

ANEXO A

Minimum compulsory tugs assistance for P. Ubu ordinary situations

Conjunto mínimo de rebocadores para manobras de rotina

BERTH	Situation	Turning?	TPB - Dwt (tons)	Qtde. Minimum	Azimuth Driver	Draft > 10.5m	OBS	
LESTE (LE)	Berthing	NO	< 10.000	2	2	-	-	
			≥ 10.000	3	3	-	OBS. 1	
		YES	< 10.000	2	2	-	-	
			≥ 10.000	3	3	-	OBS. 1	
	Seagoing	NO	Any Vessel	2	2	-	-	
		YES	≤ 40.000	2	2	-	-	
WEST (LW)	Berthing	NO	≤ 30.000	2	2	-	-	
			30.000< and ≤ 90.000	2	2	3	OBS. 2	
			> 90.000	3	3	-	OBS. 1	
		YES	≤ 90.000	2	2	3	OBS. 1	
			90.000< and ≤ 120.000	3	3	4	OBS. 2	
			120.000< and ≤ 190.000	4	4	5	OBS. 3	
			> 190.000	5	5	-	OBS. 4	
		Seagoing	NO	Any vessel	2	2	-	OBS. 1
	YES		Any Vessel	2	2	-	OBS. 1	
	OBS)	<p>OBS1 – At least 1 (one) azimuth drive tugs BP >20TTE. OBS2 – At least 3 (three) azimuth drive tugs and BP >40TTE OBS3 - At least 4 (four) azimuth drive tugs and BP >40TTE OBS4 - At least 5 (five) azimuth drive tugs and BP >40TTE</p> <p align="center">General Information</p> <p>I) Vessels If LOA < 100m maneuvers should be previously discussed</p> <p>Vessels must have available azimuth drive tug(s) stand-by no longer than 20 minutes far from P. Ubu 1 Tug BP > 20 tf for vessels < 90,000 tons (Deadweith) 1 Tug BP ≥ 40 tf for vessels 90,000 tons < (Deadweith) < 210,000 tons 1 Tug BP ≥ 55 tf for vessels > 210,000 tons</p> <p>II) Vessels with Breadth > 46,67m and Draft > 15,10m must require 2 azimuth drive tugs since one of them > 60 TTE</p> <p>III) Vessels with Breadth > 50,99m and Draft > 15,10m must be supported by 3 azimuth drive tugs since two of them > 60 TTE</p> <p>It's hardly recommended to use breaking strength ropes at least 3,5 Bollard Pull TUG's.</p>						

Berço	Situação	Há Giro?	TPB - Dwt (tons)	Qtde. Mínima	Azimutal	Draft > 10.5m	OBS
LESTE (LE)	Atracação	Não	< 10.000	2	2	-	-
			≥ 10.000	3	3	-	OBS. 1
		Sim	< 10.000	2	2	-	-
			≥ 10.000	3	3	-	OBS. 1
	Desatracação	Não	Qualquer Navio	2	2	-	-
		Sim	≤ 40.000	2	2	-	-
			> 40.000	2	2	3	OBS. 2
WEST (LW)	Berthing	Não	≤ 30.000	2	2	-	-
			30.000< and ≤ 90.000	2	2	3	OBS. 2
			> 90.000	3	3	-	OBS. 1
		Sim	≤ 90.000	2	2	3	OBS. 1
			90.000< and ≤ 120.000	3	3	4	OBS. 2
			120.000< and ≤ 190.000	4	4	5	OBS. 3
			> 190.000	5	5	-	OBS. 4
	Seagoing	Não	Qualquer Navio	2	2	-	OBS. 1
		Sim	Qualquer Navio	2	2	-	OBS. 1
	<p>OBS1 – At least 1 (one) Rebocador azimutal BP >20TTE. OBS2 – At least 3 (three) Rebocador azimutal and BP >40TTE OBS3 - At least 4 (four) Rebocador azimutal BP >40TTE OBS4 - At least 5 (five) Rebocador azimutal BP >40TTE</p> <p style="text-align: center;">Informações Gerais :</p> <p>I) Se LoA < 100m, as manobras deverão ser analisadas previamente</p> <p>II) Navios atracados em P. Ubu deverão dispor de rebocadores azimutais em condição de pronto a operar, distantes até 20 minutos e com as seguintes características: Com tração estática (BP) > 20 tf se TPB ≤ 90mil t Com tração estática (BP) ≥ 40 tf se 90 < TPB ≤ 210 mil t Com tração estática (BP) ≥ 55 tf se TPB > 210 mil t</p> <p>III) Navios Boca > 46,67m e calado > 15,10m precisam utilizar 2 rebocadores azimutais, pelo menos um deles com BP> 60 Tf de bollard pull</p> <p>IV) Navios Boca > 50,99m e calado > 15,10m precisam utilizar 3 rebocadores, sendo pelo menos 2 deles > 60 TTE Navios</p> <p>Recomenda-se fortemente que os cabos de reboque possuam Carga de Ruptura > 3,5 (Bollard Pull) a Tração Estática do rebocador.</p>						