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Camberg, A.	501	010	WF-I	A.A. Camberg, F. Bohner, J. Tölle, A. Schneider, S. Meiners, T. Tröster	Paderborn University/BENTELER Automobiltechnik GmbH	Germany	Formability Enhancement of EN AW-5182 H18 Aluminum Alloy Sheet Metal Parts in a Flash-Forming Process: Testing, Calibration and Evaluation of Fracture Models
Changela, K.	417	058	Proc-V	K. Changela, K. Hariharan, D.R. Kumar	Indian Institute of Technology Delhi	India	Characterization of Ultra-Fine Grained AA 6061 alloy Sheets Processed through Two Different Severe Plastic Deformation Techniques
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Cheong, K.	206	043	Frac-II	Kenneth Cheong, Cliff Butcher, James Dykeman	University of Waterloo/Honda R&D Americas	Canada/USA	Fracture Characterization in Proportional Plane Stress Loading by Imposing Severe Through-Thickness Strain Gradients (Oral only)
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Drotleff, K.	305	107	Form-II	K. Drotleff, M. Liewald	University of Stuttgart	Germany	Application of an advanced necking criterion for nonlinear strain paths to a complex sheet metal forming component
Duarte, A.	701	016	DB	O.C. Haase, V.L. Silveira, P.M.A. Stemler, R.A.M. Viana, A.S. Duarte	Sixpro Virtual & Practical Process/Universidade Federal de Minas Gerais	Brazil	Enabling stamping processes through meticulous FE Modelling - segmented drawbeads and remesh criteria
Duarte, A.	1209	018	SB-II	V.L. Silveira, O.C. Haase, P.M.A. Stemler, R.A.M. Viana, A.S. Duarte	Sixpro Virtual & Practical Process/Universidade Federal de Minas Gerais	Brazil	FEM stress state analysis on springback reduction methods: variable blank holder force and stake bead
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Golovashchenko, S.	801	143	EF-I	SF. Golovashchenko, N. Wang, S. Nasherlahkemi, NA. Reinberg, W. Zhou	Oakland University	USA	Mechanism of Fracture in Sheet Metal Cutting Processes and its Effect on Sheared Edge Stretchability
Goncalves, J.	317	033	Form-IV	J.Goncalves, G. Jotz, F. Huet	Global R&D ArcelorMittal Maizières	France	Stakes and solutions for in-plane sheet-metal formability assessment
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Gösling, M.	408	104	Proc-III	M. Gösling, A. Güner, I. Burchitz, Th.Thülig, B. Carleer	BILSTEIN GmbH & Co. KG/Autoform Engineering	Germany	Efficient simulation of ironing process for deep drawn parts
Grubenmann, M.	1208	070	SB-II	M. Grubenmann, K. Barth, J. Heingartner, N. Manopulo, P. Hora, A. Torkabadi, T. van den Boogaard, H. Rosen	inspire - ivp/ETH Zurich/University of Twente/thyssenkrupp Steel Europe AG	Switzerland	Analysis of yield locus description on springback behavior of CR700Y980T-DP steel
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Gutknecht, F.	1302	155	Const-I	F. Gutknecht, G. Gerstein, H. Traphöner, T. Clausmeyer, F. Nürnberger	TU Dortmund University/Leibniz Universität Hannover	Germany	Experimental setup to characterize flow-induced anisotropy of sheet metals
Habibi, N.	802	063	EF-I	N. Habibi, F. Pütz, M. Könemann, V. Brinzel, S. Münstermann, M. Feistle, W. Volk	RWTH-Aachen University/TU Munich	Germany	Numerical quantification of damage accumulation resulting from blanking in multi-phase steel
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Hartmann, B.	1207	157	SB-II	A. Birkert, B. Hartmann, M. Scholle, M. Straub	Hochschule Heilbronn, Zentrum für Umformtechnik und Karosseriebau/inigence gmbh	Germany	Optimization of the process robustness of the stamping of complex body parts with regard to dimensional accuracy
Haufe, A.	603	180	Crash-I	A. Haufe, T. Erhart, F. Andrade, T. Willmann, M. Bischoff	DYNAmore GmbH/Universität Stuttgart	Germany	Remarks on constitutive and structural modelling of small radii in sheet metal and crashworthiness simulation
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Henn, P.	604	113	Crash-II	P. Henn, M. Liewald, M. Sindel	University of Stuttgart/AUDI AG	Germany	Investigation on crashworthiness characterisation of 6xxx-series aluminium sheet alloys based on local ductility criteria and edge compression tests
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Huang, L.	303	006	Form-I	L. Huang, M.F. Shi	United States Steel Corporation	USA	Development of a New Index to Depict the Total Forming Capacity of Sheet Metals
Jain, M.	813	145	EF-IV	P. Zhang, M.K. Jain, R.K. Mishra	McMaster University/General Motors Research and Development Center	Canada/USA	Study of Trimming Behavior of Automotive AZ31 and ZEK100 Sheet Materials
Jain, M.	518	144	WF-V	G. Zhou, M. K. Jain, D. Li, R. S. Mishra	McMaster University/Shanghai Jiao Tong University/General Motors Research and Development Center	Canada/China/USA	Standard and Strain Path Change Forming Limit Diagrams of AZ31B Magnesium Sheet at Elevated Temperatures
Jiang, K.	1204	085	SB-I	K. Jiang, Y. Hou, J. Lin, J. Min	Tongji University	China	A springback energy based method of springback prediction for complex automotive parts
Jurendic, S.	504	120	WF-I	S. Jurendic, Z. Liang, M. Fumeaux, R. Burrows	Novelis Deutschland GmbH/Novelis Switzerland SA/Novelis Global R & T Center	Germany/Switzerland/USA	Modelling of the Pre-Strain Dependent Age Hardening Response in AA6000 Series Aluminium Alloys
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Kim, H.	524	190	WF-III	H. Kim, R. Hahnlen, C. Du, D. Zhou, J. Singh, P. Oberhauser, M. Austin, A. Samant, Y. Demiralp, V. Tunga	EWI Forming Center/Honda R&D Americas/Fiat Chrysler Automobiles/AMAG rolling GmbH/American Tooling Center/KTH Parts Industries Inc/AutoForm Engineering/ESI North America	USA	Design Guidelines for Warm Forming of High-Strength Aluminum Alloys (Oral Only)
Kim, H.	515	124	WF-IV	H. Kim, R. Hahnlen, T. Feister, V. Tunga	EWI Forming Center/Honda R&D Americas/KTH Parts Industries/ESI North America	USA	Comparison of Drawability between Warm Forming and Cold Forming of Aluminum 6xxx Alloys
Kim, J.	1009	096	Trib-II	J. Kim, J.W. Yoon, B. Lee, J. Kim, J. Park	Korea Advanced Institute of Science and Technology/Deakin University/LG Electronics	Korea	Scratch Modeling of Paint Coated Sheet Metal for Multi-Stage Deep Drawing Process
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Kurukuri, S.	517	032	WF-V	S. Kurukuri, M. Boba, C. Butcher, M. Worswick, R. Mishra	University of Waterloo/General Motors	Canada/USA	Cylindrical Cup Deep Drawing of ZEK100 Sheet at Elevated Temperatures
Laurent, H.	503	072	WF-I	H. Laurent, V.M. Simões, M.C. Oliveira, L.F. Menezes	Univ. Bretagne Sud/University of Coimbra	France/Portugal	The influence of warm forming conditions on the natural aging and springback of a 6016-T4 aluminum alloy
Lee, E.-H.	511	183	WF-III	E.-H. Lee, S. Ko	Handong Global University/Hyundai Motor Company	Korea	A study on forming process of AA5083 alloy with infrared local heat treatment
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M. Mohamed	523	189	WF-VI	M. Mohamed, D. Norman, A. Petre, F. Melotti, D. Szegda	Impression Technologies	United Kingdom	Advances in FEM simulation of HFQ®AA6082 tailor welded blanks for automotive applications
Madrid, M.	213	025	Frac-III	M. Madrid, C.J. Van Tyne, S. Sriram, E.J. Pavlina, J. Hu, K.D. Clarke	Colorado School of Mines/Virginia Tech/ArcelorMittal/AK Steel Research and Innovation Center	USA	The Fracture Resistance of Dual-Phase and Q&P Sheet Steels in Tension
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Meirson, G.	903	187	Hyb/Comp	G. Meirson, V. Ugresic, A. Hrymak, F. Henning	Fraunhofer Project Centre/University of Western Ontario/Fraunhofer ICT Germany	Canada/Germany	HP-RTM/LCM as a viable option to replace vehicle metal structure components (Oral only)
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Mohr, D.	203	175	Frac-I	M.B. Gorji, D. Mohr	Massachusetts Institute of Technology/Swiss Federal Institute of Technology (ETH)	USA/Switzerland	On the Potential of Machine Learning Algorithms to Predict the Plasticity and Fracture Response of Sheet Metal (Oral only)
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Nagano, C.	1307	147	Const-II	C. Nagano, T. Kuwabara, Y. Shimada, R. Kawamura	Tokyo University of Agriculture and Technology/Honda Engineering Co	Japan	Measurement of Differential Hardening under Biaxial Stress of Pure Titanium Sheet
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Narasimhan, K.	104	097	PHS-I	V. Sarawagi, S. Narkhede, A.K. Singh, K. Narasimhan	Indian Institute of Technology Bombay	India	Formability studies on 22MnB5 steel during hot stamping process
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Noder, J.	502	005	WF-I	J. Noder, A. Abedini, T. Rahman, S. DiCecco, C. Butcher, M. Worswick	University of Waterloo	Canada	An Experimental and Numerical Investigation of Non-isothermal Cup Drawing of a 7XXX-T76 Aluminum Alloy Sheet
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Penter, L.	105	011	PHS-II	L. Penter, S. Ihlenfeldt, N. Pierschel	TU Dresden/Fraunhofer Institute for Machine Tools and Forming Technology	Germany	Compensation for tool deformation and expansion in virtual try-outs of hot stamping tools
Pfeffer, C.	101	110	PHS-I	B.-A. Behrens, S. Hübner, C. Sunderkötter, L. Gebel, S. Gnaß, G. Berndt, C. Trimborn, C. Pfeffer	Leibniz Universität Hannover/Volkswagen	Germany	Influence of process parameters on the hot stamping of carbon-martensitic chromium steel sheets
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Raghavan. K.S.	211	013	Frac-III	K.S. Raghavan, J. Hu	AK Steel Corporation	USA	Strain Rate and Orientation Effects on Fracture Strain Limits in Advanced High Strength Steel
Riemer, M.	902	007	Hyb/Comp	M. Riemer, R. Kießling, R. Müller, W.-G. Drossel, D. Landgrebe, J. Ihlemann	Fraunhofer Institute for Machine Tools and Forming Technology IWU/Chemnitz University of Technology	Germany	On the development of a finite element model to analyze the behavior of hybrid composites considering the manufacturing history
Rosenschon, M.	1301	029	Const-I	M. Rosenschon, M. Merklein	Friedrich-Alexander-Universität Erlangen-Nürnberg	Germany	Analysis of the stress- and directional-dependent Bauschinger-effect of sheet metals
Roth, C.	605	174	Crash-II	C.C. Roth, X. Li, D. Mohr	Swiss Federal Institute of Technology (ETH)	Switzerland	Temperature and Strain Rate Dependent Plasticity of Advanced High Strength Steel: Experiments and Modeling (Oral only)
Samadian, P.	212	181	Frac-III	P. Samadian, M.J. Worswick, M.A. Wells	University of Waterloo	Canada	Failure Characterization of Multi-Alloy and Multi-Gauge Hot-Stamped Tailor-Welded Blanks
Sarraf, I.S.	1304	133	Const-I	I.S. Sarraf, D.E. Green	University of Windsor	Canada	A numerical method to predict the rate-sensitive hardening behaviour of sheet materials using uniaxial and biaxial flow curves
Sarraf, I.S.	1306	134	Const-II	I.S. Sarraf, D.E. Green	University of Windsor	Canada	Prediction of DP600 and TRIP780 yield loci using Yoshida anisotropic yield function
Schneider, M.	415	166	Proc-V	M. Schneider, M. Liewald	University of Stuttgart	Germany	Development of a Folding Tool for Miuri-Structures
Senn, S.	817	116	EF-IV	S. Senn and M. Liewald	University of Stuttgart	Germany	Numerical investigation of piercing of DP600 within a critical range of slant angle
Shafiei, M.	1008	031	Trib-I	M. Shafiei, D.J. Zhou, D. Young, D. Adamski	Novelis Global Research & Technology Center/Fiat Chrysler Automobiles/Ford Motor Company/General Motors Technical Center	USA	Wear and Galling Behavior of Coated Tools Used in Pierce Punching of Automotive Aluminum Sheet (Oral only)
Shanbhag, V.	1006	009	Trib-II	V.V. Shanbhag, B.F. Rolfe, Arunachalam N., M.P. Pereira	Deakin University/IIT Madras	Australia/India	Understanding the source of acoustic emission signals during the wear of stamping tools
Shawk, A.	812	131	EF-III	A. Shawk, P. Lu, P. Vedanti, X. Wu	Wayne State University/Al-Furat Al-Awsat Technical University	USA/Iraq	Topological Characterization of Machined Edges Prepared by Different Cutting Methods, and Edge Evolution in Tensile Deformation
Shuto, H.	1103	091	AHSS-I	H. Shuto, Y. Ito, D. Maeda, T. Yokoi	Nippon Steel & Sumitomo Metal Corporation	Japan	Development of High Strength Steels with High Press Formability and Fatigue Property
Sigvant, M.	1001	073	Trib-I	M. Sigvant, J. Pilthammar, J. Hol, J.H. Wiebenga, T. Chezan, B. Carleer, A.H. van den Boogaard	Volvo Cars/Blekinge Institute of Technology/TriboForm Engineering/Tata Steel/AutoForm Engineering/University of Twente	Sweden/Netherlands	Friction in sheet metal forming simulations: Introduction of new sheet metal coatings and lubricants
Sriram, S.	1105	172	AHSS-II	S. Sriram, G. Huang, N. Pottore, H. Ghassemi-Armaki	ArcelorMittal Global R&D East Chicago	USA	Effect of Al addition on the formability of uncoated commercial DP1180 Steel Products
Sriram, S.	1002	173	Trib-I	S. Sriram, V. Krishnardula, H. Hahn	ArcelorMittal Global R&D East Chicago	USA	Influence of delta phase morphology in galvanized coated steels on formability
Tabata, R.	310	083	Form-III	R.Tabata, J.Nitta, S.Yonemura, M.Mizumura, S.Hiwatashi	Nippon Steel & Sumitomo Metal Corporation	Japan	An Application of Non-Uniform Stretch Flanging Theory to Edge-Crack-Avoidable Product Design

Tatipala, S.	402	117	Proc-I	S. Tatipala, J. Pilthammar, M. Sigvant, J. Wall, C.M. Johansson	Blekinge Institute of Technology/Volvo Cars	Sweden	Introductory study of sheet metal forming simulations to evaluate process robustness
Tawk, J.	110	149	PHS-III	B. Dvorak, J.J. Tawk, T. Vít	BENTELER Mechanical Engineering GmbH/BENTELER Maschinenbau GmbH/Technical University of Liberec	Czech Republic/Germany	Advanced Design for Continuous Roller Furnace for Hot Forming Line
Thuillier, S.	306	135	Form-II	D. Hérault, S. Thuillier, P.Y. Manach, J.L. Duval	Univ. Bretagne Sud/ESI Group	France	Strain Path Changes in Reverse Redrawing of DP Steels
Tisza, M.	520	146	WF-VI	M. Tisza, Z. Lukács	University of Miskolc	Hungary	High strength aluminum alloys in car manufacturing
Trudel-Boucher, D.	901	170	Hyb/Comp	D. Trudel-Boucher, M. Champagne	National Research Council Canada	Canada	Stamping of high performance thermoplastic composite intrusion beams
Tummers, M.	606	004	Crash-II	M.Tummers, K.Omer, A.Abedini, C.Peister, C.Butcher, M.J.Worswick, S.Malcom, C.Yau, R.Soldaad	University of Waterloo	Canada	Introduction of a 1000 MPA crush tip within a Usibor 1500-AS axial crush rail using in-die heated hot stamping
van Beeck, J.	1004	041	Trib-II	J. van Beeck, T. Chezan, T. Khandeparkar	Tata Steel	Netherlands	Advanced tribomechanical modelling of sheet metal forming for the automotive industry
van Tyne, C.	808	028	EF-III	B. Goshert, O.R. Terrazas, D.K. Matlock, C.J. Van Tyne	Colorado School of Mines/ATI Specialty Materials	USA	Sample Edge Effects on Tensile Properties and Sheet Formability
Verma, M.	109	052	PHS-III	H. Yan, M. Di Ciano, M. Verma, K.J. Daun	University of Waterloo	Canada	Intercritical Annealing of 22MnB5 for Hot Forming Die Quenching
Vogt, H.	513	040	WF-IV	B.-A. Behrens, S. Hübner, H. Vogt	Leibniz Universität Hannover	Germany	Formability of 7000 aluminum alloys in warm and hot forming condition
Wagner, L.	201	014	Frac-I	L. Wagner, P. Larour	Voestalpine Stahl GmbH – R&D – Forming Technologies	Austria	Influence of specimen geometry on measures of local fracture strain obtained from uniaxial tensile tests of AHSS sheets
Wang, Y.-W.	1201	055	SB-I	Y. Jia, C. Pu, F. Zhu, K. Schmid, Y.-W. Wang	AK Steel Corporation/General Motors Corporation	USA	A New Hybrid Bead with Post-stretching Method to Effectively Control Spring-back for Advanced High Strength Steels
Wiklund, D.	1005	118	Trib-I	D. Wiklund and M. Larsson	Swerea IVF/University West	Sweden	Phenomenological friction model in deep drawing of aluminum sheet metals
Williams, B.	516	032	WF-V	B.W. Williams, J. McKinley, K.P. Boyle, L. Blaga, S. Kurukuri, M.J. Worswick	Canmet Materials/ University of Waterloo	Canada	Warm Forming Response of ZEK100 Sheet obtained under Biaxial Stretching with Full-Field Displacement Measurements
Woelke, P.	208	162	Frac-II	P.B. Woelke, J.G. Londono, L.O. Knoerr, J.Dykeman, S. Malcolm	Thornton Tomasetti/Thyssenkrupp Steel NA/Honda R&D Americas, Inc.	USA	Fundamental Differences between Fracture Behavior of Thin Sheets under Plane Strain Bending and Tension
Wu, X.	806	132	EF-II	A. Al-Shawk, X. Wu, Q. Yang	Wayne State University/AI-Furat Al-Awsat Technical University	USA/Iraq	Trim Die Damage and “Self-Reconditioning” Effect on Trimmed Edge of Sheet Metal Blanks
Xu, L.	1107	076	AHSS-II	L. Xu, H. Wu, Y. Chen	University of Science and Technology Beijing	China	Interpretation of the abnormal high-temperature flow behavior of Fe-Mn-Al duplex lightweight steel
Xu, Y.	410	084	Proc-III	B. Zhou, Y. Xu	Harbin Institute of Technology	China	Alloy Curved Sheet Parts with Large Unsupported Area
Yakubtsov, I.	108	049	PHS-III	I. Yakubtsov, R. Sohmshetty	Ford Research & Innovation Center	USA	Evolution of Al-Si Coating Microstructure during Heat-Treatment of Usibor 1500
Yan, H.	103	053	PHS-I	H. Yan, M. Di Ciano, M. Verma, K.J. Daun	University of Waterloo	Canada	Intercritical Annealing of 22MnB5 for Hot Forming Die Quenching
Yuan, W.	316	087	Form-IV	W. Yuan, M. Wan, X. Wu	Beihang University	China	Experimental Investigation of Forming Limit Curve for AA5754-O
Zhang, Q.	514	064	WF-IV	Q. Zhang, X. Luan, S. Dhawan, D.J. Politis, Z. Cai, L. Wang	Imperial College London	UK	Investigating the Quench Sensitivity of High Strength AA6082 Aluminum Alloy during the New FAST Forming Process
Zhang, S.-H.	405	160	Proc-II	S.-H. Zhang, Y. Ma, Y. Xu, A.A. El-Aty, D. Chen, Y.-L. Shang, A.I. Pokrovsky	Chinese Academy of Sciences (CAS)/Dalian University of Technology/National Academy of Sciences of Belarus	China/Belarus	Effect of Impact Hydroforming Loads on the Formability of AA5A06 Sheet Metal