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### EDUCATION

2009-2013	The Ohio State University, Mechanical Engineering, Ph.D., Columbus, OH, USA
2007-2008	Virginia Commonwealth University, Mechanical Engineering, M.Sc., Richmond, VA, USA
2003-2007	Başkent Üniversitesi, Mechanical Engineering, B.Sc., Ankara, TR

### ACADEMIC POSITIONS

Sept. 2020 – Present	<b>Assistant Professor, Department of Automotive Engineering,</b> Atılım University, Ankara, TR
Sept. 2014 – Sept. 2018	<b>Assistant Professor, Department of Automotive Engineering,</b> Atılım University, Ankara, TR

### OTHER DUTIES

Feb. 2020 – Present	Columnist, “Cutting Edge” Column <a href="#">Metalforming Magazine</a>
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### RESEARCH INTERESTS

1	Sheet metal forming
2	Press hardening and press quenching steels
3	New generation advanced high strength steels
4	Hot forming of aluminum
5	Metal forming simulations
6	Material characterization
7	Press technologies

### PUBLICATIONS (SCI, SCI-E, Scopus indexed)

1	B. Bal, B. Çetin, F. C. Bayram, <b>E. Billur</b> . “Effect of hydrogen on fracture locus of Fe-16Mn-0.6C-2.15Al TWIP Steel”, International Journal of Hydrogen Energy, 45(58): 34227-34240 [SCI-E, Q2]. <a href="https://doi.org/10.1016/j.ijhydene.2020.09.083">https://doi.org/10.1016/j.ijhydene.2020.09.083</a>
2	M. Koç, S. Mahabunphachai, E. Billur. “Forming characteristics of austenitic stainless steel sheet alloys under warm hydroforming conditions”, Int. J. Adv. Manuf. Technol., 56(1-4):97-113, 2011 [SCI-E, Q2]. <a href="https://doi.org/10.1007/s00170-011-3169-x">https://doi.org/10.1007/s00170-011-3169-x</a>
3	M. Koç, <b>E. Billur</b> , Ö.N. Cora, “An experimental study on the comparative assessment of hydraulic bulge test analysis methods”, Materials & Design, 32(1):272-281, 2011 [SCI-E, Q1]. <a href="https://doi.org/10.1016/j.matdes.2010.05.057">https://doi.org/10.1016/j.matdes.2010.05.057</a>

## PUBLICATIONS (TR-Dizin indexed)

1	K. Akcan, <b>E. Billur</b> , H.İ. Saraç. "Temperature Effects in Deep Drawing of Advanced High Strength Steels", Research on Engineering Structures and Materials, <i>available online, page numbers will be added</i> , 2021. <a href="http://dx.doi.org/10.17515/resm2021.218me1004">http://dx.doi.org/10.17515/resm2021.218me1004</a>
2	<b>E. Billur</b> , S. Karabulut, İ. Öztürk-Yılmaz, S. Erzincanoğlu, H. Çelik, E. Altınok, T. Başer. "Mechanical Properties of Trip Aided Bainitic Ferrite (TBF) Steels in Production and Service Conditions", Hittite Journal of Science and Engineering 5 (3) 231-237, 2018. <a href="http://doi.org/10.17350/HJSE19030000100">http://doi.org/10.17350/HJSE19030000100</a>

## BOOKS

1	<b>E. Billur</b> , "Hot Stamping of Ultra High-Strength Steels: An Overview of Technology and Business", Springer, ISBN 978-3319988689 (2018). <a href="https://doi.org/10.1007/978-3-319-98870-2">https://doi.org/10.1007/978-3-319-98870-2</a>
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## BOOK CHAPTERS

1	<b>E. Billur</b> , "Chapter 12: Hot Formed Steels", pp. 387-412, in "Automotive Steels - Design, Metallurgy, Processing and Applications", ed. Radhakanta Rana and Shiv Brat Singh, Woodhead Publishing (2016) <a href="https://doi.org/10.1016/B978-0-08-100638-2.00012-2">https://doi.org/10.1016/B978-0-08-100638-2.00012-2</a>
2	<b>E. Billur</b> , "Chapter 16: Die Materials and Coatings", pp. 317-338, in "Sheet Metal Forming - Processes and Applications", ed. T. Altan and A.E. Tekkaya, ASM International (2012) <a href="https://www.asminternational.org/web/edfas/search/-/journal_content/56/10192/SMFP2012P317/">https://www.asminternational.org/web/edfas/search/-/journal_content/56/10192/SMFP2012P317/</a>
3	<b>E. Billur</b> , A.E. Tekkaya, "Chapter 3: Plastic Deformation: Strain and Strain Rate", pp. 27-32, in "Sheet Metal Forming - Fundamentals", ed. T. Altan and A.E. Tekkaya, ASM International (2012) <a href="https://www.asminternational.org/web/edfas/technical/-/journal_content/56/10192/SMFF2012P027/">https://www.asminternational.org/web/edfas/technical/-/journal_content/56/10192/SMFF2012P027/</a>
4	H. Palaniswamy, <b>E. Billur</b> , "Chapter 4: Plastic Deformation: Flow Stress, Anisotropy and Formability", pp. 33-52, in "Sheet Metal Forming - Fundamentals", ed. T. Altan and A.E. Tekkaya, ASM International (2012) <a href="https://www.asminternational.org/web/edfas/technical/-/journal_content/56/10192/SMFF2012P033/">https://www.asminternational.org/web/edfas/technical/-/journal_content/56/10192/SMFF2012P033/</a>
5	<b>E. Billur</b> , "Chapter 9: Principles of Sheet Forming Presses", pp. 129-144, in "Sheet Metal Forming - Fundamentals", ed. T. Altan and A.E. Tekkaya, ASM International (2012) <a href="https://www.asminternational.org/web/edfas/technical/-/journal_content/56/10192/SMFF2012P129/">https://www.asminternational.org/web/edfas/technical/-/journal_content/56/10192/SMFF2012P129/</a>
6	T. Yelich, <b>E. Billur</b> , "Chapter 10: Mechanical Presses", pp. 145-159, in "Sheet Metal Forming - Fundamentals", ed. T. Altan and A.E. Tekkaya, ASM International (2012) <a href="https://www.asminternational.org/web/buffalo-chapter/search/-/journal_content/56/10192/SMFF2012P145/">https://www.asminternational.org/web/buffalo-chapter/search/-/journal_content/56/10192/SMFF2012P145/</a>
7	<b>E. Billur</b> , "Chapter 12: Hydraulic Presses", pp. 181-201, in "Sheet Metal Forming - Fundamentals", ed. T. Altan and A.E. Tekkaya, ASM International (2012) <a href="https://www.asminternational.org/web/buffalo-chapter/search/-/journal_content/56/10192/SMFF2012P181/">https://www.asminternational.org/web/buffalo-chapter/search/-/journal_content/56/10192/SMFF2012P181/</a>

## CONFERENCE PROCEEDINGS

1	B. Çetin, <b>E. Billur</b> , B. Baranoğlu, U. Toptaş, Ö. Alıç, "Predicting the Topology of The Bending Corner in Bending of Ultra High Strength Steels Through Finite Element Analysis", in proceedings of METAL 2019, 28th International Conference on Metallurgy and Materials, pp. 242-247, May 22-24, Brno, Czech Republic (2019). <a href="https://doi.org/10.37904/metal.2019.688">https://doi.org/10.37904/metal.2019.688</a>
2	B. Çetin, <b>E. Billur</b> , B. Baranoğlu, M. M. Yılmaz, T. Muratoğu. "Determination of The Spring-Back Angle by Image Processing in Bending of High Strength Steels", in Proceedings of 18th International Conference on Machine Design and Production (UMTIK 2018), U18-93, July 3-6, Eskisehir, Turkey.
3	<b>E. Billur</b> , B. Çetin, O. Music, C. Şimşir, K. Davut. "A Potential Solution to Mystical Materials in Indentation Test", Procedia Engineering, 207: 1952-1957, 2017. (Presented at the International Conference on Technology of Plasticity, ICTP 2017, Cambridge, UK) <a href="https://doi.org/10.1016/j.proeng.2017.10.967">https://doi.org/10.1016/j.proeng.2017.10.967</a>
4	<b>E. Billur</b> , B. Çetin, C. Yazganarikan, "New Generation Ultra-High Strength Steels for Cold Forming", In Proceedings of 18th International Metallurgy and Materials Congress (IMMC 2016), pp 451-454, September 29-October 1, Istanbul, Turkey. <a href="http://www1.metalurji.org.tr/immc2016/451.pdf">http://www1.metalurji.org.tr/immc2016/451.pdf</a>
5	<b>E. Billur</b> , G. Durkaya, B. Çetin, M.M. Yılmaz, A. Atay, A.G. Oğuz, O. Onaylı, U.C. Yalazı, E. Kılıç, "Investigation of The Effect of Servo-Press Forming in Springback and Minimum Bending Radii of Ultra High Strength Steels", in Proceedings of 17th International Conference on Machine Design And Production (UMTIK 2016), pp 811-823, July 12-15, Bursa, Turkey. <a href="https://www.researchgate.net/publication/305390387_Investigation_Of_The_Effect_Of_Servo-Press_Forming_In_Springback_And_Minimum_Bending_Radii_Of_Ultra_High_Strength_Steels">https://www.researchgate.net/publication/305390387_Investigation_Of_The_Effect_Of_Servo-Press_Forming_In_Springback_And_Minimum_Bending_Radii_Of_Ultra_High_Strength_Steels</a>
6	<b>E. Billur</b> , B. Çetin, R.O. Uğuz, K. Davut, E. Arslan, "Advanced Material Characterization of TWIP Steels", in proceedings of New Developments in Sheet Metal Forming 2016 (NEBU 2016), pp 303-318, May 10-11, Stuttgart, Germany. <a href="https://www.researchgate.net/publication/304486820_Advanced_Material_Characterization_of_TWIP_Steels">https://www.researchgate.net/publication/304486820_Advanced_Material_Characterization_of_TWIP_Steels</a>
7	<b>E. Billur</b> , B. Çetin, M.M. Yılmaz, A.G. Oğuz, A. Atay, K. Ersoy, R.O. Uğuz, B. Kaftanoğlu, "Forming of New Generation AHSS Using Servo Presses", in proceedings of 5th International Conference on Accuracy in Forming Technology (ICAFT 2015), pp. 175-191, November 10-11, Chemnitz, Germany. <a href="https://www.researchgate.net/publication/304486353_Forming_of_New_Generation_AHSS_Using_Servo_Presses">https://www.researchgate.net/publication/304486353_Forming_of_New_Generation_AHSS_Using_Servo_Presses</a>
8	<b>E. Billur</b> , H. Porzner, D. Lorenz, M. Holecek, M. Vrojlik, M. Hoss, B. Damenha, J. Friberg, C. Koroschetz, M. Skrikerud, "From Concept to Virtual Reality: Virtual Hot Forming Engineering", in proceedings of 5th International Conference on Hot Sheet Metal Forming (chs2 - 2015), pp. 463-470, May 31-June 4, Toronto, ON, Canada.
9	<b>E. Billur</b> , C.Wang, C. Bloor, M. Holecek, H. Porzner, T. Altan, "Advancements in Tailored Hot Stamping Simulations: Cooling Channel and Distortion Analyses", in AIP Conference Proceedings, Vol. 1567, pp. 1079-1084, The 9th International Conference and Workshop on Numerical Simulation of 3D Sheet Metal Forming Processes (NUMISHEET 2014), January 6-10, 2014, Melbourne, Australia. <a href="https://doi.org/10.1063/1.4850158">https://doi.org/10.1063/1.4850158</a>
10	<b>E. Billur</b> , A. Groseclose, T. Mao, T. Altan, "Current Applications of FE

	Simulation for Blanking and Stamping of Sheet Materials", in Proceedings of Tools and Technologies for Processing Ultra High Strength Steels, pp. 221-238, September 19-20, 2013, Graz - Austria. <a href="https://ercnsm.osu.edu/sites/ercnsm.osu.edu/files/uploads/666_0.pdf">https://ercnsm.osu.edu/sites/ercnsm.osu.edu/files/uploads/666_0.pdf</a>
11	<b>E. Billur</b> , H. Porzner, T. Altan, "Virtual Prototyping of Lightweight Designs Made with Cold and Hot Formed Tailored Solutions", in Proceedings of the 2 <sup>nd</sup> World Congress on Integrated Computational Materials Engineering (ICME), pp. 49-54, July 7-11, 2013, Salt Lake City, UT, USA. <a href="https://doi.org/10.1007/978-3-319-48194-4_8">https://doi.org/10.1007/978-3-319-48194-4_8</a>
12	T. Altan, A. Groseclose, <b>E. Billur</b> , S. Subramonian, T. Mao, "Advances and Challenges in Sheet Metal Forming Technology", in Proceedings of 7 <sup>th</sup> International Conference on Design and Production of Machines and Dies/Molds, pp. 1-6, June 20-23, Antalya, Turkey. <a href="https://ercnsm.osu.edu/sites/ercnsm.osu.edu/files/uploads/661.pdf">https://ercnsm.osu.edu/sites/ercnsm.osu.edu/files/uploads/661.pdf</a>
13	R. Perez-Santiago, <b>E. Billur</b> , A. Ademaj, C. Sarmiento, R. Berlanga, T. Altan, "Hot Stamping of a B-Pillar with Tailored Properties: Experiments and Preliminary Simulation Results", in Proceedings of 4 <sup>th</sup> International Conference on Hot Sheet Metal Forming (chs2 - 2013), pp. 83-90, June 9-12, 2013, Luleå, Sweden.
14	<b>E. Billur</b> , H. Porzner, M. Holecek, T. Altan, "Virtual Prototyping of Hot Formed Tailored Light-weight Designs", in Proceedings of 4 <sup>th</sup> International Conference on Hot Sheet Metal Forming (chs2 - 2013), pp. 303-310, June 9-12, 2013, Luleå, Sweden. <a href="https://ercnsm.osu.edu/sites/ercnsm.osu.edu/files/uploads/S_hot/657.pdf">https://ercnsm.osu.edu/sites/ercnsm.osu.edu/files/uploads/S_hot/657.pdf</a>
15	T. Altan, <b>E. Billur</b> , H. Porzner, D. Dooge, Y. Vincent, H. Porzner, "Concurrent Engineering with Hot and Cold Formed Tailored Solutions", in proceedings of International Automotive Body Congress (IABC 2013), pp. 91-112, May 14-15, 2013, Frankfurt, Germany.
16	<b>E. Billur</b> , Y. Demiralp, A.R. Groseclose, T. Altan, B. Wadman. "Factors Affecting the Accuracy of Flow Stress Determined by the Bulge Test", Steel Research International, ICTP 2011 Special Edition:726-731, 2011 [Proceedings of the 10th International Conference on Technology of Plasticity, ICTP 2011 : September 25 - 30, 2011, Aachen, Germany]. <a href="https://www.researchgate.net/publication/289183405_Factors_affecting_the_accuracy_of_flow_stress_determined_by_the_bulge_test">https://www.researchgate.net/publication/289183405_Factors_affecting_the_accuracy_of_flow_stress_determined_by_the_bulge_test</a>
17	M. Shah, <b>E. Billur</b> , P. Sartkulvanich, J. Carsley, T. Altan, "Cold and warm hydroforming of AA5754-O Sheet: FE Simulations and Experiments", in AIP Conference Proceedings, Vol. 1383, pp. 690-697, The 8 <sup>th</sup> International Conference and Workshop on Numerical Simulation of 3D Sheet Metal Forming Processes (Numisheet 2011), August 21-26, 2011, Seoul, S. Korea. <a href="https://www.researchgate.net/publication/253363248_Cold_and_Warm_Hydroforming_of_AA754-O_Sheet_FE_Simulations_and_Experiments">https://www.researchgate.net/publication/253363248_Cold_and_Warm_Hydroforming_of_AA754-O_Sheet_FE_Simulations_and_Experiments</a>
18	E. Billur, T. Altan, "Challenges in Forming Advanced High Strength Steels", in Proceedings of New Developments in Sheet Metal Forming 2010, pp. 285-304, May 2-4, 2010, Stuttgart, Germany. <a href="https://ercnsm.engineering.osu.edu/sites/ercnsm.osu.edu/files/uploads/S_FormingAHSS/634.pdf">https://ercnsm.engineering.osu.edu/sites/ercnsm.osu.edu/files/uploads/S_FormingAHSS/634.pdf</a>
19	E. Billur, S. Mahabunphachai, M. Koç, "Formability of Austenitic Stainless Steels under warm hydroforming conditions", in Transactions of NAMRI/SME, Vol. 37, 2009, pp. 341-348, NAMRC 2009 Conference (ref: TP09PUB63), May 19-22, 2009, Clemson, SC, USA. <a href="https://www.researchgate.net/publication/237337491_Formability_of_austenitic_stainless_steels_under_warm_hydroforming_conditions">https://www.researchgate.net/publication/237337491_Formability_of_austenitic_stainless_steels_under_warm_hydroforming_conditions</a>
20	E. Billur, M. Koç, "A comparative study on hydraulic bulge testing and analysis methods", in ASME Conf. Proc. 2008, pp. 59-65, Manufacturing Science and Engineering Conference (ref: MSEC2008-72238), October 7-10, 2008, Evanston, IL, USA. <a href="https://asmedigitalcollection.asme.org/MSEC/proceedings/MSEC2008/48517/59/332981">https://asmedigitalcollection.asme.org/MSEC/proceedings/MSEC2008/48517/59/332981</a>

## CITATIONS

	ISI Web of Science	<a href="#">Google Scholar</a>
Sum of times cited without self-citations	98	386
h-index	3	9

## COURSES GIVEN

1	AE 308 - Manufacturing and Material Technologies in Automotive Industry
2	AE 405 – Vehicle Dynamics
3	AE 414 - Active and Passive Automobile Safety
4	AE 416 - Design and Manufacturing in Automotive
5	AE 404 - Transmission Systems and Design (not offering since Spring 2018)
6	AE 417 - Introduction to Finite Element Analysis (not offering since Spring 2017)
7	AE 310 – System Dynamics and Control (not offering since Spring 2016)

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