

DAFTAR PUSTAKA

- Ahmed, Y.S., Paiva, J.M., Wagg, T., Veldhuis, S.C. (2017). Effect of Built-Up Edge Formation during Stable State of Wear in AISI 304 Stainless Steel on Machining Performance and Surface Integrity of the Machined Part. *Materials* 2017, 10(11), 1230. <https://doi.org/10.3390/ma10111230>
- Álvarez, L., C.J. Luis, I. Puertas. (2004). Analysis of the influence of chemical composition on the mechanical and metallurgical properties of engine cylinder blocks in grey cast iron. *Journal of Materials Processing Technology*, 153–154 (2004), 1039-1044. <https://doi.org/10.1016/j.jmatprotec.2004.04.222>
- Aouici, H., Yallese, M.A., Chaoui, K., Mabrouki, T., Rigal, J.F. (2012). Analysis of surface roughness and cutting force components in hard turning with CBN tool: Prediction model and cutting conditions optimization, *Measurement (Lond)* 45 344–353. <https://doi.org/10.1016/j.measurement.2011.11.011>.
- Barcelos, M.B., de Almeida, D.T., Tuset, F., Scheuer, C.J., (2024). Performance analysis of conventional and high-feed turning tools in machining the thermally affected zone after plasma arc cutting of low carbon manganese-alloyed steel, *J Manuf Process* 115 18–39. <https://doi.org/10.1016/j.jmapro.2024.01.088>.
- Bjerke, A., Casas, J., F. Lenrick, J.M. Andersson, R. M'Saoubi, V. Bushlya (2025). On the wear mechanisms of uncoated and coated pcBN tools during turning of 17–4 PH martensitic stainless steel. *International Journal of Refractory Metals and Hard Materials*, 127 (2025), 106984. <https://doi.org/10.1016/j.ijrmhm.2024.106984>
- Bleicher, F., Reiter, M., (2018). Wear reduction on cutting inserts by additional internal cooling of the cutting edge, in: *Procedia Manuf*, Elsevier B.V., 2018: pp. 518–524. <https://doi.org/10.1016/j.promfg.2018.02.152>.
- Boote, C., Ian A. Sigal, Grytz, R., Yi Hua, Thao D. Nguyen, Michael J.A. Girard (2020). Scleral structure and biomechanics. *Progress in Retinal and Eye Research*, 74, (2020), 100773. <https://doi.org/10.1016/j.preteyeres.2019.100773>
- Chihaoui, S., Yallese, M.A., Belhadi, S., Belbah, A., Safi, K., Haddad, A., (2021). Coated CBN cutting tool performance in green turning of gray cast iron EN-GJL-250: modeling and optimization, (n.d.). <https://doi.org/10.1007/s00170-021-06820-1/Published>.
- Dimla E. Dimla Snr. (2000). Sensor signals for tool-wear monitoring in metal cutting operations—a review of methods. *International Journal of Machine Tools and Manufacture*, 40, 1073–1098. [https://doi.org/10.1016/S0890-6955\(99\)00122-4](https://doi.org/10.1016/S0890-6955(99)00122-4)
- El Rayes, M.M., Abbas, A.T., Al-Abduljabbar, A.A., Ragab, A.E., Benyahia, F., Elkaseer, A., (2023). Investigation and Statistical Analysis for Optimizing Surface Roughness, Cutting Forces, Temperature, and Productivity in Turning Grey Cast Iron, *Metals (Basel)* 13. <https://doi.org/10.3390/met13061098>.

- Gabaldo, S., Diniz, A.E., Luiz, C., Andrade, F., Guesser, W.L., (2010). Performance of Carbide and Ceramic Tools in the Milling of Compact Graphite Iron-CGI.
- Gani, A., Erdiwansyah, Desvita, H., Saisa, Mahidin, Mamat, R., Sartika, Z., Sarjono R.E (2024). Correlation between hardness and SEM-EDS characterization of palm oil waste based biocoke. *Energy Geoscience*, 5, (Issue 4), 100337. <https://doi.org/10.1016/j.engeos.2024.100337>
- Giménez, S., O. Van der Biest, J. Vleugels. (2007). The role of chemical wear in machining iron based materials by PCD and PCBN super-hard tool materials. *Diamond and Related Materials*, 16, (Issue 3), 435-445. <https://doi.org/10.1016/j.diamond.2006.08.017>
- Gordon, S., Phelan, P., C. Lahiff. (2019). The effect of High Speed Machining on the Crater Wear Behaviour of PCBN Tools in Hard Turning. *Procedia Manufacturing*, 38 (2019), 1833-1848. <https://doi.org/10.1016/j.promfg.2020.01.076>
- Gupta, M. K., P. Niesłony, Sarikaya, M., Korkmaz, M.E., Mustafa Kuntoğlu, G.M. Królczyk, Muhammad Jamil. (2022). Tool wear patterns and their promoting mechanisms in hybrid cooling assisted machining of titanium Ti-3Al-2.5V/grade 9 alloy. *Tribology International*, 174 (2022), 107773. <https://doi.org/10.1016/j.triboint.2022.107773>
- Güven, S., Gökkaya, H., Sur, G., Motorcu, A.R., (2024). Effects of cutting parameters on tool wear in milling inconel 625 superalloys with a SiAlON ceramic and the prediction of tool life: *Ceram Int.* <https://doi.org/10.1016/j.ceramint.2024.12.012>.
- Jun-Young Oh , Wonkyun Lee. (2025). Model-based tool wear detection and life prognostics for end-mill. *Journal of Manufacturing Processes*, 133 (2025).1086–1099. <https://doi.org/10.1016/j.jmapro.2024.12.012>
- Kaya, E., Kaya, I. (2020). Tool wear progression of PCD and PCBN cutting tools in high speed machining of NiTi shape memory alloy under various cutting speeds. *Diamond and Related Materials*, 105, (2020), 107810. <https://doi.org/10.1016/j.diamond.2020.107810>
- Korkmaz, M.E., Gupta, M.K., Erdal Çelik, Nimel Sworna Ross, Mustafa Günay. (2024). A sustainable cooling/lubrication method focusing on energy consumption and other machining characteristics in high-speed turning of aluminum alloy. *Sustainable Materials and Technologies*, 40 (2024) e00919. <https://doi.org/10.1016/j.susmat.2024.e00919>
- Liew, W.Y.H. (2010). Low-speed milling of stainless steel with TiAlN single-layer and TiAlN/AlCrN nano-multilayer coated carbide tools under different lubrication conditions. *Wear*, 269 (2010) 617–631. <https://doi.org/10.1016/j.wear.2010.06.012>
- Lin, G., Shi, H., Liu, X., Wang, Z., Zhang, W., Zhang, J., (2024). Tool wear on machining of difficult-to-machine materials: a review, *International Journal of Advanced Manufacturing Technology* 134 (2024) 989–1014. <https://doi.org/10.1007/s00170-024-14193-4>.



- Lombardi, A., Sediako, D., A. Machin, C. Ravindran, R. MacKay. (2017). Effect of solution heat treatment on residual stress in Al alloy engine blocks using neutron diffraction. *Materials Science and Engineering: A*, 697 (2017), 238-247 <https://doi.org/10.1016/j.msea.2017.05.026>
- Luqiang Tu, Liangliang Lin, Chao Liu, Tianchang Zheng, Yadi Deng, Lei Han, Qinglong An, Weiwei Ming, Ming Chen. (2023). Tool wear characteristics analysis of cBN cutting tools in high-speed turning of Inconel 718. *Ceramics International*, 49, 635-658 <https://doi.org/10.1016/j.ceramint.2022.09.034>
- Luqiang Tu, Liangliang Lin, Zhenming Yang, Qinglong An, Weiwei Ming, Jinyang Xu, Ming Chen (2022). Wear behaviors of cubic boron nitride tools with various binders in high-speed turning of compacted graphite irons. *Wear*, 504-505 (2022) 204417. <https://doi.org/10.1016/j.wear.2022.204417>
- Luqiang Tu, Qinglong An, Jiong Zhang, Ming Chen, Dedong Yu. (2024). Understanding tool cutting-edge microstructure and deformation mechanism induced by adhesive wear in the turning of nickel-based superalloys. *Wear*, 556–557 (2024), 205519. <https://doi.org/10.1016/j.wear.2024.205519>
- Luqiang Tu, Weiwei Ming, Xingwei Xu, Chongyan Cai, Jie Chen, Qinglong An, Jinyang Xu, Ming Chen. (2022). Wear and failure mechanisms of SiAlON ceramic tools during high-speed turning of nickel-based superalloys. *Wear*, 488–489, (2022), 204171. <https://doi.org/10.1016/j.wear.2021.204171>
- Maiara, M., Jon M. Andersson, Robert Boyd, Mats P. Johansson-Joesaar, Lars J. S. Johnson, Magnus Od'én, Rogstrom, L. (2021). Crater wear mechanism of TiAlN coatings during high-speed metal turning. *Wear*, 484-485, 204016, <https://doi.org/10.1016/j.wear.2021.204016>
- Malakizadi, A., Sadik, I., Nyborg, L., (2013). Wear Mechanism of CBN Inserts During Machining of Bimetal Aluminium-grey Cast Iron Engine Block. *Procedia CIRP*. 8, (2013), 188-193. <https://doi.org/10.1016/j.procir.2013.06.087>
- Malakizadi, A., Nyborg, L. (2023). Machining of bi-metallic aluminium-grey cast iron engine block – process optimisation by means of FEM. *Procedia CIRP*, 117, 323-328. <https://doi.org/10.1016/j.procir.2023.03.055>
- Matsuda, Y., Okamura, K., Uesaka, S., Fukaya, T., (2012). Development of New Grade “SUMIBORON BN7000” for Cast Iron and Ferrous Powder Metal Machining. *SEI TECHNICAL REVIEW*, 75 (October 17), 13-17.
- Moreno, M., Jon M. Andersson, Mats P. Johansson-Joesaar, Birgit E. Friedrich, Boyd, R., Isabella C. Schramm, Lars J.S. Johnson, Odén, M., Rogström., L. (2022). Wear of Mo- and W-alloyed TiAlN coatings during high-speed turning of stainless steel. *Surface and Coatings Technology*, 446, (25 September 2022), 128786. <https://doi.org/10.1016/j.surfcoat.2022.128786>
- Nouari, M., Molinari, A., (2025). Experimental verification of a diffusion tool wear model using a 42CrMo4 steel with an uncoated cemented tungsten carbide at various cutting speeds, *Wear* 259 (2005) 1151–1159. <https://doi.org/10.1016/j.wear.2005.02.081>.



- Oh, J.Y., Lee, W., (2025). Model-based tool wear detection and life prognostics for end-mill, *J Manuf Process* 133 (2025) 1086–1099. <https://doi.org/10.1016/j.jmapro.2024.12.012>.
- Park H-W., Matsuda, M., Ishitaka, K., Funase, S., Tomizawa, A., Hosokawa, A., Yanagimoto, J., Ueda, T. (2024). Formation mechanism of ultrafine grains at machined surface of 0.45 % carbon steel under high-speed turning process. *Journal of Manufacturing Processes*, 113, 171-182, <https://doi.org/10.1016/j.jmapro.2024.01.071>
- Peng, J., Xu, Z., Zhou, R., Wang, R., Guojun Li, Yao, X., Zhao, B., Ding, W., Jiuhua Xu. (2025). Wear mechanisms of superhard cutting tools in machining of SiCp/Al composites. *Wear*, 564–565, (March 2025), 205695. <https://doi.org/10.1016/j.wear.2024.205695>
- Poulachon, G., B.P Bandyopadhyay, I.S Jawahir, Sébastien Pheulpin, Emmanuel Seguin. (2004). Wear behavior of CBN tools while turning various hardened steels. *Wear*, 256 (3–4), 302-310. [https://doi.org/10.1016/S0043-1648\(03\)00414-9](https://doi.org/10.1016/S0043-1648(03)00414-9)
- Ramana, J.V., Kumar, S., Christopher David, V.S Raju. (2004). Structure, composition and microhardness of (Ti,Zr)N and (Ti,Al)N coatings prepared by DC magnetron sputtering. *Materials Letters*, 58, 2553-2558. <https://doi.org/10.1016/j.matlet.2004.03.020>
- Santoso, R.A., Deendarlianto, Muflikhun, M.A, (2025). Tool wear and surface characteristics of TiAlN/AlCrN insert in high-speed turning of bimetal aluminium alloy-grey cast iron engine block. *Materials Letters*. 379 (2025) 137714. <https://doi.org/10.1016/j.matlet.2024.137714>
- Schultheiss, F., Bushlya, V., Lenrick, F., Johansson, D., Kristiansson, S., Ståhl, J.E., (2018). Tool wear mechanisms of pcBN tooling during high-speed machining of gray cast iron, in: *Procedia CIRP*, Elsevier B.V., 2018: pp. 606–609. <https://doi.org/10.1016/j.procir.2018.08.201>.
- Sun, M., Guo, K., Zhang, D., Yang, B., Sun, J., Li, D., Huang, T., (2024). A novel exponential model for tool remaining useful life prediction, *J Manuf Syst* 73 223–240. <https://doi.org/10.1016/j.jmsy.2024.01.009>.
- Wang, X., Zhang, M., Zhao, B., Ding, W., Zhao, Z., Cui, H., Wang, M. (2024). Effects of longitudinal ultrasonic vibration on tool wear behaviors in side milling of GH4169D superalloy. *Tribology International*, 198 (2024) 109918. <https://doi.org/10.1016/j.triboint.2024.109918>
- Wu, X., Zhang, C., Wang, Z., Xuefeng Zhao, Hongfei Yao, Yuan Li, Feng Jiang. (2022). Experimental research on the welding strength of PCBN and cemented carbide materials for cutting tools application. *International Journal of Refractory Metals and Hard Materials*, 119 (2024) 106528. <https://doi.org/10.1016/j.ijrmhm.2023.106528>
- Yen, Y.C., Söhner, J., Lilly, B., Altan, T., (2004). Estimation of tool wear in orthogonal cutting using the finite element analysis, *J Mater Process Technol* 146 82–91.



[https://doi.org/10.1016/S0924-0136\(03\)00847-1](https://doi.org/10.1016/S0924-0136(03)00847-1).

- Yi-li Li, Qi Wang, Rui-run Chen, Xin-xiu Wang, Yuan Xia, Guo-ping Zhou, Ying-dong Qu & Guang-long Li. (2023). Influence of V Content on Microstructure and Mechanical Properties of Gray Cast Iron for Super-Large Cylinder Liner. *International Journal of Metalcasting*, 17, 1806–1814.
<https://doi.org/10.1007/s40962-022-00894-7>
- Zhang, Y., Xiaojie Xu. (2021). Machine learning cutting force, surface roughness, and tool life in high speed turning processes. *Manufacturing Letters*, 29, 84-89.
<https://doi.org/10.1016/j.mfglet.2021.07.005>