DAFTAR PUSTAKA

Arif, Muh. Hidayat. (2016). Analisa Perbandingan Sekat Bergelombang Hasil Optimasi Dengan Sekat Pelat Datar Berpenegar Pada Kapal Tanker. Skripsi. Program Sarjana Universitas Hasanuddin, Makassar.

Biro Klasifikasi Indonesia. (2022). Rules For Calssification and Construction Part 1 Seagoing Ship Volume II Rules for Hull. Biro Klasifikasi Indonesia, Jakarta.

Biro Klasifikasi Indonesia. (2022). Rules For Calssification and Construction Part 1 Seagoing Ship Volume III Rules for Machinery Installations. Biro Klasifikasi Indonesia, Jakarta.

Borona, H. (2010). Analisis Kelelahan Konstruksi Wrang Pada KMP Sangke Pallangga. Skripsi. Program Sarjana Universitas Hasanuddin, Makassar.

Budynas, R. G. & Nisbett, J. K. (2011). Shigley's Mechanical Engineering Design. 9th ed. The McGraw-Hill Companies, New York, N.Y.

Carlton, J. S. (2007). Marine Propellers and Propulsion Second Edition. Butterworth-Heinemann, Oxford.

Civorezan. (2012, December 7). Gaya Radial dalam Perancangan Mekanika. https://civorezan.wordpress.com/2012/12/07/gaya-radial-dalam-perancangan-mekanika/

Gere, J. M. & Timoshenko, S. P. (2000). Mekanika Bahan Jilid 1 Edisi Keempat. Erlangga, Jakarta.

Huges, O. F. & Paik, J.K. (2010). Ship Construction Analysis and Design. The Society of Naval Architecture and Marine Engineering, New Jersey.

Isworo. (2018). Mekanika Kekuatan Material I. Universitas Lambung Mangkurat, Banjarmasin.

Kaliki, S., Thenu, N. L. T., Noya, M. F., & Hadi, A. (2022). Analisis Getaran Torsional Poros Baling-Baling Pada KN Ular Laut 405. Archipelago Engineering, ISSN 2798-7310.

P. B. (2012). Teori dan Aplikasi Metode Elemen Hingga. Andi, ogyakarta.

Kusbiantoro, dkk. (2016). Perbandingan Analisa Balok Baja dengan Cara Teoritis dan Finite Element Analysis. Universitas Pandanaran, Semarang.

Macdonald, A. J. (2001). Structure And Architecture Second Edition. Architectural Press, London.

Marciniak, Z. dkk. (2002). Mechanics of Sheet Metal Forming. Butterwort Heinemann, London.

Oktavianus. (2015). Analisis Lebar Pelat Efektif Pada Balok Lentur. Skripsi. Program Sarjana Universitas Hasanuddin, Makassar.

Pinem, M. D. (2013). Analisis Sistem Mekanik ANSYS. Wahana Ilmu Kita, Jakarta.

Santriananta, M. G. dkk. (2019) Studi Analisis Kekuatan Poros Propeller Kapal KMP. Pertiwi Nusantara Akibat Dikenai Torsi Dari Propeller. Jurnal Ilmiah Teknik Perkapalan. Vol 7, No 1.

Senjanovic, I. dkk. (2011). Analytical Procedures for Torsional Vibration Analysis of Ship Power Transmission System. Gdynia Maritime University, Gdynia.

Sinaga. H. & Tambunan. F. (2008). Analisis Stabilitas dan Penurunan Timbunan pada Tanah Lunak dengan Vertical Drain, Perkuatan Bambu dan Perkuatan Geotextile. Institut Teknologi Bandung, Bandung.

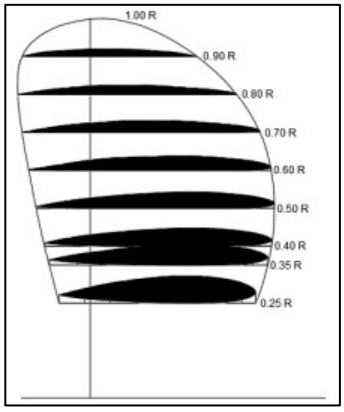
Smallman, R. E. (1991). Metalurgi Fisik Modern. Gramedia Pustaka Utama, Jakarta.

Wulandari dkk. (2021). Analisis Tegangan Regangan Pada Pelat Deck Dan Bottom Kapal Ferry Ro-Ro Menggunakan Finite Element Method. Jurnal Ilmiah. Vol 15, No. 1 Hal 45-52.

Xuenqiang, Xu dkk. (2019). Lightweight Analysis on Double-Arm Propeller Shaft Bracket on Basic of Different Rules. Chinese Journal of Ship Research. Vol 14, No. 4 Hal 67-73.

LAMPIRAN

Lampiran 1 Perhitungan titik berat daun propeller terhadap sumbu poros (r)



Gambar arsiran penampang potongan daun propeller di setiap jari-jari R

$$r = \frac{(A_{0.25R}\ x\ 0.25R) + (A_{0.35R}\ x\ 0.35R) + (A_{0.4R}\ x\ 0.4R) + \ldots + (A_{1R}\ x\ 1R)}{A_{0.25R} + A_{0.35R} + A_{0.4R} + \ldots + A_1}$$

$$r = \frac{\{(A_{0.25R}\ x\ 0.25) + (A_{0.35R}\ x\ 0.35) + (A_{0.4R}\ x\ 0.4) + \ldots + (A_{1R}\ x\ 1)\}\ x\ R}{A_{0.25R} + A_{0.35R} + A_{0.4R} + \ldots + A_1}$$

$$r = \frac{(\sum A_i . FM_i)\ x\ R}{\sum A_i}$$

Tabel perhitungan titik berat daun propeller

R	Luas Penampang A_i (m^2)	FM_i	A_i x FM_i
0.25	0.0046	0.25	0.00115
0.35	0.004	0.35	0.0014
0.4	0.0037	0.4	0.00148
0.5	0.0034	0.5	0.0017
0.6	0.0031	0.6	0.00186
0.7	0.0025	0.7	0.00175
0.8	0.0017	0.8	0.00136
0.9	0.0011	0.9	0.00099
1	0	1	0
$\sum A_i$ =	0.0241	$\sum A_i . FM_i$=	0.01169

Jari-jari propeller (R) = 0.42 m

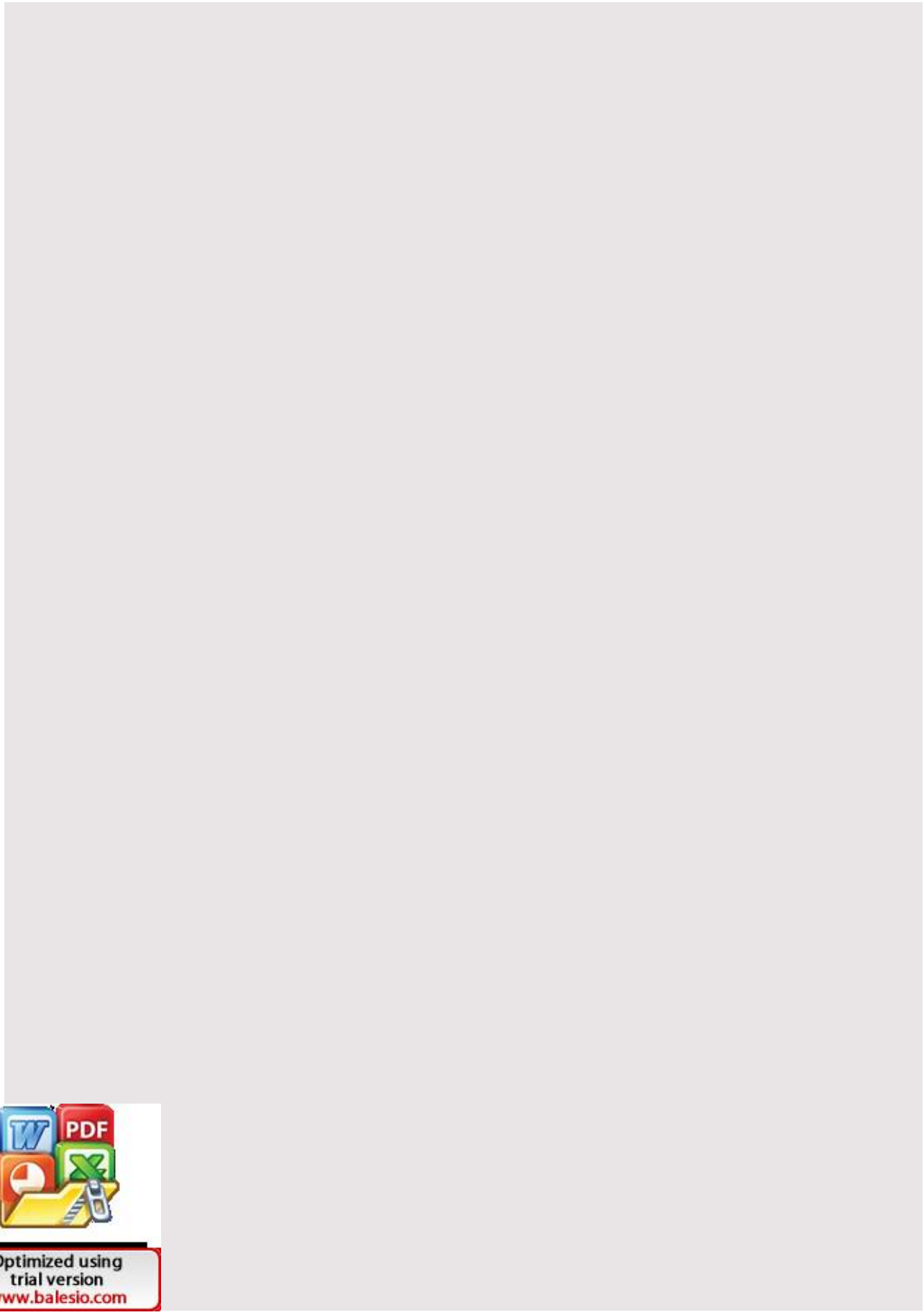
$$r = \frac{(\sum A_i . FM_i)\ x\ R}{\sum A_i}$$

$$\frac{(0.01169)\ \text{x}\ 0.42}{0.0241}$$

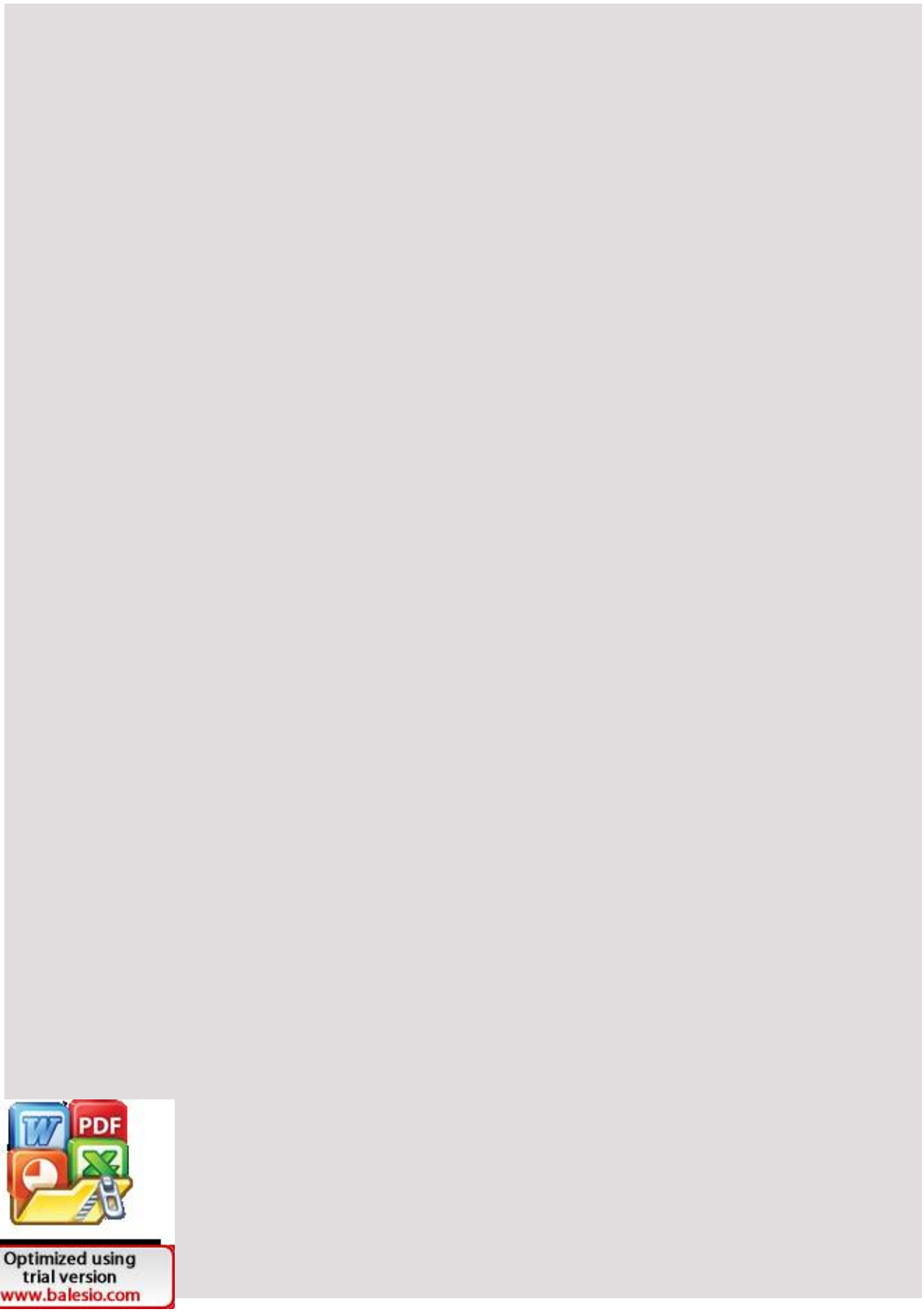
$$4\ m$$

:ak titik berat satu daun propeller terhadap sumbu poros adalah 0.204 m.

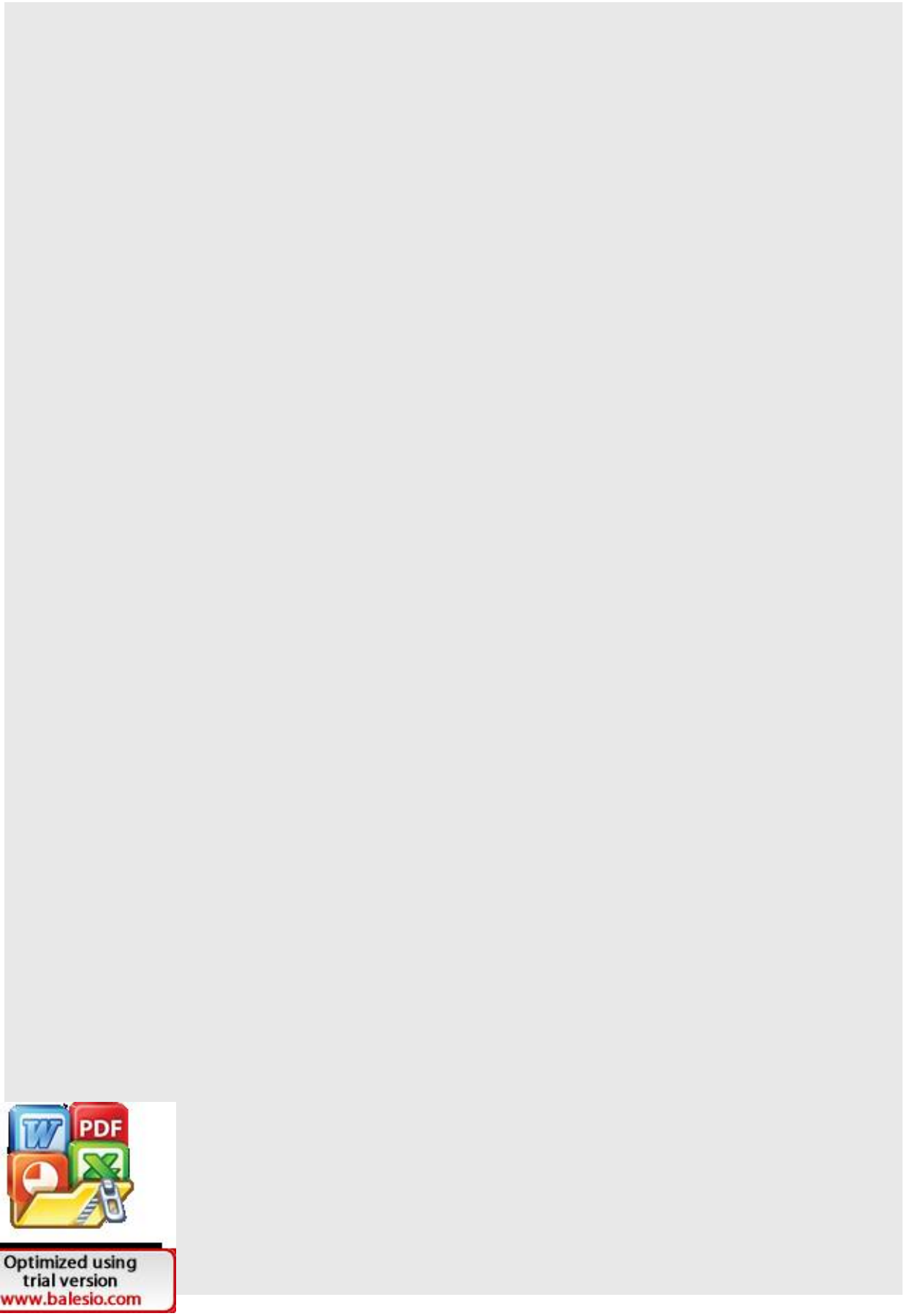
Lampiran 2 Gambar propeller kapal



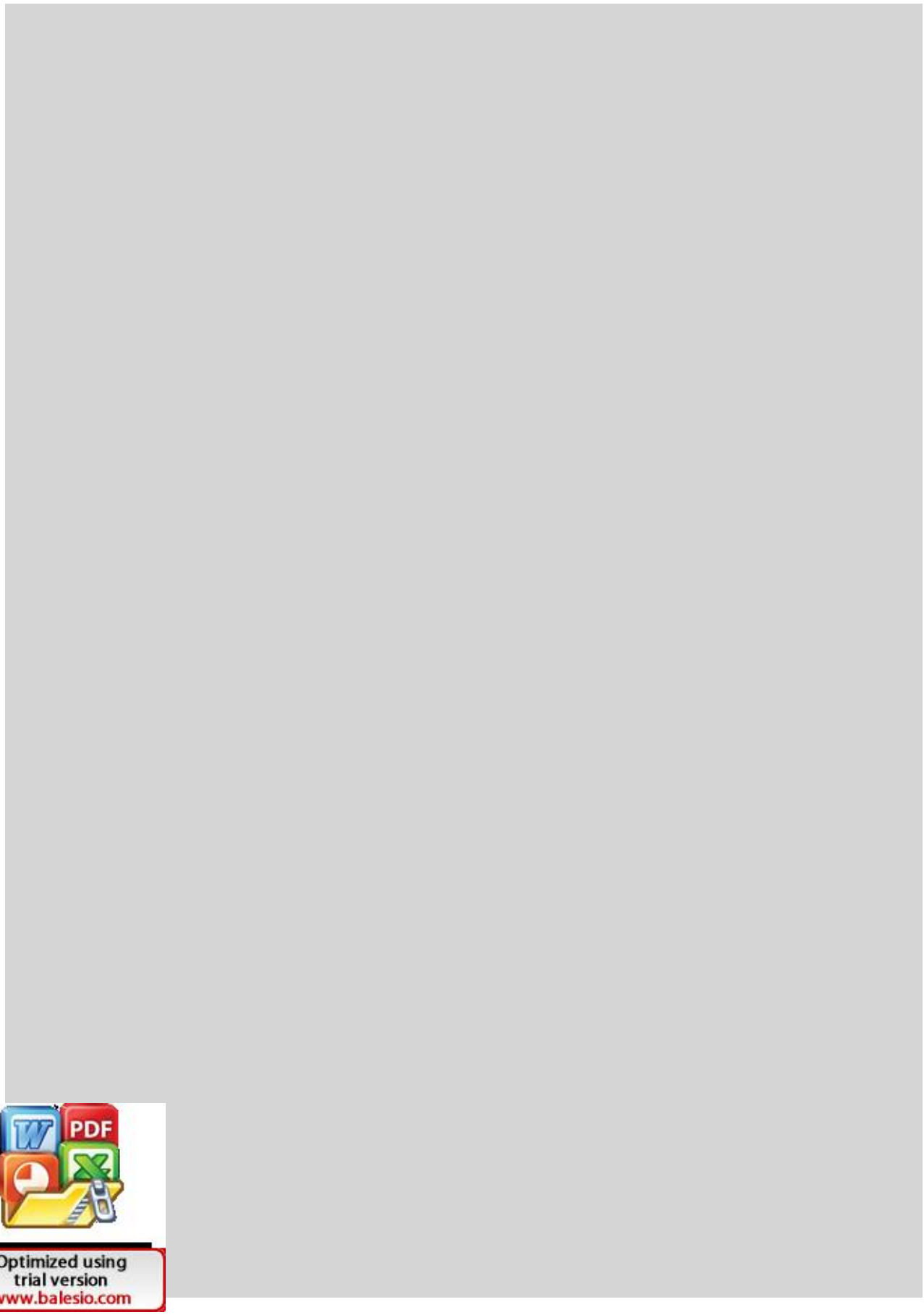
Lampiran 3 Gambar poros propeller kapal



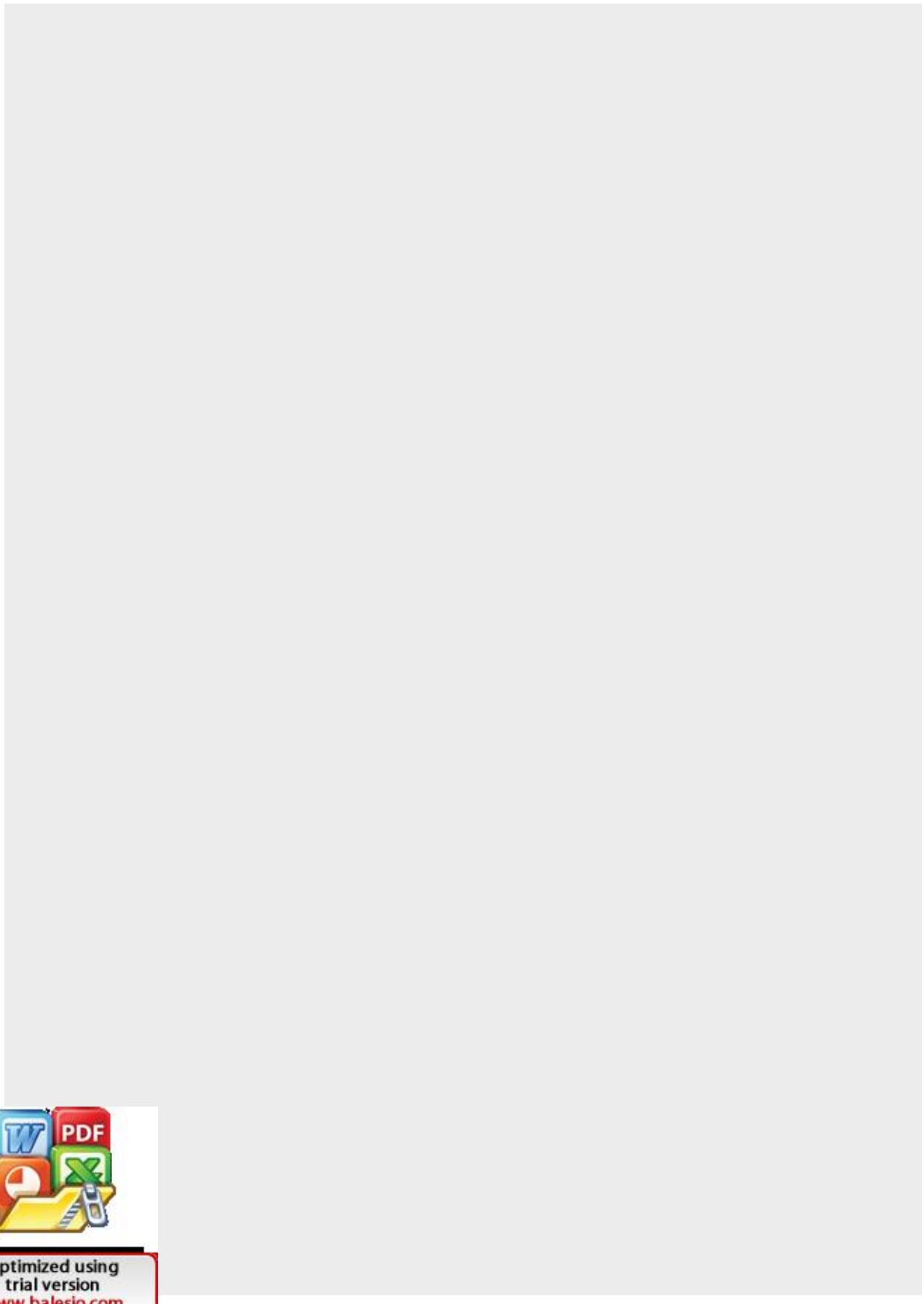
Lampiran 4 Gambar konstruksi *shaft bracket* kapal



Lampiran 5 Gambar konstruksi alas kapal



Lampiran 6 Gambar konstruksi *frame* (*transversal sections*)

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