'—450'	400	296
Less than 350'	200	148

These guidelines are recommended only and are in no way intended to limit, hinder, or override the on-scene discretion of the pilot and master as they navigate vessels on the waters of Texas City and Galveston.

Ships and the waters in which they operate present a dynamic and sometimes unpredictable environment; therefore, firm rules addressing every possible scenario are not feasible. The individuals best situated to evaluate the specific docking and/or undocking evolution contemplated by the vessel, including factors such as the prevailing weather, current, and traffic situation, are the pilot and vessel master. We realize that there will be situation where a departure from the recommendations may be necessary to address specific or special circumstances that confront a specific vessel or mooring arrangement. Further, it is recognized that the demands of maritime commerce, vessel, and tug design, and terminal configuration may change, requiring a departure from the current tug assistance guidelines. As always, any vessels' specific concerns should be presented to the Galveston-Texas City Pilots before the order is scheduled.

Texas City

Section Updated: 23 Aug 2023

Note: All Lengths and drafts are measured in feet

TC 1 with TC 11 Unoccupied

LOA	BEAM	DRAFT	ARRIVAL	DEPARTURE	REMARKS
<400	ANY	ANY	T+TSFR	TSFR+TSFR	
400-500	ANY	<30	T+TSFR	TSFR+TSFR	
400-500	ANY	>30	T+TSFR	TSFR+TSFR	
501-650	ANY	<30	T+TSFR	T+TSFR	
501-650	ANY	>30	T+TSFR	T+TSFR	
>650	ANY	<30	T+C	C+TSFR	
>650	ANY	>30	C+C	T+C	

TC 1 with TC 11 Occupied

LOA	BEAM	DRAFT	ARRIVAL	DEPARTURE	REMARKS
<400	ANY	ANY	T+TSFR	TSFR+TSFR	
400-500	ANY	<30	T+TSFR	TSFR+TSFR	
400-500	ANY	>30	T+TSFR	TSFR+TSFR	
501-650	ANY	<30	C+T*	T+T	
501-650	ANY	>30	C+T*	T+C	
>650	ANY	ANY	C+T*	C+T*	

*NO BOW THRUSTER SUBSTITUTION PERMITTED

TC 11, 12, 40, 41 (Non-VLCC. For VLCC—see next page)

LOA	BEAM	DRAFT	ARRIVAL	DEPARTURE	REMARKS
<650	ANY	ANY	T+TSFR*	TSFR+TSFR	
650-750	<107	<30	T+T*	TSFR+TSFR	
650-750	<107	>30	C+T*	C+TSFR*	
650-750	>107	<30	C+T*	C+TSFR*	
650-750	>107	>30	C+T+T OR C+C*	C+TSFR*	
>750	<150	<30	C+C*	C+TSFR*	
>750	<150	>30	C+C+T OR Z+C*	C+T*	
>750	>150	<30	C+C*	T+T*	
>750	>150	>30	Z+C+T*	C+T*	
>750	>150	<30	C+C*	T+T*	

*NO BOW THRUSTER SUBSTITUTION PERMITTED

TC 19 & 20 (Note: Beam restriction @TC 19/20 ≤ 90')

LOA	BEAM	DRAFT	ARRIVAL	DEPARTURE	REMARKS
<400	ANY	<30	T+TSFR	TSFR+TSFR	Maximum Tug length 100'
<400	ANY	>30	T+TSFR	TSFR+TSFR	Maximum Tug length 100'
400-500	ANY	<30	T+TSFR	TSFR+TSFR	Maximum Tug length 100'
400-500	ANY	>30	C+TSFR*	T+T	Maximum Tug length 100'
>500	ANY	<30	C+T*	C+T	Maximum Tug length 100'
>500	ANY	>30	C+C*	C+T	Maximum Tug length 100'

*NO BOW THRUSTER SUBSTITUTION PERMITTED

TC 16, 32

LOA	BEAM	DRAFT	ARRIVAL	DEPARTURE	REMARKS
<400	ANY	<30	T+TSFR	TSFR+TSFR	
<400	ANY	>30	T+TSFR	TSFR+TSFR	
400-500	ANY	<30	T+TSFR	TSFR+TSFR	
400-500	ANY	>30	T+TSFR*	T+TSFR	
>500	ANY	<30	T+T	T+T	
>500	ANY	>30	C+T	C+T	

TC 15, 37, 38

LOA	BEAM	DRAFT	ARRIVAL	DEPARTURE	REMARKS
<600	ANY	ANY	T+TSFR	TSFR+TSFR	37 slip- Maximum Tug length 100'
>600	ANY	<30	T+T*	T+TSFR	37 slip- Maximum Tug length 100'
>600	ANY	>30	C+C*	C+TSFR	37 slip- Maximum Tug length 100'

*NO BOW THRUSTER SUBSTITUTION PERMITTED

TC 45

LOA	BEAM	DRAFT	ARRIVAL	DEPARTURE	REMARKS
<700	ANY	<30	C+T*	T+TSFR	
<700	ANY	>30	C+C*	C+T	
>700	ANY	<30	C+C*	C+C	
>700	ANY	>30	Z+Z*	Z+C	

*NO BOW THRUSTER SUBSTITUTION PERMITTED

TC 50

LOA	BEAM	DRAFT	ARRIVAL	DEPARTURE	REMARKS
<450	ANY	ANY	T+TSFR	TSFR+TSFR	
>450	ANY	<30	C+T	TSFR+TSFR	
>450	ANY	>30	C+C	T+TSFR	

TC 66, 67

LOA	BEAM	DRAFT	ARRIVAL	DEPARTURE	REMARKS
<350	≤107	ANY	TSFR+TSFR	TSFR+TSFR	
350-700	≤107	<30	C+T	T+T	
350-700	≤107	>30	C+C	C+T	
ANY	>107	ANY	Z+C	Z+C	

OCEAN GOING TUG/BARGE UNITS (Beam restrictions apply for TC 19, 20, & Gal. Slips)

LOA	BEAM	DRAFT	ARRIVAL	DEPARTURE	REMARKS
<400	ANY	<20	TSFR	TSFR	
<400	ANY	>20	TSFR	TSFR	
400-600	ANY	<20	TSFR	TSFR	
400-600	ANY	>20	TSFR	TSFR	
>600	ANY	<20	T	TSFR	
>600	ANY	>20	C	TSFR	

TC VLCC

LOA	BEAM	DRAFT	ARRIVAL	DEPARTURE	REMARKS
ANY	ANY	ANY	Z+Z+Z+Z+C	Z+Z+Z+Z+C	

Galveston

Section Updated: 11 Oct 2023

Note: All lengths and drafts are measured in feet

Channel-side docks:

(Pier 10, 16, 18**, 21, 25, 27, 28, 30/32, 34, 35, 39/40, Gulf Sulfur Services, Galveston Oil Terminal):**

LOA	BEAM	DRAFT	ARRIVAL	DEPARTURE	REMARKS
<500	ANY	<28	T+TSFR	T+TSFR	
<500	ANY	>28	T+T	T+TSFR	
500-700	ANY	<28	C+T	T+TSFR	
500-700	ANY	>28	C+T	C+TSFR	
>700	<130	ANY	C+C	C+T	
>700	130-150	32-35	C+C	C+T	
>799	>150	32-35	Z+Z	C+C	
>799	>150	>35	Z+Z+T	C+C	
Car Carriers +Grimaldi	ANY	ANY	C+C	C+T	When shifting 10 to 39/40, requires C+C
Cruise Ships	ANY	ANY	Z+Z	Z+Z	Additional Z tugs may be needed in high winds/current
Container Type Ships	ANY	ANY	Z+C	C+C	Additional T, C, or Z may be needed in high winds/current
LNG Vessels	ANY	ANY	Z+Z+Z	Z+Z+Z	Tug quantities and type may vary based on vessel size.

**Del Monte ships require C+T for on/off

Slips (Piers 12, 14, 15, 37, 39, 40, 41, Duval Slip):

Note: Ships >90' beam require special service vetting and 24-hr notice.

LOA	BEAM	DRAFT	ARRIVAL	DEPARTURE	REMARKS
<500	ANY	<28	T+TSFR	T+TSFR	
<500	ANY	>28	T+TSFR	T+TSFR	
>500	ANY	ANY	C+TSFR	T+TSFR	
ANY	90-106	ANY	C+T+PUSH TUG	C+T+PUSH TUG	B/T may replace push tug

OCEAN GOING TUG/ BARGE UNITS (Beam restrictions apply for Gal. Slips)

LOA	BEAM	DRAFT	ARRIVAL	DEPARTURE	REMARKS
<400	ANY	<20	TSFR	TSFR	
<400	ANY	>20	TSFR	TSFR	
400-600	ANY	<20	TSFR	TSFR	
400-600	ANY	>20	T	TSFR	
>600	ANY	<20	T	TSFR	
>600	ANY	>20	C	T	

Texas International Terminal (TxIT):

Section Updated: 11 Nov 2023

Note: When the combined total of T, C, or Z assist tugs exceed 2 ea. on auto orders at TxIT, the inbound/arriving vessel shall have at least C+T to hold until the departing vessel can safely release the required tugs (T, C, or Z) to the arriving vessel.

TIT 1, 2, 3, 4

LOA	BEAM	DRAFT	ARRIVAL	DEPARTURE	REMARKS
<500	ANY	<32	T+T	T+T	
<500	ANY	>32	C+T	C+T	
500-640	ANY	<35	C+C	C+C	
500-640	ANY	>35	Z+C+T	Z+C+T	
641-700	ANY	>35	Z+Z+C	Z+Z+T	
641-700	ANY	<35	Z+C	Z+C	
>700	ANY	ANY	Z+Z+C	Z+Z+C	Additional assets may be needed on a case-by-case basis
Aframax	ANY	ANY	Z+Z+C+C	Z+Z+C+C	Z class must be 30-75 or 30-80 or better.