**Revision Form**

|  |  |
| --- | --- |
| Title | ~~STUDY OF OPTIMIZATION PROPULSION PERFORMANCE FOR CONTAINER SHIPS~~ Enhancing Propulsion Performance for Container Ships through Propeller Adjustments~~:~~ A Case study of MV Kendhaga Nusantara 6 |
| Reviewer | *Please fill in the reviewers who are giving comments (#A / ~~#B~~)* |

**Abstract**

|  |  |  |
| --- | --- | --- |
| No | Reviewer comments | Revision |
| 1 | - | * - |

**1.Introduction**

|  |  |  |
| --- | --- | --- |
| No | Reviewer comments | Revision |
|  | * tambahkan rujukan pada section hingga minimal 10 rujukan dan sebisa mungkin beberapa rujukan dari jurnal Kapa- The "research background" is not well defined, and is confusing.   - | * Sudah ditambah referensi terkait dengan Jurnal Propeller dari Jurnal Teknik Perkapalan |

**Method**

|  |  |  |
| --- | --- | --- |
| No | Reviewer comments | Revision |
|  |  |  |

**Results and Discussion**

|  |  |  |
| --- | --- | --- |
| No | Reviewer comments | Revision |
|  | * apakah perbedaan (s) dan (P) tolong * dijelaskan pada paragraf | * Berdasarkan data di atas, terdapat perbedaan signifikan dalam pitch propeller antara propeller kanan dan kiri. Propeller kanan mengalami peningkatan pitch dari 1651 mm menjadi 1660 mm, sedangkan propeller kiri mengalami peningkatan pitch dari 1651 mm menjadi 1670 mm. Perbedaan ini menunjukkan bahwa pitch pada propeller kiri mengalami peningkatan yang lebih besar dibandingkan dengan propeller kanan. * Selain itu, perbedaan dalam pitch ini juga mempengaruhi kecepatan kapal, yang tercermin dalam perbedaan laju (knots) antara kedua propeller. Propeller dengan pitch lebih tinggi cenderung menghasilkan kecepatan kapal yang lebih tinggi. Oleh karena itu, dapat disimpulkan bahwa propeller kiri memiliki kecepatan yang lebih tinggi dibandingkan dengan propeller kanan. * Selain pitch, faktor lain yang mempengaruhi perbedaan kecepatan antara propeller kanan dan kiri adalah sistem bantalan dan pelumasan. Sistem bantalan dan pelumasan yang berbeda dapat mempengaruhi efisiensi dan kinerja propeller, yang pada gilirannya mempengaruhi kecepatan kapal. Selain itu, desain geometri propeller sebelum dan setelah perbaikan juga dapat menjadi faktor yang memengaruhi perbedaan kecepatan antara kedua propeller. |

**Conclusion**

|  |  |  |
| --- | --- | --- |
| No | Reviewer comments | Revision |
|  |  |  |

**Overall Comments**

|  |  |  |
| --- | --- | --- |
| No | Reviewer comments | Revision |
| 1 | Acknowledgements  ‘However, they may not agree with all of the interpretations/conclusions of this paper.  delete, hal ini tidak perlu di tulis di manuskrip in | * Bagian ini di hapus. |

**Revision Form**

|  |  |
| --- | --- |
| Title | ~~STUDY OF OPTIMIZATION PROPULSION PERFORMANCE FOR CONTAINER SHIPS~~ ENHANCING PROPULSION PERFORMANCE FOR CONTAINER SHIPS THROUGH PROPELLER ADJUSTMENTS: A Case study of MV Kendhaga Nusantara 6 |
| Reviewer | *Please fill in the reviewers who are giving comments (#A / #B)* |

**Abstract**

|  |  |  |
| --- | --- | --- |
| No | Reviewer comments | Revision |
| 1 | Title: The title does not reflect the content of the article; it must be changed may propeller reparation or others | * Updated the tittle become “   Enhancing Propulsion Performance for Container Ships through Propeller Adjustments: A Case study of MV Kendhaga Nusantara 6 |

**Introduction**

|  |  |  |
| --- | --- | --- |
| No | Reviewer comments | Revision |
|  | Fig 4. Cropped image ..? | * Bagian ini di hapus |

**Method**

|  |  |  |
| --- | --- | --- |
| No | Reviewer comments | Revision |
|  | Write your comments on "Research Objects and Treatment of Objects".  Write your comments about "The solution method along with the procedure used to research". | * Sudah melakukan perbaikan terhadap metode yang diusulkan dalm penelitian dengan prosedur metode yang baik. |

**Results and Discussion**

|  |  |  |
| --- | --- | --- |
| No | Reviewer comments | Revision |
| 4 | 1.What are the results obtained from the method you wrote (2.1 ~ 2.4) in the case of this propeller ? should be listed -----------------  2. Alpha 1, Alpha2, X1,X2 where’s position at propeller ? please explain  Also unit should be listed  Alpha = thickness ..?  3. Fig 10. Image description is not clear. The x and y axes do not explain what is being measured | * 1. **Cavitation**   Based on the calculations, the cavitation number (σn) for a propeller with a diameter of 1850 mm, pitch of 1650 mm, and a propeller speed of 500 RPM is approximately 0.041. This assessment is based on the assumption that the reference pressure (P\_Ref) and absolute vapor pressure (P\_v) are under normal conditions. The fluid density used is around 1025 kg/m³, which is consistent with seawater. The calculation results indicate that the low σn value suggests the likelihood of low cavitation on this propeller under normal operational conditions. Low cavitation is desirable because cavitation can have negative effects on propeller performance, including performance degradation, noise, vibration, and erosion. Therefore, understanding and controlling cavitation on the propeller are crucial in ship propulsion system planning.   * 1. **Efisiensi propeller**   Certainly, propeller efficiency calculations play a crucial role in evaluating how effectively a propeller converts power into thrust and how efficiently it operates in a specific environment. This efficiency value depicts the propeller's ability to convert engine power into the necessary thrust to propel the ship. With specific data such as a thrust of 1900, water velocity of approximately 0.5, and an input power of 2200, the calculation yields a propeller efficiency of approximately 43.18%. This figure serves as a critical parameter in ship propulsion system design, indicating how well the propeller optimizes power usage to generate the required thrust. High propeller efficiency is a desired goal in designing energy-efficient and performance-optimized ship propulsion systems. High propeller efficiency means that the ship can operate with less power consumption, reducing fuel consumption and environmental impact while maintaining optimal performance during sea journeys.   * Fig 10 y = picth; X= speed |

**Conclusion**

|  |  |  |
| --- | --- | --- |
| No | Reviewer comments | Revision |
| 5 | “From the above problems, the results of the right pitch propeller optimization value of 0.6% and the left propeller pitch optimization value of 1.2% can make the ship's speed when the docking trial is 12.3 knots following the planned velocity.”  This is more precisely an addition, not an optimization of the propeller pitch | * Kesimpulan sudah ditambahkan perbaikan penulisan. |

**Overall Comments**

|  |  |  |
| --- | --- | --- |
| No | Reviewer comments | Revision |
| 1 | Write your overall comments about this manuscript | * Abstrak sudah diperbaiki dan pendahuluan memuat latar belakang masalah, tujuan, manfaat penelitian, cara penyelesaian dan pembeda teori peneliti sebelumnya. * Penjabaran metode dengan prosedur sesuai teori yang ada. * hasil penelitian sudah dijelaskan dan dianalisis kelayakannya. * Kesimpulan sudah dilengkapi sesuai dari reviewer comments * Tabel dan gambar dianalisis di hasil pembahasan dan ditulis keterangan dengan baik. * Kesuluruhan reviewer comments sudah ditulis dan dimuat ke dalam jurnal dengan perbaikan. |