Recommended Mooring Pattern and Operational Wind Limits
Aframax Tankers
Minimum Equipment Requirements

ALTONA REFINERY
GELLIBRAND PIER

Maximum Operating Environmental Limits	
	Wind Velocity [1]
Stop Cargo Transfer	35 knots
Disconnect Marine Loading Arms	40 knots
Take Special Precautions	45 knots

(1)20 second gust measured at 10 m elevation

Notes:
· Wind limits apply to all wind directions.
· Lines must be tended periodically.
· Additional mooring lines or stronger lines will not increase wind limits.
· Take Special Precautions - refinery shall either deploy additional lines, call in standby tugs, or release vessel.

Minimum Mooring Requirements								
	Structure Number							
	MD 10	MD9	MD8	MD 6	MD 5	MD 3	MD 2	MD 1
Number of Lines	2	2	2	2	2	2	2	2
Line Breaking Strength	Minimum ≥ 63 metric tons							
Mooring Line Material	High Modulus Fiber Ropes or Steel Wires with Tails							
Tail Properties	11 m with Strength 25% Stronger than MBL of Main Mooring Ropes							

Mooring Diagram Limits		
	Max	Min
LOA	250.0 m	239.0 m
Beam	44.0 m	42.0 m
Draft	14.0 m	6.4 m
Moulded Depth	22.2 m	-

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