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Education Information

Doctorate, Karabük Üniversitesi, Fen Bilimleri Enstitüsü, Makine Mühendisliği A.B.D, Turkey 2015 - 2019

Post Graduate, Karabük Üniversitesi, Fen Bilimleri Enstitüsü, Makine Mühendisliği (YI) (Tezli), Turkey 2012 - 2015

Under Graduate, Middle East Technical University, Faculty Of Engineering, Department Of Mechanical Engineering, Turkey 2006 - 2012

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, DETERMINATION OF MATERIAL CONSTITUTIVE EQUATION PARAMETERS OF NICKEL BASED SUPER ALLOY (NIMONIC 80A) AND INVESTIGATION OF THEIR APPLICABILITY, Karabuk University, Fen Bilimleri Enstitüsü, Makine Mühendisliği A.B.D, 2018

Post Graduate, MODELING OF CUTTING TOOL STRESSES ON MACHINING OF HARDENED COLD WORK TOOL STEEL, Karabuk University, Fen Bilimleri Enstitüsü, 2015

Research Areas

Mechanical Engineering, Mechanical, Mechanical Testing, Engineering and Technology

Academic Titles / Tasks

Assistant Professor, Karabuk University, Mühendislik Fakültesi, Makine Mühendisliği, 2019 - Continues

Research Assistant, Karabuk University, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, 2012 - 2019

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

1. Performance analysis of coated carbide tool in turning of Nimonic 80A superalloy under different cutting environments

GÜNAY M., KORKMAZ M. E., YAŞAR N.

Journal of Manufacturing Processes, vol.56, pp.678-687, 2020 (Journal Indexed in SCI Expanded)

- II. **Numerical and experimental investigation of cutting forces in turning of Nimonic 80A superalloy**
KORKMAZ M. E., YAŞAR N., GÜNAY M.
Engineering Science and Technology, an International Journal, vol.23, pp.664-673, 2020 (Journal Indexed in SCI Expanded)
- III. **An investigation on braking systems used in railway vehicles**
GÜNAY M., KORKMAZ M. E., ÖZMEN R.
Engineering Science and Technology, an International Journal, vol.23, pp.421-431, 2020 (Journal Indexed in SCI Expanded)
- IV. **Verification of Johnson-Cook parameters of ferritic stainless steel by drilling process: Experimental and finite element simulations**
KORKMAZ M. E.
Journal of Materials Research and Technology, 2020 (Journal Indexed in SCI Expanded)
- V. **Determination and Verification of Johnson-Cook Parameters for 430 Ferritic Steels via Different Gage Lengths**
KORKMAZ M. E.
TRANSACTIONS OF THE INDIAN INSTITUTE OF METALS, vol.72, pp.2663-2672, 2019 (Journal Indexed in SCI)
- VI. **Investigation of tensile Johnson-Cook model parameters for Nimonic 80A superalloy**
KORKMAZ M. E., GÜNAY M., Verleysen P.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.801, pp.542-549, 2019 (Journal Indexed in SCI)
- VII. **Identification of Constitutive Model Parameters for Nimonic 80A Superalloy**
KORKMAZ M. E., Verleysen P., GÜNAY M.
TRANSACTIONS OF THE INDIAN INSTITUTE OF METALS, vol.71, pp.2945-2952, 2018 (Journal Indexed in SCI)
- VIII. **Finite Element Modelling of Cutting Forces and Power Consumption in Turning of AISI 420 Martensitic Stainless Steel**
KORKMAZ M. E., GÜNAY M.
ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, vol.43, pp.4863-4870, 2018 (Journal Indexed in SCI)
- IX. **Finite element modeling of tool stresses on ceramic tools in hard turning**
Gunay M., Korkmaz M. E., Yasar N.
Mechanika, vol.23, pp.432-440, 2017 (Journal Indexed in SCI Expanded)

Articles Published in Other Journals

- I. **Estimation of Entropy Generation for Ag-MgO/Water Hybrid Nanofluid Flow through Rectangular Minichannel by Using Artificial Neural Network**
UYSAL C., KORKMAZ M. E.
JOURNAL OF POLYTECHNIC-POLITEKNIK DERGISI, vol.22, pp.41-51, 2019 (Journal Indexed in ESCI)
- II. **Confirmation of Johnson-Cook Model Parameters for Nimonic 80A alloy by Finite Element Method**
KORKMAZ M. E., GÜNAY M.
Journal of Polytechnic, 2019 (Refereed Journals of Other Institutions)
- III. **Al2014 Alüminyum Alaşımının Delinmesinde İtme Kuvvetinin Sonlu Elemanlar Yöntemi İle Analizi**
KORKMAZ M. E., ÇAKIROĞLU R., YAŞAR N., ÖZMEN R., GÜNAY M.
El-Cezeri Journal of Science and Engineering, vol.6, pp.193-199, 2019 (Other Refereed National Journals)
- IV. **Ferritik Paslanmaz Çeliğin Malzeme Yapısal Denklem Parametrelerinin Belirlenmesi ve Doğrulanması**
KORKMAZ M. E.
Düzce Üniversitesi Bilim ve Teknoloji Dergisi, vol.7, pp.628-639, 2019 (Other Refereed National Journals)
- V. **Optimization of Cutting Parameters in Hard Turning of AISI H10A Steel under Minimum Quantity Lubrication**
GÜNAY M., DEMİR H., KORKMAZ M. E., ÇAKIROĞLU R.

European Journal of Engineering and Natural Sciences, vol.3, pp.157-164, 2019 (Refereed Journals of Other Institutions)

- VI. **EXPERIMENTAL AND STATISTICAL ANALYSIS ON MACHINABILITY OF NIMONIC80A SUPERALLOY WITH PVD COATED CARBIDE**
KORKMAZ M. E. , GÜNAY M.
SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES-SIGMA MUHENDISLIK VE FEN BILIMLERI DERGISI, vol.36, pp.1139-1150, 2018 (Journal Indexed in ESCI)
- VII. **AISI 420 Martenzitik Paslanmaz Çeliğin Delinebilirliğinin Sonlu Elemanlar Yöntemiyle Analizi**
KORKMAZ M. E. , MERAL T., GÜNAY M.
Gazi Mühendislik Bilimleri Dergisi, vol.4, pp.223-229, 2018 (Refereed Journals of Other Institutions)
- VIII. **Investigation on hole quality of cutting conditions in drilling of CFRP composite**
YAŞAR N., KORKMAZ M. E. , GÜNAY M.
MATEC Web of Conferences, 2017 (Refereed Journals of Other Institutions)
- IX. **Optimization of Honing Parameters for Renewal of Cylinder Liners**
GÜNAY M., KORKMAZ M. E.
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.30, pp.111-119, 2017 (Journal Indexed in ESCI)
- X. **Finite Element Modeling of Tool Stresses in Hard Turning of AISI L2 Steel Prediction by ANN**
KORKMAZ M. E. , GÜNAY M.
International Journal of Modern Engineering Research, vol.6, pp.30-40, 2016 (Refereed Journals of Other Institutions)
- XI. **Modelling and Optimization of the Surface Roughness in High Speed Hard Turning with Coated and Uncoated CBN Insert**
Yurtkuran H., KORKMAZ M. E. , GÜNAY M.
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.29, pp.987-995, 2016 (Journal Indexed in ESCI)
- XII. **AISI P20 Çeliginin İşlenmesinde Kesme Kuvvetinin Deneysel ve Nümerik Analizi**
YAŞAR N., SEKMEN M., KORKMAZ M. E. , GÜNAY M.
Gazi Üniversitesi Fen Bilimleri Dergisi Part: C Tasarım ve Teknoloji, vol.4, pp.13-19, 2016 (Refereed Journals of Other Institutions)
- XIII. **AISI P20 Çeliğinin İşlenmesinde Kesme Kuvvetinin Deneysel ve Nümerik Analizi**
YAŞAR N., SEKMEN M., KORKMAZ M. E. , GÜNAY M.
Gazi Üniversitesi Fen Bilimleri Dergisi Part: C Tasarım ve Teknoloji, vol.4, pp.625-631, 2016 (Other Refereed National Journals)
- XIV. **Awareness and Attitudes toward Engineering Faculty Students on Renewable Energy Sources and Environment**
GÜNAY M., KORKMAZ M. E.
International Journal of Arts and Sciences, vol.8, pp.1-12, 2015 (Refereed Journals of Other Institutions)

Refereed Congress / Symposium Publications in Proceedings

- I. **Al/SiC METAL MATRİKS KOMPOZİT FREN DİSKİ-DÖKME DEMİRBALATA ETKİLEŞİMİNE DİSK GEOMETRİSİ ETKİLERİNİNİNCELENMESİ**
SELÇUK E., KORKMAZ M. E. , GÜNAY M.
2. Uluslararası Türk Dünyası Mühendislik ve Fen Bilimleri Kongresi, 7 - 10 November 2019
- II. **CFRP PLAKALARIN KAPLAMASIZ KARBÜR MATKAP İLE DELİNMESİNDE DELME PARAMETRELERİNİN ÇOKLU YANIT OPTİMİZASYONU**
YAŞAR N., KORKMAZ M. E. , GÜNAY M.
2. Uluslararası Türk Dünyası Mühendislik ve Fen Bilimleri Kongresi, 7 - 10 November 2019
- III. **INVESTIGATION OF THE EFFECTS OF DISC GEOMETRY ON THE INTERACTION OF Al/SiC METAL MATRIX COMPOSITE BRAKE DISC-CAST IRON PAD**
SELÇUK E., KORKMAZ M. E. , GÜNAY M.

2. Uluslararası Türk Dünyası Mühendislik ve Fen Bilimleri Kongresi, 7 - 10 November 2019

- IV. **DEMİRYOLU ARACININ FREN DİSKİ-BALATA ETKİLEŞİMİNE DİSK GEOMETRİSİ ETKİLERİNİN ARAŞTIRILMASI**
SELÇUK E., KORKMAZ M. E. , GÜNAY M.
INTERNATIONAL BLACK SEA COASTLINE COUNTRIES SYMPOSIUM-2, 20 - 22 July 2019
- V. **Numerical Investigation of Cutting Forces in Turning of C23000 Brass Alloy**
KORKMAZ M. E.
International Data Science Engineering Symposium, 2 - 03 May 2019
- VI. **Effects Printing Orientation on Mechanical Properties of Samples Produced by Multijet Fusion (MJF) Technology**
KORKMAZ M. E. , GÜNAY M.
4th International Congress on 3D Printing (Additive Manufacturing) Technologies and Digital Industry, 11 - 14 April 2019
- VII. **Surface roughness optimization and modeling of finishing operation for hardened X40CrMoV51 steel with ceramic tool**
KORKMAZ M. E. , GÜNAY M.
4th International Iron and Steel Symposium (UDCS'19), 4 - 06 April 2019
- VIII. **Finite Element Modelling of Cutting Forces in Hard Turning of AISI 52100 Steel**
KORKMAZ M. E.
4th International Iron and Steel Symposium (UDCS'19), 4 - 06 April 2019
- IX. **Finite Element Analysis of Thrust Force in Drilling of Al2014 Aluminum Alloy**
KORKMAZ M. E. , ÇAKIROĞLU R., YAŞAR N., ÖZMEN R., GÜNAY M.
1st International Symposium on Light Alloys and Composite Materials (ISLAC'18), 22 - 24 March 2018
- X. **NIMONIC 80A Süper Alaşımının Tornalanmasında Kesme Kuvvetlerinin Analizi**
KORKMAZ M. E. , GÜNAY M.
9th International Symposium on Machining, 8 - 10 November 2018
- XI. **Review on Braking Systems Used in Railway Vehicles, 4rd International Symposium on Railway Systems Engineering**
SELÇUK E., KORKMAZ M. E. , GÜNAY M.
4th International Symposium on Railway System Engineering, 10 - 12 October 2018
- XII. **A REVIEW ON BRAKING SYSTEMS USED IN RAILWAY VEHICLES**
SELÇUK E., GÜNAY M., KORKMAZ M. E.
IV. RAYLI SİSTEMLER MÜHENDİSLİĞİ SEMPOZYUMU, Karabük, Turkey, 8 - 10 October 2018
- XIII. **Estimation of machining outputs in drilling of AISI 430 stainless steel by numerical analysis**
MERAL T., KORKMAZ M. E. , UZUN H., GÜNAY M.
4th International Conference on Engineering and Natural Sciences, 2 - 06 May 2018
- XIV. **Al2014 Alüminyum Alaşımının Delinmesinde İtme Kuvvetinin Sonlu Elemanlar Yöntemi İle Analizi**
KORKMAZ M. E. , ÇAKIROĞLU R., YAŞAR N., ÖZMEN R., GÜNAY M.
1st International Symposium on Light Alloys and Composite Materials, 22 - 24 March 2018
- XV. **Finite Element Analysis of Cutting Forces in Turning of AISI420 Steel**
KORKMAZ M. E. , GÜNAY M.
1st International Turkish World Engineering and Science Congress, 7 - 10 December 2017
- XVI. **Investigation of Machinability of Hard Facing Welding Applied on DIN 1.2344 Tool Steel**
GÜNAY M., ÖZBEY İ., KORKMAZ M. E. , UZUN G.
1st International Turkish World Engineering and Science Congress, 7 - 10 December 2017
- XVII. **Optimization of Cutting Parameters in Hard Turning of AISI H10A Steel under Minimum Quantity Lubrication**
DEMİR H., KORKMAZ M. E. , ÇAKIROĞLU R., GÜNAY M.
3rd International Conference on Engineering and Natural Sciences (ICENS 2017), 3 - 07 May 2017
- XVIII. **Investigation on hole quality of cutting conditions in drilling of CFRP composite**
YAŞAR N., KORKMAZ M. E. , GÜNAY M.

The 21th edition of IManEE 2017 International Conference, 25 - 26 May 2017

- XIX. 2D Modelling of Residual Stresses in Hard Turning of AISI 4140 Steel**
KORKMAZ M. E. , YAŞAR N., GÜNAY M.
3rd International Iron Steel Symposium, 3 - 05 April 2017
- XX. Modelling of Round Rolling Process by Using Finite Element Method**
EROL E., KORKMAZ M. E. , GÜNAY M.
3rd International Iron Steel Symposium, 3 - 05 April 2017
- XXI. EXPERIMENTAL AND NUMERICAL ANALYSIS OF CUTTING FORCES IN MACHINING OF HARDENED X40CrMoV5 1 STEEL**
YAŞAR N., YURTKURAN H., KORKMAZ M. E. , GÜNAY M.
InternationalConference on Engineering and NaturalSciences, Sarajevo, Bosnia And Herzegovina, 24 - 28 May 2016
- XXII. OPTIMIZATION OF DRILLING PARAMETERS FOR THRUST FORCE IN DRILLING OF AA7075 ALLOY**
GÜNAY M., YAŞAR N., KORKMAZ M. E.
InternationalConference on Engineering and NaturalSciences, Sarajevo, Bosnia And Herzegovina, 24 - 28 May 2016
- XXIII. CFRP KOMPOZİTLERİN DELİNMESİNDE KESME ŞARTLARININ İTME KUVVETİ VE DELAMİNASYON ÜZERİNDEKİ ETKİLERİNİN İNCELENMESİ**
YAŞAR N., KORKMAZ M. E. , GÜNAY M.
7th INTERNATIONAL SYMPOSIUMON MACHINING, İstanbul, Turkey, 3 - 05 November 2016
- XXIV. CFRP Kompozitlerin Delinmesinde Delme Sartlarının İlerleme Kuvveti Ve Delaminasyon ÜzerindekiEtkilerinin İncelenmesi**
YAŞAR N., KORKMAZ M. E. , GÜNAY M.
7th International Symposium on Machining (UTIS 2016), 3 - 05 November 2016
- XXV. Renewable Energy Sources and Environmental Perception Comparison of University and High School Students**
GÜNAY M., KORKMAZ M. E.
1st of International INES Academic Researches Congress, 3 - 05 November 2016
- XXVI. Intermodal Tasımacılık Sistemine Göre Demiryolu Vagon Sistemi Tasarımı**
UZUN H., KORKMAZ M. E. , GÜNAY M.
The 1st of International INES Academic Researches Congress, 3 - 05 November 2016
- XXVII. CFRP Kompozitlerin Delinmesinde Delme Şartlarının İlerleme Kuvveti Ve Delaminasyon Üzerindeki Etkilerinin İncelenmesi**
YAŞAR N., KORKMAZ M. E. , GÜNAY M.
7th International Symposium on Machining (UTIS 2016), 3 - 05 November 2016
- XXVIII. Intermodal Taşımacılık Sistemine Göre Demiryolu Vagon Sistemi Tasarımı**
UZUN H., KORKMAZ M. E. , GÜNAY M.
1st of International INES Academic Researches Congress, 3 - 05 November 2016
- XXIX. Optimization of drilling parameters for thrust force in drilling of AA7075**
YAŞAR N., KORKMAZ M. E. , GÜNAY M.
2nd International Conference on Engineering and Natural Sciences, 24 - 28 May 2016
- XXX. Finite Element Modeling of Residual Stresses and Cutting Temperature in Hard Turning**
KORKMAZ M. E. , YAŞAR N., GÜNAY M.
2nd International Conference on Engineering and Natural Sciences, 24 - 28 May 2016
- XXXI. Optimization of Surface Roughness in Honing of Engine Cylinder Liners with SiC Honing Stones**
ÖZDEMİR M., KORKMAZ M. E. , GÜNAY M.
1st International Conference on Engeneering Technology and Applied Sciences, 21 - 22 April 2016
- XXXII. Sertleştirilmiş Soğuk İş Takım Çeliğinin İşlenmesinde Kesici Takımda Oluşan Gerilmelerin İncelenmesi**
KORKMAZ M. E. , GÜNAY M.
6. Ulusal Talahlı İmalat Sempozyumu, Turkey, 5 - 07 November 2015

- XXXIII. **Metal Kesme Analizleri İçin En Uygun Visko Plastik Modelin Belirlenmesi**
KAYKI Ö., KORKMAZ M. E. , GÜNAY M.
19. Ulusal Mekanik Kongresi, Turkey, 24 - 28 August 2015
- XXXIV. **Awareness and Attitudes Toward Engineering Faculty Students on Renewable Energy Sources and Environment**
GÜNAY M., KORKMAZ M. E. , OĞUZ A.
Conference of the International Journal of Arts and Sciences, 23 - 26 June 2015
- XXXV. **Modelling of Specific Cutting Resistance in Machining of AISI P20 Plastic Mould Steel**
YAŞAR N., KORKMAZ M. E. , GÜNAY M., ŞEKER U.
International Conference on Engineering and Natural Science, 15 - 19 May 2015
- XXXVI. **Modelling of Surface Roughness in Hard Turning of DIN 1 2210 Cold Work Tool Steel with Ceramic Tools**
KORKMAZ M. E. , GÜNAY M.
Proceedings of the 19th international conference "Mechanika 2014", 24 - 25 April 2014, pp.135-140
- XXXVII. **DIN 1 2344 SICAK İŞ TAKIM ÇELİĞİNİN İŞLENMESİNDE YÜZEY PÜRÜZLÜLÜĞÜNÜN MODELLENMESİ**
YURTKURAN H., KORKMAZ M. E. , ÇAKIROĞLU R., GÜNAY M.
ULUSAL TALAŞLI İMALAT SEMPOZYUMU, Turkey, 7 - 09 November 2013

Supported Projects

GÜNAY M., KORKMAZ M. E. , Project Supported by Higher Education Institutions, NİKEL ESASLI SÜPER ALAŞIMIN (NIMONIC 80A) MALZEME YAPISAL DENKLEM PARAMETRELERİNİN BELİRLENMESİ VE UYGULANABİLİRLİĞİNİN ARAŞTIRILMASI, 2018 - 2018

KORKMAZ M. E. , Project Supported by Higher Education Institutions, Finite Element Modeling of Residual Stresses and Cutting Temperature in Hard Turning, 2016 - 2016

Citations

Total Citations (WOS):25

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