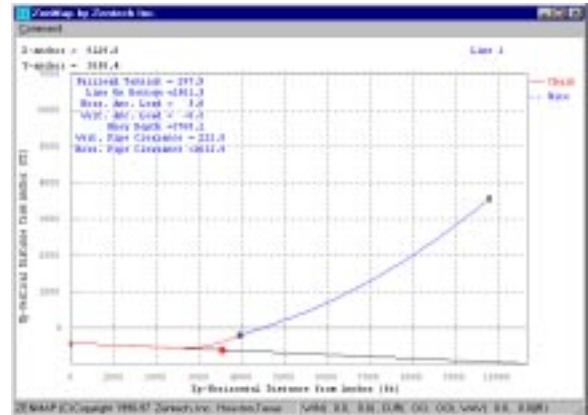


Vessel Positioning and Mooring Advisory Software

ZenMAP is a Powerful State-of-the-art, Rig-Specific Mooring Advisory Program, for use on Offshore Drilling Vessels, Floating Production Systems and other Moored Vessels.



Features

- Static and Quasi-Static Analysis
- Option for Pre-Set Mooring Lines
- Weather Heading Relative to Bow or Compass
- Influence of Thrusters
- Adding and Deleting Line Segments
- Usage of Buoys and Clump Weights
- Effect of Bottom Slope
- Automatic and Manual Relocation

Graphic Displays

- Line Spread with Line Tensions and Anchor Forces
- Initial and Relocated Positions of the Vessel
- Catenary Profile of Individual Lines
- Display of Pipeline in Line Spread and Line Profile
- Vessel Motion History after Line Breakage

Line No.	Heading	Bottom Length	Remaining Length	Operating Tension	Percentage of D.S.	Line Status	Anchor Depth	Holding Capacity	Anchor H. Coord.	Anchor V. Coord.	Pre-set Anchor
(deg)	(ft)	(ft)	(ft)	(kips)	(%)		(ft)	(kips)	(ft)	(ft)	(ft)
1	22.5	1100.0	1880.0	300.0	27.43	ACTIVE	4000.0	508.00	876.7	3075.3	
2	67.5	1100.0	1880.0	300.0	27.43	ACTIVE	4000.0	508.00	3863.5	3017.7	
3	112.5	1100.0	1880.0	300.0	27.43	ACTIVE	4000.0	508.00	3863.5	3017.7	
4	157.5	1100.0	1880.0	300.0	27.43	ACTIVE	4000.0	508.00	8216.7	3075.3	
5	202.5	1100.0	1880.0	300.0	27.43	ACTIVE	4000.0	508.00	8216.7	3075.3	
6	247.5	1100.0	1880.0	300.0	27.43	ACTIVE	4000.0	508.00	3863.5	3017.7	
7	292.5	1100.0	1880.0	300.0	27.43	ACTIVE	4000.0	508.00	3863.5	3017.7	
8	337.5	1100.0	1880.0	300.0	27.43	ACTIVE	4000.0	508.00	876.7	3075.3	

No.	Type	Diameter (inches)	Installed Length (ft)	Deployable Length (ft)	Air Weight (lb/ft)	Water Weight (lb/ft)	S.S.	EA	Clump Weight (lb)	Buoy (lb)
1	CHAIN	3.254	9000.0	4088.0	180.11	87.78	14850	13495.0	0.00	0.00
2	WIRE	3.500	18000.0	3088.0	24.00	13.32	14800	14815.0		



Calculations Performed

- Computes Environmental Forces from Weather Data
- Calculated Vessel offsets and Line Tensions
- Determines Anchor Position and Anchor Loads
- Estimates Payouts and Haul-in Required for Auto Relocation
- Estimates Distance Relocated for Given Payout
- Single Line Analysis
- Line Break Transient Analysis
- Calculates Pipeline and Buoy Clearances

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Water Depth at Vessel(ft): 3500.00
Draft(ft): 70.00

WEATHER CONDITION:
Wind(kts) Magnitude Heading F-x(kip) F-y(kip) W-x(kip-ft)
Dirac Dirac Direction Breaking of Length Length Equival(-) Bottom at Inload
Current(kts) 1.00 98.00 0.00 42.65 0.0
Sea Wave(ft) 0.00 45.00 0.00 12.67 0.0
Swell Wave(ft) 0.00 0.0 0.00 0.00 0.0

VESSEL POSITION FROM WELL:
TARGET FINAL
X (ft) 70.00 70.15
Y (ft) 38.00 38.89

Line Initial Final Final Top % of Factor previous Final Payout(+/-) Line on Sag off vert
No. Dirac Dirac Tension Breaking of Length Length Equival(-) Bottom at Inload
(kip) (kip) Strength Safety (ft) (ft) (ft) (ft) (ft) (ft)
1 22.50 67.49 281.52 28.11 4.97 11890.0 10981.0 -49.9 3814.3 44.82
2 67.50 67.81 282.53 28.18 4.96 11890.0 10989.9 -38.6 3814.9 44.92
3 112.50 112.46 282.73 28.98 4.97 11890.0 11088.0 0.0 3768.8 45.63
4 157.50 157.82 289.82 32.13 4.92 11890.0 11518.7 38.7 3796.8 46.84
5 202.50 202.51 321.38 32.94 4.94 11890.0 11848.1 49.1 3543.6 47.81
6 247.50 247.19 319.52 32.04 4.98 11890.0 11638.7 28.7 3242.7 47.81
7 292.50 292.84 326.51 31.92 4.94 11890.0 10994.2 -5.7 3296.6 46.31
8 337.50 337.19 281.88 28.79 4.81 11890.0 10961.2 -34.8 3268.1 45.39
    
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