

DAFTAR PUSTAKA

- ASM International. (2000). ASM handbook, volume 8: *Mechanical testing and evaluation*. ASM International.
- ASM International. (2002). ASM handbook, volume 11: *Failure analysis and prevention*. ASM International.
- ASM International. (2004). ASM handbook, volume 9: *Metallography and microstructures*. ASM International.
- ASM International. (2005). *ASM Handbook, Volume 1: Properties and Selection: Irons, Steels, and High-Performance Alloys*, ASM International, Materials Park, Ohio.
- ASTM International E8/E8M – 13a. (2013). *Standard Test Methods for Tension Testing of Metallic Materials*, ASTM International
- Assefinejad, A. H., Kermanpur, A., Eslami, A. M., & Kangazian, J. (2020). Failure investigation of water wall tubes in a drum boiler of a thermal power plant. *Engineering Failure Analysis*, 118. <https://doi.org/10.1016/j.engfailanal.2020.104869>
- Bulloch, J. H., Callagy, A. G., Scully, S., & Greene, A. (2009). A failure analysis and remnant life assessment of boiler evaporator tubes in two 250 MW boilers. *Engineering Failure Analysis*, 16(3), 775–793. <https://doi.org/10.1016/j.engfailanal.2008.06.020>
- Callister, W. D., & David Rethwisch, J. G. (2014). *Materials Science and Engineering: An Introduction*, John Wiley & Sons, Hoboken, New Jersey.
- Chatterjee, U. K. (2012). *Microstructural Imprints In Failure Of Power Plant Boiler Tubes*.
- Chaudhuri, S. (2006). Some aspects of metallurgical assessment of boiler tubes-Basic principles and case studies. *Materials Science and Engineering: A*, 432(1–2), 90–99. <https://doi.org/10.1016/j.msea.2006.06.026>
- Conita, I. P. (2023). Analisis kegagalan *water wall tube* boiler PLTU ditinjau dari aspek metalurgi [Tugas akhir, Institut Teknologi Sepuluh Nopember]. Fakultas Teknologi Industri dan Rekayasa Sistem, Departemen Teknik Mesin, Institut Teknologi Sepuluh Nopember, Surabaya.
- Deshmukh, S., & Dhamangaonkar, P. (2022). A review paper on factors that causes the bulging failure of the metal tube. *Materials Today: Proceedings*, 62(P14), 7610–7617. <https://doi.org/10.1016/j.matpr.2022.04.1003>
- Dhua, S. K. (2010). Metallurgical investigation of failed boiler water-wall tubes received from a thermal power station. *Engineering Failure Analysis*, 17(7–8), 1572–1579. <https://doi.org/10.1016/j.engfailanal.2010.06.004>
- Dooley, R. B., & Mcnaughton, W. P. (1996). *Boiler Tube Failures: Theory and Practice Volume 1: Boiler Tube Fundamentals*.
- Mulyana, C., Saad, A. H., Nurhilal, O., & Farhan Yusuf, M. (2015). *Cukup Mulyana / Penentuan Umur Sisa Pipa (Tube) pada Pengilangan minyak Penentuan Umur Sisa Pipa (Tube) Pada Pengilangan Minyak*. (55).
- Haribhakti, P., Joshi, P. B., & Kumar, R. (2018). *Failure Investigation of Boiler Tubes: A Comprehensive Approach*, ASM International, Materials Park, Ohio.
- Ilman, M. N., & Kusmono. (2014). Analysis of material degradation and life assessment of 25Cr-38Ni-Mo-Ti wrought alloy steel (HPM) for cracking tubes in an ethylene plant. *Engineering Failure Analysis*, 42, 100–108. <https://doi.org/10.1016/j.engfailanal.2014.03.020>
- Jones, D. R. H. (2004). Creep failures of overheated boiler, superheater and reformer

- tubes. *Engineering Failure Analysis*, 11(6), 873–893.
<https://doi.org/10.1016/j.engfailanal.2004.03.001>
- Khedr, M., Abd_Elaziem, W., Newishy, M., & Abdel-Aleem, H. (2023). Metallurgical analysis of ASME SA213 T12 boiler vertical water-wall tubes failure. *Engineering Failure Analysis*, 145.
<https://doi.org/10.1016/j.engfailanal.2022.107016>
- Kim, Y. S., Kim, W. C., & Kim, J. G. (2019). Bulging rupture and caustic corrosion of a boiler tube in a thermal power plant. *Engineering Failure Analysis*, 104, 560–567. <https://doi.org/10.1016/j.engfailanal.2019.06.022>
- Kitto, J. B. ., & Stultz, S. C. . (2005). *Steam: Its Generation and Use*, Babcock & Wilcox, Barberton, Ohio.
- Kochmański, P., Fryska, S., & Kochmańska, A. E. (2024). Failure analysis of steam superheater boiler tube made of ASTM T22 steel. *Engineering Failure Analysis*, 162. <https://doi.org/10.1016/j.engfailanal.2024.108366>
- Mohtadi-Bonab, M. A., Javaheri, V., & Totonchi-Maleki, F. (2023). Rupture analysis of 12Cr1MoV super-heater tubes in power plants. *Engineering Failure Analysis*, 153. <https://doi.org/10.1016/j.engfailanal.2023.107593>
- Mukhopadhyay, S. K., Roy, H., & Roy, A. (2009). Development of hardness-based model for remaining life assessment of thermally loaded components. *International Journal of Pressure Vessels and Piping*, 86(4), 246–251.
<https://doi.org/10.1016/j.ijpvp.2008.11.014>
- Parningotan, H., Malau, V., & Iswanto, P. T. (2022). *Studi Analisis Kegagalan Dan Evaluasi Sisa Umur Water Wall Tube Pada Boiler Tipe Cfb Kapasitas 75 Ton Per Jam*.
- Pivdiablyk, I., Di Goh, Z., Chye, L. K., Shandro, R., & Lefebvre, F. (2023). Residual Creep Life Assessment of High-Temperature Components in Power Industry. *Sensors*, 23(4). <https://doi.org/10.3390/s23042163>
- Ranjeeth, R., Aditya, D., Gautam, A., Singh, S. P., & Bhattacharya, S. (2024). Failure investigation of a water-wall tube of fossil-fuel fired boiler. *Engineering Failure Analysis*, 155. <https://doi.org/10.1016/j.engfailanal.2023.107727>
- Shlyannikov, V. N., Tumanov, A. V., Boychenko, N. V., & Tartygasheva, A. M. (2016). Loading history effect on creep-fatigue crack growth in pipe bend. *International Journal of Pressure Vessels and Piping*, 139–140, 86–95.
<https://doi.org/10.1016/j.ijpvp.2016.03.007>
- Soltanloo, M., Babae, M. H., Hosseini Yeganeh, S. E., Shafiei, A., & Akbari, A. H. (2022). Root cause failure investigation of a boiler waterwall tube employed in a 325 MW thermal power plant: Caustic corrosion phenomenon and its effects. *Engineering Failure Analysis*, 133.
<https://doi.org/10.1016/j.engfailanal.2021.105974>
- Sunandrio, H., Besar, B., & Struktur, T. K. (2016). *Penentuan Temperatur Operasional “Rod Hanger Tube Heater” Agar Mencapai Umur Operasi Desain*
- Tilley, R. (2006). *EPRI Project Boiler Condition Assessment Guideline Fourth Edition*. www.epri.com
- Wahyudi, D., & Iswanto, P. T. (2023). Analisis Sisa Umur Pakai Tube Heater Pada Heat Recovery Steam Generator (HRSG). *Journal of Mechanical Design and Testing*, 5(1), 10. <https://doi.org/10.22146/jmdt.70178>
- Yeo, W. H., Fry, A. T., Inayat-Hussain, J. I., & Purbolaksono, J. (2021). Remnant creep life estimation approach for Alloy 617 tubes of ultra-supercritical thermal power plants. *Engineering Failure Analysis*, 130.

<https://doi.org/10.1016/j.engfailanal.2021.105746>

Zekri, A., Silva De Sa, J. Da, Shetty, A. R., Mroue, K., Salhi, A., Aissa, B., & Mansour, S. (2026). Microstructural degradation and creep damage of T91 steel: a case study of fish-mouth rupture in heat recovery steam generator superheater tubes. *Engineering Failure Analysis*, 186, 110554. <https://doi.org/10.1016/j.engfailanal.2026.110554>