

Investigation on the edge forces in ball end milling of in

International Journal of Mechanical Sciences

119, 360-369

DOI: [10.1016/j.ijmecsci.2016.10.034](https://doi.org/10.1016/j.ijmecsci.2016.10.034)

Citation Report

#	ARTICLE	IF	CITATIONS
1	The study on minimum uncut chip thickness and cutting forces during laser-assisted turning of WC/NiCr clad layers. International Journal of Advanced Manufacturing Technology, 2017, 91, 3887-3898.	1.5	58
2	Mechanical and technological aspects of micro ball end milling with various tool inclinations. International Journal of Mechanical Sciences, 2017, 134, 424-435.	3.6	75
3	Value Stream Mapping as a tool for the optimization of production – case study. MATEC Web of Conferences, 2017, 121, 02006.	0.1	1
4	Surface texture formation in precision machining of direct laser deposited tungsten carbide. Advances in Manufacturing, 2017, 5, 251-260.	3.2	15
5	Performance of Al <sub>2</sub> O <sub>3</sub> nanofluids in minimum quantity lubrication in hard milling of 60Si <sub>2</sub> Mn steel using cemented carbide tools. Advances in Mechanical Engineering, 2017, 9, 168781401771061.	0.8	60
6	Volume optimization of gear trains with spur gears using genetic algorithm. MATEC Web of Conferences, 2017, 121, 01007.	0.1	0
7	The application of response surface method to optimization of precision ball end milling. MATEC Web of Conferences, 2017, 112, 01004.	0.1	3
8	A separate-edge force coefficients™ calibration method using specific condition for cutters with variable helix and pitch angles combining the runout effect. International Journal of Advanced Manufacturing Technology, 2017, 93, 1737-1749.	1.5	3
9	The analysis of surface topography during turning of Waspaloy with the application of response surface method. MATEC Web of Conferences, 2017, 136, 02006.	0.1	20
10	Modelling of a contact pressure distribution caused by assembly errors in a spur gear transmission. , 2017, , .		1
11	Turning process monitoring of internal combustion engine piston™s cylindrical surface. MATEC Web of Conferences, 2017, 112, 10002.	0.1	1
12	The use of 3d scanner for testing changes in shape of human limbs under the influence of external mechanical load. E3S Web of Conferences, 2017, 19, 03024.	0.2	1
13	The analysis of instantaneous tool displacements during precise ball end milling. MATEC Web of Conferences, 2017, 137, 05008.	0.1	0
14	Investigation of the influence of coolant-lubricant modification on selected effects of pull broaching. E3S Web of Conferences, 2017, 19, 03032.	0.2	1
15	The study on dynamic properties of monolithic ball end mills with various slenderness. E3S Web of Conferences, 2017, 19, 03014.	0.2	0
16	Tool life of diamond inserts after laser assisted turning of cemented carbides. MATEC Web of Conferences, 2017, 121, 03011.	0.1	2
17	Application of optical scanning system to determine the machining allowances. MATEC Web of Conferences, 2017, 112, 01002.	0.1	2
18	Productivity improvement of the water meter™s body manufacturing process. MATEC Web of Conferences, 2017, 112, 01003.	0.1	0

#	ARTICLE	IF	CITATIONS
19	The Evaluation of Surface Integrity During Machining of Inconel 718 with Various Laser Assistance Strategies. MATEC Web of Conferences, 2017, 136, 01006.	0.1	28
20	Investigations of Surface Topography of Hot Working Tool Steel Manufactured with the Use of 3D Print. MATEC Web of Conferences, 2017, 137, 02004.	0.1	5
21	Modelling of surface roughness in inclined milling operations with circle-segment end mills. Simulation Modelling Practice and Theory, 2018, 84, 161-176.	2.2	56
22	Deformation analysis and error prediction in machining of thin-walled honeycomb-core sandwich structural parts. International Journal of Advanced Manufacturing Technology, 2018, 95, 3875-3886.	1.5	8
23	Mechanistic modelling for predicting cutting forces in machining considering effect of tool nose radius on chip formation and tool wear land. International Journal of Mechanical Sciences, 2018, 142-143, 255-268.	3.6	36
24	Prediction of ball end milling forces based on special turning experiment data. International Journal of Advanced Manufacturing Technology, 2018, 96, 4423-4430.	1.5	2
25	Application of signal to noise ratio and grey relational analysis to minimize forces and vibrations during precise ball end milling. Precision Engineering, 2018, 51, 582-596.	1.8	118
26	Surface quality and topographic inspection of variable compliance part after precise turning. Applied Surface Science, 2018, 434, 91-101.	3.1	104
27	A pyramid-shaped machining test to identify rotary axis error motions on five-axis machine tools: software development and a case study. International Journal of Advanced Manufacturing Technology, 2018, 94, 227-237.	1.5	16
28	Cutting force modeling for non-uniform helix tools based on compensated chip thickness in five-axis flank milling process. Precision Engineering, 2018, 51, 659-681.	1.8	20
29	Experimental analysis of system parameters for minimum cutting fluid consumption when machining Ti-6Al-4V using a novel supply system. International Journal of Advanced Manufacturing Technology, 2018, 95, 2795-2809.	1.5	21
30	Assessment of the effect of borax and boric acid additives in cutting fluids on milling of AISI O2 using MQL system. International Journal of Advanced Manufacturing Technology, 2018, 95, 2005-2013.	1.5	20
31	3D milling modeling: mechanical actions, strains, strain rates and temperature calculations in the three cutting zones. International Journal of Advanced Manufacturing Technology, 2018, 95, 1931-1940.	1.5	1
32	Investigation of the Effect of Workpiece Resolution on Milling Simulation Accuracy in Production Module 3D CAE Software. Tehnicki Vjesnik, 2018, 25, .	0.3	1
33	Study on metrological relations between instant tool displacements and surface roughness during precise ball end milling. Measurement: Journal of the International Measurement Confederation, 2018, 129, 686-694.	2.5	95
34	FE simulation of machining of Ti-54M titanium alloy for industry relevant outcomes. Measurement: Journal of the International Measurement Confederation, 2018, 129, 268-276.	2.5	15
35	Determination of Real Clearances Between Cycloidal Speed Reducer Elements by the Application of Heuristic Optimization. Transactions of Famera, 2018, 42, 15-26.	0.3	11
36	Surface texture processing for tribological performance improvement of UHMWPE-based water-lubricated bearings. Industrial Lubrication and Tribology, 2018, 70, 1341-1349.	0.6	14

#	ARTICLE	IF	CITATIONS
37	Machining deformation prediction of thin-walled workpieces in five-axis flank milling. International Journal of Advanced Manufacturing Technology, 2018, 97, 4179-4193.	1.5	46
38	Analysis of the minimum chip thickness during turning of duplex stainless steel. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2019, 233, 1733-1744.	1.5	3
39	Design and Optimization of Machining Parameters for Effective AISI P20 Removal Rate during Milling Operation. Procedia CIRP, 2019, 84, 861-867.	1.0	31
40	Influence of Al <sub>2</sub> O <sub>3</sub> Processing on the Microtexture and Morphology of Mold Steel: Hydrophilic-to-Hydrophobic Transition. , 2019, , .		0
41	Anti-Friction and Anti-Wear Mechanisms of Micro Textures and Optimal Area Proportion in the End Milling of Ti6Al4V Alloy. Journal of Manufacturing and Materials Processing, 2019, 3, 91.	1.0	2
43	Cutting Depth Monitoring Based on Milling Force for Robot-Assisted Laminectomy. IEEE Transactions on Automation Science and Engineering, 2020, 17, 2-14.	3.4	31
44	Simple Discriminatory Methodology for Wear Analysis of Cutting Tools: Impact on Work Piece Surface Morphology in Case of Differently Milled Kinetics Steel H13. Materials, 2020, 13, 215.	1.3	2
45	A PSO-based semi-analytical force prediction model for chamfered carbide tools considering different material flow state caused by edge geometry. International Journal of Mechanical Sciences, 2020, 169, 105329.	3.6	16
46	A New Approach to the Consideration and Analysis of Critical Factors in Robotic Machining. Applied Sciences (Switzerland), 2020, 10, 8885.	1.3	4
47	Dislocation Density Based Flow Stress Model Applied to the PFEM Simulation of Orthogonal Cutting Processes of Ti-6Al-4V. Materials, 2020, 13, 1979.	1.3	7
48	Technical data-driven tool condition monitoring challenges for CNC milling: a review. International Journal of Advanced Manufacturing Technology, 2020, 107, 4837-4857.	1.5	60
49	Measurement and optimization of cutting forces during M200 TS milling process using the response surface methodology and dynamometer. Procedia CIRP, 2020, 88, 288-293.	1.0	17
50	Prediction of Shearing and Ploughing Constants in Milling of Inconel 718. Journal of Manufacturing and Materials Processing, 2021, 5, 8.	1.0	5
51	Modified cutting force prediction model considering the true trajectory of cutting edge and in-process workpiece geometry in ball-end milling operation. International Journal of Advanced Manufacturing Technology, 2021, 115, 1187-1199.	1.5	4
52	FE analysis of the effects of process representations on the prediction of residual stresses and chip morphology in the down-milling of Ti6Al4V. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 0, , 1-40.	1.3	1
53	Cutting force model of longitudinal-torsional ultrasonic-assisted milling Ti-6Al-4V based on tool flank wear. Journal of Materials Processing Technology, 2021, 291, 117042.	3.1	37
54	Identifying the transient milling force coefficient of a slender end-milling cutter with vibrations. Journal of Manufacturing Processes, 2021, 67, 262-274.	2.8	12
55	A review on micro-milling: recent advances and future trends. International Journal of Advanced Manufacturing Technology, 2021, 112, 655-684.	1.5	97

#	ARTICLE	IF	CITATIONS
56	The influence of laser heat treatment on the geometric structure of the surface and condition of the surface layer and selected properties of Waspaloy. MATEC Web of Conferences, 2017, 121, 03006.	0.1	4
58	STUDY OF THE EFFECT OF THE ELECTROLESS Ni-P COATING THICKNESS APPLIED ON AW-7075 ALUMINUM ALLOY ON ITS MECHANICAL PROPERTIES. Advances in Science and Technology Research Journal, 2018, 12, 291-297.	0.4	2
59	Cutting Forces and Power in Machining Shaping of AlCu4MgSi Aluminium Alloy. Studies in Systems, Decision and Control, 2020, , 151-159.	0.8	0
60	Theoretical approaches for determining machining conditions affecting a machined surface topography in filleted end milling. International Journal for Simulation and Multidisciplinary Design Optimization, 2021, 12, 27.	0.6	0
61	Wear distribution characteristics of carbide ball end milling tool focusing on tool path and posture. Wear, 2022, 498-499, 204248.	1.5	1
62	Artificial intelligence systems for tool condition monitoring in machining: analysis and critical review. Journal of Intelligent Manufacturing, 2023, 34, 2079-2121.	4.4	90
63	A frequency-based analysis of cutting force for depths of cut identification in peripheral end-milling. Mechanical Systems and Signal Processing, 2022, 171, 108943.	4.4	12
64	Application of measurement systems in tool condition monitoring of Milling: A review of measurement science approach. Measurement: Journal of the International Measurement Confederation, 2022, 199, 111503.	2.5	44
66	A State of the Art on Simulation and Modelling Methods in Machining: Future Prospects and Challenges. Archives of Computational Methods in Engineering, 0, , .	6.0	6
67	Dynamic modeling and nonlinear vibration analysis of spindle system during ball end milling process. International Journal of Advanced Manufacturing Technology, 2022, 121, 7867-7889.	1.5	14
68	Nonlinear dynamic modeling and vibration analysis of whole machine tool. International Journal of Mechanical Sciences, 2023, 245, 108122.	3.6	12
69	Deep learning-based instantaneous cutting force modeling of three-axis CNC milling. International Journal of Mechanical Sciences, 2023, 246, 108153.	3.6	3
70	Modelling and analysis of the micro-milling of micro-dimpled structures with copying method on glow discharge polymer (GDP). Wear, 2023, 523, 204776.	1.5	1
71	Modelling of the Face-Milling Process by Toroidal Cutter. Materials, 2023, 16, 2829.	1.3	2