

DAFTAR PUSTAKA

- Ahmed, M. A., Amin, S., & Mohamed, A. A. (2023). Fouling in reverse osmosis membranes: monitoring, characterization, mitigation strategies and future directions. *Heliyon*, 9(4). <https://doi.org/10.1016/j.heliyon.2023.e14908>
- Aladwani, S. H., Al-Obaidi, M. A., & Mujtaba, I. M. (2021). Performance of reverse osmosis based desalination process using spiral wound membrane: Sensitivity study of operating parameters under variable seawater conditions. *Cleaner Engineering and Technology*, 5, 100284. <https://doi.org/10.1016/j.clet.2021.100284>
- Alhathal Alanezi, A., Altaee, A., & Sharif, A. O. (2020). The effect of energy recovery device and feed flow rate on the energy efficiency of reverse osmosis process. *Chemical Engineering Research and Design*, 158, 12–23. <https://doi.org/10.1016/j.cherd.2020.03.018>
- Al-Obaidi, M. A., Alsarayreh, A. A., Bdour, A., Jassam, S. H., Rashid, F. L., & Mujtaba, I. M. (2023). Simulation and optimisation of a medium scale reverse osmosis brackish water desalination system under variable feed quality: Energy saving and maintenance opportunity. *Desalination*, 565(July), 116831. <https://doi.org/10.1016/j.desal.2023.116831>
- Alsarayreh, A. A., Al-obaidi, M. A., Farag, S. K., Patel, R., & Mujtaba, I. M. (2021). Performance evaluation of a medium-scale industrial reverse osmosis brackish water desalination plant with different brands of membranes. A simulation study. *Desalination*, 503(January), 114927. <https://doi.org/10.1016/j.desal.2020.114927>
- Badruzzaman, M., Voutchkov, N., Weinrich, L., & Jacangelo, J. G. (2019). Selection of pretreatment technologies for seawater reverse osmosis plants: A review. *Desalination*, 449(August 2018), 78–91. <https://doi.org/10.1016/j.desal.2018.10.006>
- BBRI - Pure Inc Manual Book, 2010. *SW-55K-2680 210 m³ / day Reverse Osmosis System User Manual*.
- Davenport, D. M., Deshmukh, A., Werber, J. R., & Elimelech, M. (2018). High-Pressure Reverse Osmosis for Energy-Efficient Hypersaline Brine Desalination: Current Status,

Design Considerations, and Research Needs. *Environmental Science and Technology Letters*, 5(8), 467–475. <https://doi.org/10.1021/acs.estlett.8b00274>

Deng, H., Jacob, M., Montaner, M., Pic, J.-S., & Guigui, C. (2020). Reverse Osmosis Performance in MBR-RO Process with Recirculation of RO Concentrate to MBR for Water Reclamation. *Journal of Water Resource and Protection*, 12(09), 800–824. <https://doi.org/10.4236/jwarp.2020.129047>

Dévora-Isiordia, G. E., Cásares-De la Torre, C. A., Morales-Mendívil, D. P., Montoya-Pizeno, R., Velázquez-Limón, N., Aguilar-Jiménez, J. A., & Ríos-Arriola, J. (2023). Evaluation of Concentration Polarization Due to the Effect of Feed Water Temperature Change on Reverse Osmosis Membranes. *Membranes*, 13(1). <https://doi.org/10.3390/membranes13010003>

Gao, Q., Duan, L., Jia, Y., Zhang, H., Liu, J., & Yang, W. (2023). A Comprehensive Analysis of the Impact of Inorganic Matter on Membrane Organic Fouling: A Mini Review. *Membranes*, 13(10). <https://doi.org/10.3390/membranes13100837>

General Tank Industrial. (Sumber: <https://penguin.id/general-tank-industrial>. diakses tanggal 22 Juni 2022)

Gusdini, N., Purwanto, M. J. J., & Murtilaksono, K. (2016). Kelangkaan air bersih : telaah sistem pelayanan penyediaan air bersih di kabupaten bekasi water scarcity : review of water supply system in bekasi region. 1, 175–186.

Hanna, N. L. (2016). Kelayakan Teknologi Desalinasi Sebagai Alternatif Penyediaan Air Minum Kota Surabaya (Studi Kasus: 50 Liter per detik). *Jurnal Teknik ITS*, 5(2). <https://doi.org/10.12962/j23373539.v5i2.16514>

Hoek, E. M. V., Weigand, T. M., & Edalat, A. (2022). Reverse osmosis membrane biofouling: causes, consequences and countermeasures. *Npj Clean Water*, 5(1). <https://doi.org/10.1038/s41545-022-00183-0>

<https://bbri.co.id/about-us/tentangkamidansejarahkami>

<https://energyrecovery.com/about-us/our-technology/>

<https://energyrecovery.com/water/turbochargers/>

<https://maintenanceskill.com/how-horizontal-multistage-centrifugal-pump-works/>

<https://penguin.id/general-tank-industrial/>

<https://www.toyobo-global.com/seihin/ro/tokucho.htm>

Huang, B., Pu, K., Wu, P., Wu, D., & Leng, J. (2020). *Design , Selection and Application of Energy.*

Idrees, M. F. (2020). Performance Analysis and Treatment Technologies of Reverse Osmosis Plant – A case study. *Case Studies in Chemical and Environmental Engineering*, 2, 100007.
<https://doi.org/10.1016/j.cscee.2020.100007>

Jadhav, D. A., Pandit, S., Sonawane, J. M., Gupta, P. K., Prasad, R., & Chendake, A. D. (2021). Effect of membrane biofouling on the performance of microbial electrochemical cells and mitigation strategies. *Bioresource Technology Reports*, 15(May), 100822.
<https://doi.org/10.1016/j.biteb.2021.100822>

Jiang, C., Fei, Z., & Hou, Y. (2023). High-Performance Polyamide Reverse Osmosis Membrane Containing Flexible Aliphatic Ring for Water Purification. *Polymers*, 15(4).
<https://doi.org/10.3390/polym15040944>

Karabelas, A. J., Koutsou, C. P., Kostoglou, M., & Sioutopoulos, D. C. (2018). Analysis of specific energy consumption in reverse osmosis desalination processes. *Desalination*, 431(April 2017), 15–21. <https://doi.org/10.1016/j.desal.2017.04.006>

Kencana, K. S. (2018). *Proses Produksi Air Demin dari Air Laut untuk Pembangkit Listrik Tenaga Uap Proses Produksi Air Demin dari Air Laut untuk Pembangkit Listrik Tenaga Uap dengan Teknologi Membran Terintegrasi*. December 2017, 0–16

Leon, F., & Ramos, A. (2021). *Performance Analysis of a Full-Scale Desalination Plant with Reverse Osmosis Membranes for Irrigation.*

Manual Book SWRO 200C O&M App, 2008.

Multi Stage Centrifugal Pump. (<https://maintenanceskill.com/how-horizontal-multistage-centrifugal-pump-works>. diakses tanggal 22 Juni 2022)

M. Amin Abdel-Fatah, M., & Ahmed Al Bazedi, G. (2020). Water Treatment and Desalination. *Desalination - Challenges and Opportunities*, March.
<https://doi.org/10.5772/intechopen.91471>

Nakao, T., Miura, Y., Furuichi, K., & Yasukawa, M. (2021). Cellulose triacetate (Cta) hollow-fiber (hf) membranes for sustainable seawater desalination: A review. *Membranes*, 11(3).
<https://doi.org/10.3390/membranes11030183>

Peñate, B., & García-Rodríguez Lourdes, L. (2011). Energy optimisation of existing SWRO (seawater reverse osmosis) plants with ERT (energy recovery turbines): Technical and thermoeconomic assessment. *Energy*, 36(1), 613–626.
<https://doi.org/10.1016/j.energy.2010.09.056>

Qin, X., Qin, X., Xu, X., Zhao, J., Gui, Y., Guo, H., Mao, J., Wang, Y., & Zhang, Z. (2023). The membrane-based desalination: Focus on MOFs and COFs. *Desalination*, 557(March), 116598. <https://doi.org/10.1016/j.desal.2023.116598>

Reverse Osmosis and Water Treatment System. (<https://purequa.com/what-is-reverse-osmosis>, diakses tanggal 28 Juni 2022)

Ruiz-García, A., & Nuez, I. (2020). Performance assessment of SWRO spiral-wound membrane modules with different feed spacer dimensions. *Processes*, 8(6).
<https://doi.org/10.3390/PR8060692>

Sani, A. E. (2019). Design and synchronizing of Pelton turbine with centrifugal pump in RO package. *Energy*, 172, 787–793. <https://doi.org/10.1016/j.energy.2019.01.144>

Schunke, A. J., Hernandez Herrera, G. A., Padhye, L., & Berry, T. A. (2020). Energy Recovery in SWRO Desalination: Current Status and New Possibilities. *Frontiers in Sustainable Cities*, 2(April), 1–7. <https://doi.org/10.3389/frsc.2020.00009>

Sim, L. N., Chong, T. H., Taheri, A. H., Krantz, W. B., Fane, A. G., & Sim, S. T. V. (2018). A review of fouling indices and monitoring techniques for reverse osmosis. *Desalination*, 434(May 2017), 169–188. <https://doi.org/10.1016/j.desal.2017.12.009>

Sitterley, K. A., Cath, T. J., Jenne, D. S., Yu, Y. H., & Cath, T. Y. (2022). Performance of reverse osmosis membrane with large feed pressure fluctuations from a wave-driven desalination system. *Desalination*, 527(January), 115546.
<https://doi.org/10.1016/j.desal.2022.115546>

Teguh Sasono, Tjatur Udjianto, & Taufik Rizal. (2016). Rancangan Multistage High Recovery Brackish Water Reverse Osmosis Pada Pltu Cilacap Kapasitas 660 Mw. *Jurnal Teknik Energi*, 6(2), 541–546. <https://doi.org/10.35313/energi.v6i2.1719>

Tan, C. H., Lefebvre, O., Zhang, J., Ng, H. Y., & Ong, S. L. (2012). *Membrane Processes for Desalination : Overview* (Issue December 2016).
<https://doi.org/10.1061/9780784412275.ch10>

Valdés, H., Saavedra, A., Flores, M., Vera-Puerto, I., Aviña, H., & Belmonte, M. (2021). Reverse osmosis concentrate: Physicochemical characteristics, environmental impact, and technologies. *Membranes*, 11(10). <https://doi.org/10.3390/membranes11100753>

Wang, Y., Qin, Y., Wang, B., Jin, J., Wang, B., & Cui, D. (2020). Selective removal of calcium ions from seawater or desalination brine using a modified sodium carbonate method. *Desalination and Water Treatment*, 174, 123–135. <https://doi.org/10.5004/dwt.2020.24828>

Wang, L., He, J., Heiranian, M., Fan, H., Song, L., Li, Y., & Elimelech, M. (2023). Water transport in reverse osmosis membranes is governed by pore flow, not a solution-diffusion mechanism. *Science Advances*, 9(15), 1–13. <https://doi.org/10.1126/sciadv.adf8488>

Wiyono Noerhadi, Faturrahman Arief, & Syauqiah Isna. (2017). Portable water treatment plant. *Infrastructure, Environment, Water and People: Proceedings of the 17th WEDC Conference*, 6(1), 163–165.

Yaqub, M., Nguyen, M. N., & Lee, W. (2022). Treating reverse osmosis concentrate to address scaling and fouling problems in zero-liquid discharge systems: A scientometric review of global trends. *Science of the Total Environment*, 844, 157081.
<https://doi.org/10.1016/j.scitotenv.2022.157081>

Youssry, A., Ridwan, M. G., Altmann, T., Rousseva, A., Azab, K., & Das, R. (2022). Performance model for reverse osmosis. *Chemical Engineering Research and Design*, 186, 416–432. <https://doi.org/10.1016/j.cherd.2022.08.012>

Zhang, Y., Song, D., Wang, H., Wang, X., Jiang, L., Wang, C., Fan, M., & Zhao, J. (2022). Performance fluctuations and evaluation of a piston type integrated high pressure pump-energy recovery device. *Npj Clean Water*, 5(1), 1–9. <https://doi.org/10.1038/s41545-022-00162-5>