

ClassNK ZETA

Introduction of

Performance Table powered by NAPA

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Performance Table powered by NAPA is a feature of ClassNK ZETA provided in cooperation with NAPA Ltd. The Performance table provides up-to-date information on the vessel's current performance and shows the information of ship speed and fuel consumption for each engine output under different weather and sea conditions (Beaufort from 0 to 6) and loading conditions (laden and ballast). The ship speed and fuel consumption are averages for all directions of wind and wave and the effects of shallow water and current are not considered. The engine loads are described as percentages of the maximum continuous rating (MCR).

The fuel consumption is based on HFO equivalent (Lower Calorific Value:40.4MJ/kg).

Vessel Performance Table (powered by NAPA)													
WIND/SEAS	Main Engine Load	35	40	45	50	55	60	65	70	75	80	85	90
Beaufort0	Speed, Laden(kn)	13.1	13.8	14.4	15	15.5	16	16.5	17	17.4	17.8	18.2	18.6
Beaufort0	Speed, Ballast(kn)	13.4	14.1	14.8	15.4	16	16.5	17.1	17.5	18	18.5	18.9	19.3
Beaufort0	Total FOC(mtr/d)	19.2	21.7	24.3	26.8	29.4	32	34.5	37	39.6	42.3	45	47.9
Beaufort1	Speed, Laden(kn)	13.1	13.7	14.4	14.9	15.5	16	16.5	16.9	17.4	17.8	18.2	18.6
Beaufort1	Speed, Ballast(kn)	13.4	14.1	14.8	15.4	16	16.5	17	17.5	18	18.4	18.9	19.3
Beaufort1	Total FOC(mtr/d)	19.2	21.7	24.3	26.8	29.4	32	34.5	37	39.6	42.3	45	47.9
Beaufort2	Speed, Laden(kn)	13	13.7	14.3	14.9	15.4	16	16.4	16.9	17.3	17.8	18.2	18.6
Beaufort2	Speed, Ballast(kn)	13.4	14.1	14.7	15.4	15.9	16.5	17	17.5	18	18.4	18.8	19.2
Beaufort2	Total FOC(mtr/d)	19.2	21.7	24.3	26.8	29.4	32	34.5	37	39.6	42.3	45	47.9
Beaufort3	Speed, Laden(kn)	12.9	13.6	14.2	14.8	15.3	15.8	16.3	16.8	17.2	17.7	18.1	18.5
Beaufort3	Speed, Ballast(kn)	13.2	13.9	14.6	15.2	15.8	16.3	16.9	17.4	17.8	18.3	18.7	19.1
Beaufort3	Total FOC(mtr/d)	19.2	21.7	24.3	26.8	29.4	32	34.5	37	39.6	42.3	45.1	47.9
Beaufort4	Speed, Laden(kn)	12.6	13.3	13.9	14.5	15	15.6	16.1	16.5	17	17.4	17.8	18.2
Beaufort4	Speed, Ballast(kn)	12.9	13.6	14.3	14.9	15.5	16.1	16.6	17.1	17.6	18	18.5	18.9
Beaufort4	Total FOC(mtr/d)	19.1	21.7	24.3	26.8	29.4	32	34.5	37.1	39.7	42.3	45.1	48
Beaufort5	Speed, Laden(kn)	11.8	12.6	13.2	13.9	14.5	15	15.5	16	16.5	16.9	17.3	17.7
Beaufort5	Speed, Ballast(kn)	12.1	12.9	13.6	14.3	14.9	15.5	16	16.5	17	17.5	17.9	18.4
Beaufort5	Total FOC(mtr/d)	19.1	21.7	24.3	26.9	29.4	32	34.5	37.1	39.8	42.5	45.3	48.2
Beaufort6	Speed, Laden(kn)	10.2	11	11.8	12.5	13.1	13.7	14.3	14.8	15.4	15.8	16.3	16.7
Beaufort6	Speed, Ballast(kn)	10.4	11.3	12.1	12.8	13.5	14.1	14.7	15.3	15.8	16.3	16.8	17.3
Beaufort6	Total FOC(mtr/d)	19	21.6	24.2	26.8	29.4	32	34.6	37.3	40.1	42.9	45.7	48.5

Note:
 Draft used for Laden condition: 9.3 m
 Draft used for Ballast condition: 7 m

Ship Performance Model

Without data (e.g., Noon report, MRV data) sent from ship, information is estimated by a ship-specific baseline performance model, which is built using NAPA's best knowledge about that vessel and the typical properties associated with that vessel's type and size. The baseline model represents the clean hull condition, but it does not account for the most recent technical ship performance differences, such as fouling. If the ship data is available, the error caused by technical performance differences can be significantly reduced in a matter of weeks and the table is automatically updated each time the ship data is received.

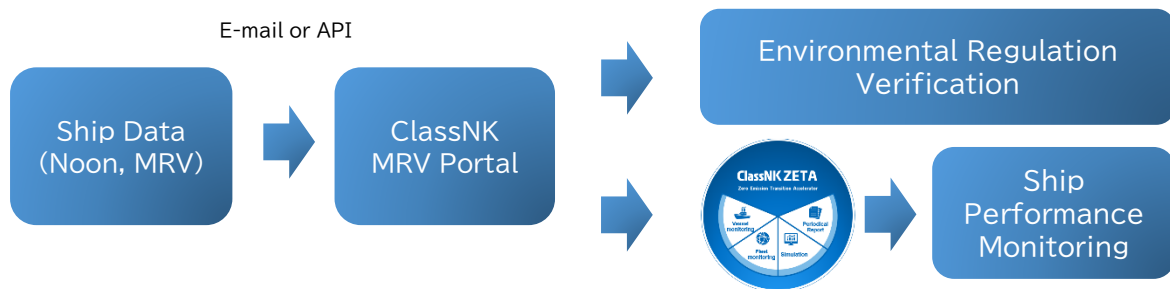
- ✓ Know more about [NAPA Performance model](#)

Advantage of Performance Table

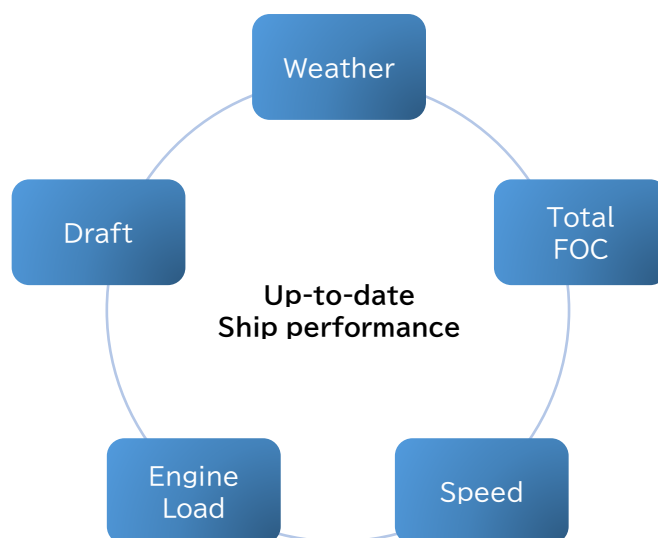
The vessel's most recent performance information is available in the Performance table. Regular performance checks will allow to determine when to clean the hull of the ship. Improvements in fuel efficiency and CII rating is expected by timely doing the hull cleaning of the ship.

Why ClassNK ZETA Performance Table?

1. You can easily and quickly get started with any ship data you have already sent to ClassNK MRV Portal (examples: Noon report and MRV data).
2. It is not required to send information to anywhere other than ClassNK MRV Portal. For the purposes of monitoring ship performance and verifying environmental regulations, the entire data transfer process is fully automated by sending data to ClassNK MRV Portal.



3. You can get the most recent ship performance analysis automatically. Every time new ship data is received, the model is automatically update.



Usage Fee

200,000 JPY /vessel/year

Only at the first application for this service by user: free of charge for Trial Period of 3 months from the completion of registration.

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