

## GalTex Pilots Tug Matrix

The following guidelines have been developed to determine adequate 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 designated by the circumstances of the maneuver. Tugs are categorized by “bollard pull” as provided by area operators. Bollard pull is used rather than horsepower to rate tugs effectiveness. Additionally, the tug’s design type, tractor or conventional, has a definite bearing on effectiveness and desirability.

### **Tug Class Ratings: Minimum Bollard Pull (in pounds)**

<b>Class</b>	<b>Ahead</b>	<b>Astern</b>
S (Small; compact)	35,000	20,000
M (Medium; diamond class)	60,000	45,000
L (Large; twin-screws)	85,000	55,000
T (Tractor)		

T can substitute for any class

L can substitute for S or M

M can substitute for S, except arrivals less than 30’

Bow thruster substitutes for smallest tug

Thrusters must meet the following minimum requirement of available horsepower to substitute for a tug. (1 KW equals 1.35HP)

<b>Vessel LOA</b>	<b>Thruster Horsepower</b>
More than 900’	2,500
751’ – 900’	2,000
551’ – 750’	980
451’ – 550’	730
350’ – 450’	400
Less than 350’	200

As always, any vessels’ specific concerns should be discussed with the GalTex Pilots. Ships and the waters in which they operate represent a dynamic, ever-changing environment. Firm rules addressing every possible scenario are not possible. The individual pilot and master on board are best situated to evaluate the specific docking and/or undocking evolution contemplated by the vessel and the prevailing weather, current, and traffic situation affecting the vessel. These guidelines are recommendations only. It is recognized that the on-scene discretion of the pilot and master should not be hindered. The following guidelines regarding tug assistance 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. We realize that there will be situations where actions that conflict with these recommendations may be necessary to address specific or special circumstances that confront a specific vessel. Further, it is recognized that as the demands of maritime commerce, vessel and tug design, and terminal configuration may change requiring a departure from the current tug assistance guidelines.

## Texas City

### TC 1 with TC 11 Unoccupied

LOA	BEAM	DRAFT	ARRIVAL	DEPARTURE	REMARKS
<400	ANY	ANY	LM	LM	
400-500	ANY	<30	LM	LM	
400-500	ANY	>30	LL	LL	
501-650	ANY	<30	LM	LM	
501-650	ANY	>30	LL	LL	
> 650	ANY	<30	LM	LM	
> 650	ANY	>30	LL	LL	

### TC 1 with TC 11 Occupied

LOA	BEAM	DRAFT	ARRIVAL	DEPARTURE	REMARKS
<400	ANY	ANY	LM	LM	
400-500	ANY	<30	LM	LM	
400-500	ANY	>30	LL	LL	
501-650	ANY	<30	LM	LM	
501-650	ANY	>30	LL	LL	
> 650	ANY	ANY	LL	LL	

### TC 11,12,40,41

LOA	BEAM	DRAFT	ARRIVAL	DEPARTURE	REMARKS
<650	ANY	ANY	LL	LL	
650-750	<107	<30	LL	LM	
650-750	<107	>30	LL*	LM	
650-750	>107	<30	LL*	LM	
650-750	>107	>30	LLL*/TL*	LM	
>750	<150	<30	LL*	LM	
>750	<150	>30	LLL*/TL*	LM	
>750	>150	<30	LLL*/TLL*	LM	TC 11,40
>750	>150	>30	LLL*/TLL*	LL	TC 11,40
>750	>150	<30	LLL*/TLL*	LM	TC 12,41
>750	>150	>30	LLL*/TLL*	LL	TC 12,41

\* NO BOW THRUSTER SUBSTITUTION PERMITTED  
ALL LENGTHS AND DRAFTS IN FEET

**TC 15,19,20 (Note: Beam restriction @TC 19/20 ≤ 90')**

LOA	BEAM	DRAFT	ARRIVAL	DEPARTURE	REMARKS
<400	ANY	<30	LM	LM	
<400	ANY	>30	LL	LM	
400-500	ANY	<30	LL	LM	
400-500	ANY	>30	LL	LM	
>500	ANY	<30	LL	LM	
>500	ANY	>30	LL	LL	

**TC 16,32**

LOA	BEAM	DRAFT	ARRIVAL	DEPARTURE	REMARKS
<400	ANY	<30	LM	MM	
<400	ANY	>30	LM	LM	
400-500	ANY	<30	LM	LM	
400-500	ANY	>30	LM	LM	

**TC 37, 38**

LOA	BEAM	DRAFT	ARRIVAL	DEPARTURE	REMARKS
<600	ANY	ANY	LM	LM	
>600	ANY	<30	LM	LM	
>600	ANY	>30	LL	LL	DEPARTURE TC38 MAY USE LM

**TC 45**

LOA	BEAM	DRAFT	ARRIVAL	DEPARTURE	REMARKS
<700	ANY	<30	LL	LM	
<700	ANY	>30	LL	LL	
>700	ANY	<30	LLM/TL	LM	
>700	ANY	>30	LLL/TL	LL	

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ALL LENGTHS AND DRAFTS IN FEET

**TC 50**

<b>LOA</b>	<b>BEAM</b>	<b>DRAFT</b>	<b>ARRIVAL</b>	<b>DEPARTURE</b>	<b>REMARKS</b>
<450	ANY	ANY	LM	MM	IF HEAD IN LM
>450	ANY	<30	LL	LM	IF HEAD IN LM
>450	ANY	>30	LL	LL	

**TC 66,67**

<b>LOA</b>	<b>BEAM</b>	<b>DRAFT</b>	<b>ARRIVAL</b>	<b>DEPARTURE</b>	<b>REMARKS</b>
<350	ANY	ANY	LM	LM	
350-700	ANY	<30	LM	LM	
350-700	ANY	>30	LL	LL	

**OCEAN GOING TUG / BARGE UNITS**

<b>LOA</b>	<b>BEAM</b>	<b>DRAFT</b>	<b>ARRIVAL</b>	<b>DEPARTURE</b>	<b>REMARKS</b>
<400	ANY	<20	M	M	
<400	ANY	>20	M	M	
400-600	ANY	<20	L	M	
400-600	ANY	>20	L	L	
>600	ANY	<20	L	L	
>600	ANY	>20	L	L	

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ALL LENGTHS AND DRAFTS IN FEET

## Galveston

Channel-side docks (Piers 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	MM	MM	
<500	ANY	>28	LM	LM	
500-700	ANY	<28	LM	LM	
500-700	ANY	>28	LL	LL	
>700	< 130	Any	LL	LL	Head in arrival
>700	>130	>32	LLL	LL	Turning on arrival, Otherwise, LL

Slips (Piers 12, 14, 15, 37, 39 40, 41, Duval Slip): Note: Ships restricted to ≤90' beam in Galveston slips unless equipped with a working bow thruster.

LOA	BEAM	DRAFT	ARRIVAL	DEPARTURE	REMARKS
<500	Any	<28	LM	LM	
<500	Any	>28	LL	LL	
>500	Any	Any	LL	LL	
Car Carriers	Any	Any	TL	TL	

### Galveston Bulk Terminal:

LOA	BEAM	DRAFT	ARRIVAL	DEPARTURE	REMARKS
<500	Any	Any	LL	LL	
500-700	Any	<32	LL	LL	
500-700	Any	>32	LLL	LLL	
>700	Any	Any	LLL	LLL	

\*\*Sulfur Enterprise: Same as channel-side docks or per Master's order

\* NO BOW THRUSTER SUBSTITUTION PERMITTED  
ALL LENGTHS AND DRAFTS IN FEET

Dated 27 July 2008