UNIVERSITAS
GADJAH MADA
Analisis Numerik Kinerja Cyclone Anchor pada Rangkaian Sucker Rod Pump dengan Variasi Sudut Kemiringan Baffle dan Ulir serta Pump Displacement Menggunakan CFD
Elga Lamiri, Dr. Ir. Akmal Irfan Majid, S.T., M.Eng.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

DAFTAR PUSTAKA

Al-Kayiem, H. H., Hamza, J. E., & Lemmu, T. A. (2020). Performance enhancement of axial concurrent liquid–liquid hydrocyclone separator through optimization of the swirler vane angle. *Journal of Petroleum Exploration and Production Technology*, *10*(7), 2957–2967. https://doi.org/10.1007/s13202-020-00903-7

American Petroleum Institute. (1988). *Recommended practice for design calculations for sucker rod pumping systems (conventional units)* (4th ed.) [API RP 11L]. API Production Department.

American Petroleum Institute. (2010). *Specification for sucker rods, polished rods and liners, couplings, sinker bars, polished rod clamps, stuffing boxes, and pumping tees* (27th ed.) [API Spec 11B]. American Petroleum Institute

American Petroleum Institute. (2011). *Specification for casing and tubing* (9th ed.) [API Spec 5CT]. American Petroleum Institute

ANSYS, Inc. (2013). *ANSYS Fluent theory guide* (Release 15.0). ANSYS, Inc.

ANSYS, Inc. (2015). *Lecture 7: Mesh quality and advanced topics — Introduction to ANSYS meshing* (Release 15.0). ANSYS, Inc.

ANSYS, Inc. (2019). *How to check Rosin-Rammler diameter distribution of Fluent DPM sample data*. ANSYS, Inc.

ANSYS, Inc. (2020). *Compressible flow regimes: Basics of compressible flows — Lesson 4*. ANSYS, Inc.

ANSYS, Inc. (2024). Verify that property conservation is satisfied. In *Fluent user's guide* (Release 2024 R2). ANSYS, Inc. https://ansyshelp.ansys.com/public/account/secured?returnurl=/Views/Secured/corp/v242/en/flu_ug/flu_gs_success_sim.html

ASTM International. (2010). *Standard specification for pipe, steel, black and hot-dipped, zinc-coated, welded and seamless* (ASTM A53/A53M-10).

AZoM. (2023, January 10). *Particle size - US sieve series and Tyler mesh size equivalents*.AzoM.com. https://www.azom.com/article.aspx?ArticleID=1417

UNIVERSITAS
GADJAH MADA
Analisis Numerik Kinerja Cyclone Anchor pada Rangkaian Sucker Rod Pump dengan Variasi Sudut Kemiringan Baffle dan Ulir serta Pump Displacement Menggunakan CFD
Elga Lamiri, Dr. Ir. Akmal Irfan Majid, S.T., M.Eng.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Cengel, Y. A., & Cimbala, J. M. (2014). *Fluid mechanics: Fundamentals and applications* (3rd ed.). McGraw-Hill.

Choi, S., Choi, W., Shin, D., Ahn, S., & Sung, Y. (2025). Effects of diameter and aspect ratios on particle separation efficiency in hydrocyclones. *Processes*, *13*(12), 3980. https://doi.org/10.3390/pr13123980

Dizajyekan, S. N., Shahgholi, G., Fanaei, A. R., Rostampour, V., Sharabiani, V. R., Szymanek, M., & Marczuk, A. (2022). A comprehensive CFD assessment of wheat flow in wheat conveying cyclone validation and performance analysis by experimental data. *Processes*, *10*(1), 1. https://doi.org/10.3390/pr10010001

Irawan, G. (2023). *Peningkatan lifetime sumur G#01 setelah fracturing menggunakan modifikasi sand anchor dan gas anchor di Lapangan Sangasanga* [Tesis, Universitas Pembangunan Nasional "Veteran" Yogyakarta].

Jeong, W., & Seong, J. (2014). Comparison of effects on technical variances of computational fluid dynamics (CFD) software based on finite element and finite volume methods. *International Journal of Mechanical Sciences*, *78*, 19–26. https://doi.org/10.1016/j.ijmecsci.2013.10.017

Montgomery, D. C., & Runger, G. C. (2003). *Applied statistics and probability for engineers* (3rd ed.). John Wiley & Sons.

Nie, Q., Li, M., & Zhou, S. (2022). Structural parameter optimization of the helical blade of the variable-pitch, downhole, cyclone separator based on the response surface method. *Energies*, *15*(18), 6839. https://doi.org/10.3390/en15186839

Pertamina EP Cepu. (2005). *Analisa air formasi Sumur ELG-05* (No. 67/D15320/AF/2005). PT Pertamina EP Cepu Regional 4 Zona 11.

Pertamina EP Cepu. (2005). *Laporan hasil analisa minyak Sumur ELG-05* (No. 70/D15320/AM/2005). PT Pertamina EP Cepu Regional 4 Zona 11.

Pertamina EP Cepu. (2019). *Pasir ELG-05*. PT Pertamina EP Cepu Regional 4 Zona 11.

UNIVERSITAS
GADJAH MADA
Analisis Numerik Kinerja Cyclone Anchor pada Rangkaian Sucker Rod Pump dengan Variasi Sudut Kemiringan Baffle dan Ulir serta Pump Displacement Menggunakan CFD
Elga Lamiri, Dr. Ir. Akmal Irfan Majid, S.T., M.Eng.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Pertamina EP Cepu. (2023). *PVT ELG-05*. PT Pertamina EP Cepu Regional 4 Zona 11.

Pertamina EP Cepu. (2025). *Daily production ELG-05*. PT Pertamina EP Cepu Regional 4 Zona 11.

Pertamina EP Cepu. (2025). *Well profile ELG-05*. PT Pertamina EP Cepu Regional 4 Zona 11.

Pertamina EP Cepu. (2025). *Zone 11 – Sand control*. PT Pertamina EP Cepu Regional 4 Zona 11.

Qiu, S., & Wang, G. (2020). Effects of reservoir parameters on separation behaviors of the spiral separator for purifying natural gas hydrate. *Energies*, *13*(20), 5346. https://doi.org/10.3390/en13205346

Qiu, S., Wang, G., Wang, L., & Fang, X. (2019). A downhole hydrocyclone for the recovery of natural gas hydrates and desanding: The CFD simulation of the flow field and separation performance. *Energies*, *12*(17), 3257. https://doi.org/10.3390/en12173257

Rao, S. S. (2011). *Mechanical vibrations* (5th ed.). Prentice Hall.

Saponja, J., Hari, R., David, S., Brignac, J., Jaszan, D., Coyes, C., VanHuss, B., Nagoo, A., & Penner, B. (2021). *Enhancing downhole gas and solids separation and lowering operational risk by taking advantage of multi-phase flow reversals*. 2021 Southwestern Petroleum Short Course, Lubbock, TX, United States.

Schlumberger. (2026). Tubing joint. In *Energy glossary*. https://glossary.slb.com/terms/t/tubing_joint

Seneviratne, M. (2018). *Wastewater treatment technologies*. ZDHC Foundation.

Subhani, S. M., Hussain, S. A., & Reddy, P. D. S. (2021). Comparison of particle size distribution estimated by Rosin-Rammler equation vs Malvern particle size analyzer for different brands of PPC cement. *Bulgarian Chemical Communications*, *53*(D), 40–43. https://doi.org/10.34049/bcc.53.D.27

Takacs, G. (2015). *Sucker-rod pumping handbook: Production engineering fundamentals and long-stroke rod pumping*. Gulf Professional Publishing.

UNIVERSITAS
GADJAH MADA
Analisis Numerik Kinerja Cyclone Anchor pada Rangkaian Sucker Rod Pump dengan Variasi Sudut Kemiringan Baffle dan Ulir serta Pump Displacement Menggunakan CFD
Elga Lamiri, Dr. Ir. Akmal Irfan Majid, S.T., M.Eng.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Versteeg, H. K., & Malalasekera, W. (2007). *An introduction to computational fluid dynamics: The finite volume method* (2nd ed.). Pearson Prentice Hall.

Wang, Z., Jin, A., & Liu, M. (2025). Simulation and experimental design of an axial flow cyclone separator suitable for high-wind-sand environments. *Sustainability*, *17*(8), Article 3355. https://doi.org/10.3390/su17083355

Williams, B. J. (2008). *Successful sucker rod pumping of particulate-laden fluids*. Southwestern Petroleum Short Course, Lubbock, TX, United States.

Young, H. D., & Freedman, R. A. (2020). *University physics with modern physics* (15th ed.). Pearson.

Zhao, Z., Zhou, L., Liu, B., & Cao, W. (2022). Computational fluid dynamics and experimental investigation of inlet flow rate effects on separation performance of desanding hydrocyclone. *Powder Technology*, *402*, Article 117363. https://doi.org/10.1016/j.powtec.2022.117363