

TOWAGE TABLES

Sydney Harbour and Port Botany

In force from 1 May 2023



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1 Tug Classification

Classification of tugs

The harbour tugs are classified in accordance with the table below, further information on towage can be obtained from the Harbour Master Directions:

Class of tug	Type of propulsion	Minimum bollard pull capacity (tonne) ahead or astern
Z	Omnidirectional	≥55
A	Omnidirectional	≥45 and <55
B	Omnidirectional	≥30 and <45
C	N/A	≥10 and <30

The towage tables set out the minimum towage for vessels calling at Sydney Harbour and Port Botany in accordance with the latest version of the Harbour Master Directions, Sydney Harbour and Port Botany available at Port Authority website.

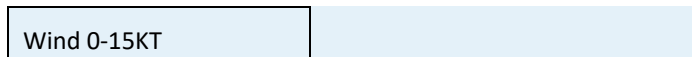
Where a vessel of a type not specified for the berths listed in the tables is booked, the Harbour Master and Duty Pilot shall be consulted to determine towage requirements.

2 Wind Conditions

PANSW utilises real time wind monitoring and a weather forecasting system that has information for specific areas in Sydney Harbour and Port Botany.

The system used encompasses a colour coding to assist with increasing towage requirements appropriate to the wind conditions. This provides guidance to the Duty VTS Manager and Duty Pilot when determining required towage as follows:

- Wind Gusts 0-15 knots – Normal operations



- Wind Gusts 15-25 knots – Increased Towage



- Wind Gusts >25 knots – Assess Movement Acceptability



- Consult DP for movement acceptability and towage requirements
- If movement considered acceptable, towage to be no less than prescribed in the 15-25 kt table.

3 Sydney Harbour

3.1 Bulk carriers, general cargo vessels, gas-free tankers

Table 1. Any berth, for arrival and departure, with wind gusts below 15 knots

Vessel Length (m)	Without approved bow thruster	With approved bow thruster
30-74.9	C	No tug required
75-99.9	CC	C
100-129.9	BC	B
130 - 184.9	AB	A
185 - 199.9	AA	A
200 - 224.9	AA	AB
225 - 264.9	AAA	ZZ
Over 265	As determined by the Harbour Master in consultation with duty pilot.	

Note: Tug rendezvous and release position Sea buoy

Table 2. Any berth, for arrival and departure, with wind gusts 15-25 knots

Vessel Length (m)	Without approved bow thruster	With approved bow thruster
30-74.9	C	C
75-99.9	CC	CC
100-129.9	BC	BC
130 - 184.9	AA	AB
185 - 199.9	AA	AA
200 - 224.9	AA	AA
225 - 264.9	AAA	ZZ
265 and more	As determined by the Harbour Master in consultation with duty pilot.	

Note: Tug rendezvous and release position: Sea buoy

Table 3. Any berth, for arrival and departure, with wind gusts above 25 knots

Vessel Length (m)	With or without approved bow thruster
All vessel Lengths	As determined by the Harbour Master in consultation with duty pilot.

Note: Tug rendezvous and release position: Sea buoy

3.2 Passenger vessels

The minimum towage requirement for each passenger vessel is assessed using a risk-based approach by the Harbour Master in consultation with duty pilot before the vessel's first call to Sydney Harbour. Once a vessel has been assessed, and its manoeuvring abilities has been found to be satisfactory, the below table is used on subsequent calls. Minimum towage requirements for any other passenger vessel are determined on a case-by-case basis.

Table 4. Any berth, for arrival and departure, with satisfactorily manoeuvring ability

Vessel Length (m)	Wind gusts below 20 knots	Wind gusts 20-25 knots	Wind gusts above 25 knots
Less than 130	No tug required	A	As determined by the Harbour Master in consultation with the duty pilot
130-199.9	A	A	
200 - 259.9	Z	Z	
260 - 299.9	Z	ZA	
300 - 329.9	Z	ZZ	
330 - 350	Z	ZZ	

Note: Tug rendezvous and release position Sea buoy

3.3 Non gas-free tankers

Table 5. Gore Cove and Chowder Bay berths, for vessel Length below 200m, with wind gusts below 15 knots

Displacement	Without approved bow thruster	With approved bow thruster
Less than 7500	CC	C
7500 to 9999	AC	A
10000 to 24999	AA	A
25000 to 59999	ZZ	ZZ
60000 to 80000	ZZZ	ZZZ

Note: Tug rendezvous and release position Line Zulu

Table 6. Gore Cove and Chowder Bay berths, for vessel Length below 200m, with wind gusts 15-25 knots

Displacement	Without approved bow thruster	With approved bow thruster
Less than 7500	AC	CC
7500 to 9999	AA	AC
10000 to 24999	AA	AA
25000 to 59999	ZZ	ZZ
60000 to 80000	ZZZ	ZZZ

Note: Tug rendezvous and release position Line Zulu

Table 7. Gore Cove and Chowder Bay berths, for vessel Length 200-260m, with wind gusts below 15 knots

Displacement	With or without approved bow thruster
Less than 100000	ZZZ
100000 to 120000	ZZZ*

Note: Tug rendezvous and release position Line Zulu

* Minimum total bollard pull of 185 tonnes, made up of a minimum 3 Z class tugs, which may be complemented by an additional A-class tug to meet the requirement

Table 8. Gore Cove and Chowder Bay berths, for vessel Length 200-260m, with wind gusts 15-25 knots

Displacement	With or without approved bow thruster
Less than 100000	ZZZ
100000 to 120000	ZZZ*

Note: Tug rendezvous and release position Line Zulu

* Minimum total bollard pull of 185 tonnes, made up of minimum 3 Z class tugs, which may be complemented by an additional A class tug to meet the requirement

Table 9. Gore Cove and Chowder Bay berths, for vessel Length 200-260m, with wind gusts above 25 knots

Displacement	With or without approved bow thruster
All displacements	As determined by the Harbour Master in consultation with duty pilot.

3.4 Anchorages

Table 10. Anchorages listed in the Berths and Channels document on the Port Authority website

Vessel	With or without approved bow thruster
Vessel with length greater than 215m or draft greater than 10m	A
Tankers with draft greater than 10m	AA
Vessel with Length greater than 215m and draft greater than 10m	AA

4 Port Botany

4.1 Brotherson Dock and Hayes Dock berths

Table 11. Vessel arrival or swing departure, for all berths other than Brotherson Dock berth 10 head-in arrival (if berth 11 is occupied), with wind gusts below 15 knots

GRT	Without approved bow thruster	With approved bow thruster
Less than 14999	AA	A
15000-38999	AA	A
39000-48999	ZZ	AA
49000-74999	ZZA	ZZ
74999 - 115000	ZZAA	ZZA

Note: Tug rendezvous and release position Henry Head

Table 12. Vessel arrival or swing departure, for all berths other than Brotherson Dock berth 10 head-in arrival (if berth 11 is occupied), with wind gusts 15-25 knots

GRT	Without approved bow thruster	With approved bow thruster
Less than 14999	AA	AA
15000-38999	AA	AA
39000-48999	ZZA	ZZ
49000-74999	ZZZ	ZZA*
74999 - 115000	ZZZA	ZZAA

*Consult duty pilot for potential reduction to ZZ.

Note: Tug rendezvous and release position Henry Head

Table 13. Vessel head-in arrival, for Brotherson Dock berth 10 (if berth 11 is occupied), with wind gusts below 15 knots

GRT	Without approved bow thruster	With approved bow thruster
Less than 14999	AA	A
15000-38999	AA	AA
39000-48999	AAA	AAA
49000-74999	ZZA	ZZA
74999 - 115000	ZZAA	ZZA

Note: Tug rendezvous and release position Henry Head

Table 14. Vessel head-in arrival, for Brotherson Dock berth 10 (if berth 11 is occupied), with wind gusts 15-25 knots

GRT	Without approved bow thruster	With approved bow thruster
0-14999	AA	AA
15000-38999	AA	AA
39000-48999	ZZZ	ZZA
49000-74999	ZZZ	ZZZ
74999 - 115000	ZZZA	ZZAA

Note: Tug rendezvous and release position Henry Head

Table 15. Vessel head-out departure, with wind gusts below 15 knots

GRT	Without approved bow thruster	With approved bow thruster
Less than 14999	AA	A
15000-38999	AA	A
39000-48999	ZZ	AA
49000-74999	ZZ	AA
74999 - 115000	ZZA	ZZ

Note: Tug rendezvous and release position Henry Head

Table 16. Vessel head-out departure, with wind gust 15-25 knots

GRT	Without approved bow thruster	With approved bow thruster
0-14999	AA	AA
15000-38999	AA	AA
39000-48999	ZZ	ZZ
49000-74999	ZZ	ZZ
74999 - 115000	ZZZ	ZZA

Note: Tug rendezvous and release position Henry Head

Table 17. Vessel head out departure, for Brotherson Dock berth 12 and Hayes Dock berth 1 and 2 (subject to requirements in the note below), with wind gusts below 15 knots

GRT	Without approved bow thruster	With approved bow thruster
Less than 14999	A	No tug required

Note: The ship's berth, and a minimum distance of 400m ahead, must be clear of other ships and obstructions, including cranes.

Note: Tug rendezvous and release position Henry Head

Table 18. Wind gusts above 25 knots

Displacement	With or without approved bow thruster
All displacements	As determined by the Harbour Master in consultation with duty pilot.

Note: Tug rendezvous and release position Henry Head

4.2 Bulk Liquid Berth 1 and 2

Table 19. Vessel arrival or swing departure, for vessel Length below 235m, with wind gusts below 15 knots

Displacement	Without approved bow thruster	With approved bow thruster
Less than 7500	CC	C
7500 to 9999	AC	A
10000 to 24999	AA	A
25000 to 59999	AA	AA
60000 to 84999	AAA	AAA
85000 to 99999	ZZA	ZZA
100000 to 119999	ZZAA	ZZAA
120000 to 140000	ZZZA	ZZZA

Note: Tug rendezvous and release position Cape Banks for vessels with Length above 215 m or displacement above 60,000 tonnes.
Tug rendezvous and release position Henry Head for all other vessels.

Table 20. Vessel arrival or swing departure, for vessel Length below 235m, with wind gusts 15-25 knots

Displacement	Without approved bow thruster	With approved bow thruster
Less than 7500	AC	CC
7500 to 9999	AA	AC
10000 to 24999	AA	AA
25000 to 59999	ZZ	AA
60000 to 84999	ZZA	ZZA
85000 to 99999	ZZZ	ZZZ
100000 to 119999	ZZAA	ZZAA
120000 to 140000	ZZZA	ZZZA

Note: Tug rendezvous and release position Cape Banks for vessels with Length above 215 m or displacement above 60,000 tonnes.
Tug rendezvous and release position Henry Head for all other vessels.

Table 21. Vessel arrival or swing departure, for vessel Length 235m or more, with wind gusts below 15 knots

Displacement	With or without approved bow thruster
Less than 84999	AAA
85000 to 99999	ZZZ
100000 to 119999	ZZAA
120000 to 140000	ZZZA

Note: Tug rendezvous and release position Cape Banks for vessels with Length above 215 m or displacement above 60,000 tonnes.
Tug rendezvous and release position Henry Head for all other vessels.

Table 22. Vessel arrival or swing departure, for vessel Length 235m or more, with wind gusts 15-25 knots

Displacement	With or without approved bow thruster
Up to 84999	AAA
85000 to 99999	ZZZ
100000 to 119999	ZZAA
120000 to 140000	ZZZA

Note: Tug rendezvous and release position Cape Banks for vessels with Length above 215 m or displacement above 60,000 tonnes.
Tug rendezvous and release position Henry Head for all other vessels.

Table 23. Vessel head-out departure, for vessel Length below 130m, with wind gusts below 15 knots

Displacement	Without approved bow thruster	With approved bow thruster
Less than 7500	C	No tug required
7500 and above	A	No tug required

Note: Tug rendezvous and release position Cape Banks for vessels with Length above 215 m or displacement above 60,000 tonnes.
Tug rendezvous and release position Henry Head for all other vessels.

Table 24. Vessel head-out departure, for vessel Length 130m or more, with wind gusts below 15 knots

Displacement	Without approved bow thruster	With approved bow thruster
Less than 7500	CC	C
7500 to 9999	AC	A
10000 to 59999	AA	A
60000 to 84999	ZZ	ZZ
85000 to 140000	ZZA	ZZA

Note: Tug rendezvous and release position Cape Banks for vessels with Length above 215 m or displacement above 60,000 tonnes.
Tug rendezvous and release position Henry Head for all other vessels.

Table 25. Vessel head-out departure, for vessel Length 235m or more, with wind gusts 15-25 knots

Displacement	Without approved bow thruster	With approved bow thruster
Less than 7500	AC	CC
7500 to 9999	AA	AC
10000 to 59999	ZZ	AA
60000 to 84999	ZZA	ZZA
85000 to 140000	ZZZ	ZZZ

Note: Tug rendezvous and release position Cape Banks for vessels with Length above 215 m or displacement above 60,000 tonnes.
Tug rendezvous and release position Henry Head for all other vessels.

Table 26. Wind gusts above 25 knots

Displacement	With or without approved bow thruster
All displacements	As determined by the Harbour Master in consultation with duty pilot.

Note: Tug rendezvous and release position Cape Banks for vessels with Length above 215 m or displacement above 60,000 tonnes.
Tug rendezvous and release position Henry Head for all other vessels.

4.3 Kurnell berth 1

Table 27. Vessel arrival, for vessel Length below 235m, with wind gusts below 15 knots

Displacement	Without approved bow thruster	With approved bow thruster
Less than 7500	CC	C
7500 to 9999	AC	A
10000 to 24999	AA	A
25000 to 59999	AA	AA
60000 to 84999	AAA	AAA
85000 to 99999	ZZAA	ZZAA
100000 to 119999	ZZZA	ZZZA

Note: Tug rendezvous and release position Cape Banks

Table 28. Vessel arrival, for vessel Length below 235m, with wind gusts 15-25 knots

Displacement	Without approved bow thruster	With approved bow thruster
Less than 7500	AC	CC
7500 to 9999	AA	AC
10000 to 24999	AA	AA
25000 to 59999	AA	AA
60000 to 84999	AAA	AAA
85000 to 99999	ZZAA	ZZAA
100000 to 119999	ZZZA	ZZZA

Note: Tug rendezvous and release position Cape Banks

Table 29. Vessel arrival, for vessel Length 235m or more, with wind gusts below 15 knots

Displacement	With or without approved bow thruster
Less than 59999	AAA
60000 to 99999	ZZAA
100000 to 119999	ZZZA

Note: Tug rendezvous and release position Cape Banks

Table 30. Vessel arrival, for vessel Length 235m or more, with wind gusts 15-25 knots

Displacement	With or without approved bow thruster
up to 59999	AAA
60000 to 99999	ZZAA
100000 to 119999	ZZZA

Note: Tug rendezvous and release position Cape Banks

Table 31. Departure, for vessel Length below 235m, with wind gusts below 15 knots

Displacement	Without approved bow thruster	With approved bow thruster
Less than 7500	C	No tug required
7500 to 9999	A	No tug required
10000 to 24999	AA	A
25000 to 59999	AA	AA
60000 to 84999	ZZ	ZZ
85000 to 120000	ZZA	ZZA

Note: Tug rendezvous and release position Cape Banks

Table 32. Vessel departure, for vessel Length below 235m, with wind gusts 15-25 knots

Displacement	Without approved bow thruster	With approved bow thruster
Less than 7500	AC	CC
7500 to 9999	AA	AC
10000 to 24999	AA	AA
25000 to 59999	AA	AA
60000 to 84999	ZZ	ZZ
85000 to 120000	ZZA	ZZA

Note: Tug rendezvous and release position Cape Banks

Table 33. Vessel head-out departure, for vessel Length 235m or more, with wind gusts below 15 knots

Displacement	With or without an approved bow thruster
Less than 85000	ZZ
85000 and over	ZZA

Note: Tug rendezvous and release position Cape Banks

Table 34. Vessel head-out departure, for vessel Length 235m or more, with wind 15-25 knots

Displacement	With or without approved bow thruster
Less than 59999	AAA
60000 and more	ZZA

Note: Tug rendezvous and release position Cape Banks

Table 35. Wind gusts above 25 knots

Displacement	With or without approved bow thruster
All displacements	As determined by the Harbour Master in consultation with duty pilot.

Note: Tug rendezvous and release position Cape Banks

4.4 Kurnell berth 2

Table 36. Vessel arrival, for vessel Length less than 200m, with wind gusts below 15 knots

Displacement	Without approved bow thruster	With approved bow thruster
Less than 7500	CC	C
7500 to 9999	AC	A
10000 to 24999	AA	A
25000 to 59999	AA	AA
60000 to 84999	AAA	AAA

Note: Tug rendezvous and release position Cape Banks

Table 37. Vessel departure, for vessel Length less than 200m, with wind gusts below 15 knots

Displacement	Without approved bow thruster	With approved bow thruster
Less than 7500	C	No tug required
7500 to 9999	A	No tug required
10000 to 24999	AA	A
25000 to 59999	AA	AA
60000 to 84999	ZZ	ZZ

Note: Tug rendezvous and release position Cape Banks

Table 38. Vessel arrival or departure, for vessel Length less than 200m, Wind gusts 15-25 knots

Displacement	Without approved bow thruster	With approved bow thruster
Less than 7500	AC	CC
7500 to 9999	AA	AC
10000 to 24999	AA	AA
25000 to 59999	AA	AA
60000 to 84999	AAA	n/a

Note: Tug rendezvous and release position Cape Banks

Table 39. Wind gusts above 25 knots

Displacement	With or without approved bow thruster
All displacements	As determined by the Harbour Master in consultation with duty pilot.

Note: Tug rendezvous and release position Cape Banks

4.5 Kurnell berth 3

Table 40. Vessel arrival, with wind gusts less than 25 knots

Displacement	With or without approved bow thruster
60000 to 84999	AAA
85000 to 119999	ZZA
120000 or more	ZZZA

Note: Tug rendezvous and release position Cape Banks

Table 41. Vessel departure, with wind gusts less than 25 knots

Displacement	With or without approved bow thruster
Less than 84999	ZZ
85000 or more	ZZA

Note: Tug rendezvous and release position Cape Banks

Table 42. Vessel arrival or departure, with wind gusts above 25 knots

Displacement	With or without approved bow thruster
All displacements	As determined by the Harbour Master in consultation with duty pilot.

Note: Tug rendezvous and release position Cape Banks

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