

## DAFTAR PUSTAKA

- A. Moufki, G. Le Coz, & D. Dudzinski. (2017). End-*milling* of inconel 718 superalloy-An Analytical modelling. *Procedia CIRP*, 58, 358-363. <https://doi.org/10.1016/j.procir.2017.03.330>
- A.K. Parida, P. V. Rao and S. Ghosh. (2019) Influence of cutting speed and nose radius in the machining of Al-6061: FEM and experimental validation, *Materials Today: Proceedings*, <https://doi.org/10.1016/j.matpr.2019.10.142>
- Altintas Y, Jin X. (2011). Mechanics of micro-*milling* with round edge tools. *CIRP Ann-Manuf Technol.* 60, 77-80
- Amala, M., & Widyanto S.A., (2014). Pengembangan Perangkat Lunak Sistem Operasi *Milling* CNC Trainer, *Jurnal Teknik Mesin*, Universitas Diponegoro, Semarang
- Aydın, M., & Köklü, U. (2019). Analysis of flat-end milling forces considering chip formation process in high-speed cutting of Ti6Al4V titanium alloy. *Simulation Modelling Practice and Theory*. <https://doi.org/10.1016/j.simpat.2019.102039>
- Basit, B.A.(2019). Pengaruh *Spindle speed* terhadap nilai kekerasan permukaan dan kerataan mesin CNC 5 Axis *portable* berbasis *microcontroller match 3 breakout board* dan *microstep motor driver controller TB6600*, *Jurnal Teknik Mesin*, Universitas Pancasakti, Tegal
- Bohari, Sulaeman, D.R., Wawan P. (2023). *Gasket Manufacturing Process Using CAD/CAM-Based CNC Milling Machine*. *Jurnal Pendidikan Teknik Mesin* Vol.11No 01
- Bolar, G., Das, A., & Joshi, S. N. (2018). Measurement and analysis of cutting force and product surface quality during end-*milling* of thin-wall components. *Measurement: Journal of the International Measurement Confederation*, 121, 190–204. <https://doi.org/10.1016/j.measurement.2018.02.015>
- Bolsunosky, S., Verme, V., & Gubanov, G. (2013). Cutting Force Calculation And Experimental Measurement For 5-Axis Ball End *Milling*. *Procedia CIRP*, 8, 235-239. <https://doi.org/10.1016/j.procir.2013.06.095>
- Dazhen, W., Ren, J., & Tian, W. (2020). A method for the prediction of cutting force for 5-axis ball-end *milling* of workpieces with curved surfaces. *The*

*International Journal of Advanced Manufacturing Technology.*

<https://doi.org/10.1007/s00170-020-05030-5>

Dynamometer tipe 9129AA, diakses pada 04 Juli 2023.

<http://www.kistler.com/INT/en/cutting-force-measurements-with-dynamometers/C00000017>

Fontaine, M., Moufki, A., Devillez, A., & Dudzinski, D. (2007). Modelling of cutting forces in ball-end *milling* with tool-surface inclination. Part 1: Predictive Force Model and experimental validation. *Journal Of Materials Processing Technology*, 189(1-3), 73-84.

<https://doi.org/10.1016/j.jmatprotec.200701.006>

Fountas, N. A., Stergiou, C. I., Majstorović, V. D., & Vaxevanidis, N. M. (2016). Intelligent Optimization for Sculptured Surface CNC Tool-paths. *Procedia CIRP*, 55, 140–145. <https://doi.org/10.1016/j.procir.2016.08.033>

Gao, W., Liu, H., Zhang, E., Sun, R., & Fu, Z. (2022). Free-Form Surface Partitioning and Simulation Verification Based on Surface Curvature. *Micromachining*, 13, 2163. <https://doi.org/10.3390/mi13122163>

Grossi, N., Sallese, L., Scippa, A., & Campatelli, G. (2015). Speed-varying cutting force coefficient identification in *milling*. *Precision Engineering*, 42, 321-334. <https://doi.org/10.1016/j.precisioneng.2015.04.006>

Jin X, Altintas Y, Jin X. Chatter stability model of micro-*milling* with process damping. *J Manuf Sci Eng* (2013;135):922-6 <https://doi.org/10.1016/j.cja.2019.09.014>

Kaneko, K., Nishida, I., Sato, R., & Shirase, K. (2018). Virtual *milling* force monitoring method based on in-process *milling* force prediction model to eliminate predetermination of cutting coefficients. *Procedia CIRP*, 77(Hpc), 22-25. <https://doi.org/10.1016/j.procir.2018.08.196>

Khoshdarregi, M. R., Tappe, S., & Altintas, Y. (2014). Integrated five-axis trajectory shaping and contour error compensation for high-speed CNC machine tools. *IEEE/ASME Transactions on Mechatronics*, 19(6), 1859–1871. <https://doi.org/10.1109/TMECH.2014.2307473>

Kim, S. J., Lee, H. U., & Cho, D. W. (2006). Feedrate scheduling for indexable end *milling* process based on an improved cutting force model. *International Journal of Machine Tools and Manufacture*, 46(12–13), 1589–1597.

<https://doi.org/10.1016/j.ijmachtools.2005.09.014>

- Kiswanto,G., Ricko,V., & Suntoro,S.(2012).*Tool Inclination Angel Change Rate Control In Five-Axis Flat-End Milling. Advanced Material Research*, 488-489,819-825. <https://doi.org/10.4028/www.scientific.net489.819>
- Kurniadil, D.K.A., Haddil, I. B., Rahman, H., & Arif; Saiful. (2021). INTEGRATION SYSTEM OF CAD/DAM IN MACHINERY PROCESS USING WIRE-EDM. *Jurnal Teknologi dan Riset Terapan*, 3(1), 21-26.
- Li, X. Y., Jiang, H., & Wang, X. C. (2004). NC Rough Machining of Sculptured Surface Based on Measured Data. *Chinese Journal of Aeronautics*, 17(1), 60–64. [https://doi.org/10.1016/S1000-9361\(11\)60204-5](https://doi.org/10.1016/S1000-9361(11)60204-5)
- Lin, T., Lee, J. W., & Bohez, E. L. J. (2009). A new accurate curvature matching and optimal tool based five-axis machining algorithm. *Journal of Mechanical Science and Technology*, 23(10), 2624–2634. <https://doi.org/10.1007/s12206-009-0724-6>
- Module Data Acquitition, diakses pada 04 Juli 2023. <https://www.ni.com/support/model.ni-9201>
- Molnar T.G., Berezvaic S., Kiss A.K., Bachrathy D., Stepan G.(2019). Experimental investigation of dynamic chip formation in orthogonal cutting. *International Journal of Machine Tools and Manufacture*,145:103429 <https://doi.org/10.1016/ijmachtools/2019.103429>
- Moufki, A., Dudzinski, D.,& Le Coz., G. (2015). Prediction of cutting forces from an analytical model of oblique cutting, application to peripheral *milling* of Ti-6Al-4V alloy. *International Jurnal Of Advance Manufacturing Tecnology*, 81(1-4),615-626. <https://doi.org/10.1007/s00170-7018-1>
- Multichanel Charge Amplifier tipe 5070A. diakses pada 04 Juli 2023. <https://www.kitsler.com/INT/en/digital-industrial-charge-amplifier-type-5070A/C000000427>
- Nan, C., & Liu, D. (2018). *Analytical Calculation Of Cutting Forces in Ball-End Milling with Inclination Angle. Journal Of Manufacturing and Materials Prosessing*, 2(2),35. <https://doi.org./10.3390/jmmp2020035>
- NI cDAQ tipe 9188 diakses pada 04 Juli 2023. <https://www.ni.com/support/model.cDAQ-9188>

- Parhad, P., Dakre, V., Likhite, A., & Bhatt, J. (2019). The Impact Of Cutting Speed And Depth Of Cut On Cutting Force During Turning Of Austempered Ductile Iron. *Material Today: Proceedings*,(xxxx). <https://doi.org/10.1016/j.matpr.2019.07.750>
- Prabha, K. A., & Srinivasa, B. (2019). Machining of Steam Turbine Blade on 5-Axis CNC Machine. *Materials Today: Proceedings*, 18, 3001–3007. <https://doi.org/10.1016/j.matpr.2019.07.171>
- Pratama, M. Yuda, Syuhri, A., Fachri, & Boy A. (2017). Analisis Parameter Pemotongan dan Debit Pendingin CNC Milling Terhadap Kekasaran Permukaan Menggunakan Box Benheken Design. *Rotor*, 14-17. <https://doi.org/10.19184/rotor.v0i0.7697>
- Rajput, R., & Sarathe, A. K. (2016). *Comparative Study of CNC Controllers used in CNC Milling Machine American Journal of Engineering Research (AJER)*. 62(4), 54–62.
- Sonawane, H. A., & Joshi, S. S. (2010). Analytical modeling of chip geometry and cutting forces in helical ball end milling of superalloy Inconel 718. *CIRP Journal of Manufacturing Science and Technology*, 3(3), 204–217.
- Sonawane, H. A., & Joshi, S.S (2015). Analytical Modeling Of Chip Geometry In High-Speed Ball-End Milling On Inclined Inconel 718 Workpieces. *Journal Of Manufacturing Science And Engineering*, 137(1), 011005. <https://doi.org/10.1115/1.4028635>
- Su, Y. (2019). Effect of the cutting speed on the cutting mechanism in machining CFRP. *Composite Structures*, 220(March), 662–676. <https://doi.org/10.1016/j.compstruct.2019.04.052>
- Sunarno, Bondan, R.S.M., & Wijanarko, R. (2019) Analisis Waktu Arah Planar Dan Sudut Permukaan Bidang Kerja Terhadap Kekasaran Permukaan Material, Fc25 Hasil Pemesinan Pada Mesin Cnc Milling Menggunakan Ballnose Endmill. 15(2), 167-173
- Syafaatinnisa, L. (2020). Pemodelan, Simulsi, Dan Analisa Gaya Potong Pada Proses Micro End Milling Titanium Ti-6Al-4V Menggunakan Model Mekanistik. [Skripsi]. Depok: Fakultas Teknik, Universitas Indonesia

- Tangkemanda, Abram. 2008. Perancangan Skema Pergerakan Mesin 5-axis Untuk Menghindari Collision. [Tesis].Depok: Fakultas Teknik, Universitas Indonesia
- Telles, S., Reddy, S. K., & Nagendra, H. R. (2019). Manufacturing Engineering and Technology, seventh edition in SI Units. In *Journal of Chemical Information and Modeling* (Vol. 53). <https://doi.org/10.1017/CBO9781107415324.004>
- Thrinadh, J., Mohapatra, A., Datta, S., & Masanta, M. (2019). Machining behavior of Inconel 718 superalloy : Effects of cutting speed and depth of cut. *Materials Today: Proceedings*, (xxxx). <https://doi.org/10.1016/j.matpr.2019.10.128>
- Vàsquez Céspedes, H. (2011). Measuring Cutting Forces In Machining Processes. *Revista Ingeniería*, 11(1-2). <https://doi.org/10.15517/ring.vlli-2.613>
- Waldorf, D. J. (2006). A simplified model for ploughing forces in turning. *Journal of Manufacturing Processes*, 8(2), 76–82. [https://doi.org/10.1016/S1526-6125\(07\)00005-9](https://doi.org/10.1016/S1526-6125(07)00005-9)
- WANG, L., SI, H., & GU, L. (2018). Prediction of cutting forces in flank milling of parts with non-developable ruled surface. *Chinese Journal of Aeronautics*. <https://doi:10.1016/j.cja.1018.07.017>
- WANG, L., YUAN, X., SI, H., & DUAN, F. (2019). Feedrate scheduling method for constant peak cutting force in five-axis flank milling process. *Chinese Journal of Aeronautics*, (October).
- Wang, M., Gao, L., & Zheng, Y. (2014). An Examination Of The Fundamental Mechanics Of Cutting Force Coefficients, *International Journal Of Machine Tools And Manufacture*, 88,1-7. <https://doi.org/10.1016/j.ijmachtools.2013.10.008>
- Widiarto. (2008). Teknik Pemesinan Jilid 1. Jakarta: Direktorat Pembinaan Sekolah Menengah Kejuruan
- Wojciechowski, S.; Maruda, R.W.; Barrans, S.; Nieslony, P.; Krolczyk, G.M. Optimisation Of Machining Parameters During Ball End Milling Of Hardened Steel With Various Surface Inclinations. *Measurement* (2017),111, 18–28.

- Wuryanto, A. (2019). Pengaruh Laju Pemakanan (*Feed Rate*) Terhadap Kekasaran Permukaan Hasil Pemesinan CNC *Router* pada Pembuatan *Souvenir* dengan media *Acrylic*. [Skripsi]. Surakarta: Fakultas Teknik, Universitas Muhammadiyah Surakarta
- Xu, K., Wang, J., Chu, C. H., & Tang, K. (2017). Cutting force and machine kinematics constrained cutter location planning for five-axis flank *milling* of ruled surfaces. *Propulsion and Power Research*, 6(2), 203–217. <https://doi.org/10.1016/j.jcde.2017.02.003>
- Yudhayadi, Tri Rachmanto, Adnan, D.R., (2016). Optimasi Parameter Pemesinan Terhadap Waktu Proses Pada Pemrograman CNC *Milling* Dengan Berbasis CAD/CAM, *Dinamika Teknik Mesin*, Universitas Mataram, Nusa Tenggara Barat
- Zhang, Q., Zhang, S., & Li, J. (2017). Three Dimensional Finite Element Simulation Of Cutting Forces And Cutting Temperature In Hard *Milling* of AISI H13 Steel. *Procedia Manufacturing*, 10, 37-47. <https://doi.org/10.1016/j.promfg.2017.07.18>
- Zhou, X., Luo, M., Zhang, D., & Liu, W. (2016). Cutting Force Prediction in Four-axis *Milling* of Curved Surfaces with Bull-nose End Mill. *Procedia CIRP*, 56, 100–104. <https://doi.org/10.1016/j.procir.2016.10.027>
- Zulhendri, Kiswanto G., & Rosa, Y. (2005). *Pengaruh Tipe Pahat Dan Arah Pemakanan Permukaan Berkontur Pada Pemesinan milling Awal Dan Akhir Terhadap Kekasaran Permukaan.*

