

Curriculum Vitae

Adj. Prof. Alf Andersson

Identification number: 690119-2713

Address:

Home:

Fläderbärsvägen 17
293 41 Olofström
Tel: 0454-42056

Work:

Volvo Cars Corp.
Dept. 81280
SE-293 80 Olofström
Tel:0454 265280
e-mail: aander58@volvocars.com

Marital status:

Married with Pernilla and we have two daughters, Klara ten year and Ida three year.

Current employment

Tech. Area Leader Total Vehicle Geometry (TVG) , Volvo Cars Corp.

Education

- Adjunct Professor, Product and Production Development, Chalmers University 2010
- Associate Professor, Production and Materials Engineering, Lund University 2008
- Ph.D., Production and Materials Engineering, Lund University 2004
- Tekn Lic., Production and Materials Engineering, Lund University 2001
- Participated in following Ph.D.-programs: 2004
 - Volvo Cars Ph.D. program
 - Proviking
 - PROPER
- Master of Science degree, Mech. Eng. Luleå University 1994
- Upper-secondary school, Mech.. Eng., Sunnerboskolan, Ljungby 1988
- Nine-year school, Astradskolan, Ljungby 1985

Languages

- Swedish: Native language.
- English: Speak, understand and write fluently.
- German: Speak, write , and understand.

Competence:

- Worked as project leader for Volvo Cars Corp. within several large international/national research projects (3DS, DFE, PROPER, ProViking, FFI)
- Project leader for R&D-projects within Volvo Cars Corp.
- Supervisor for seven Master Thesis
- Industrial supervisor for a PhD-candidate

Qualities:

Analytic, Structured, Methodical, Calm, Careful, Communicative, independent, Easy for collaborate, Pedagogic, Positive

Contacts:

- Volvo Cars Corp. Body Components – contacts within many areas
- Volvo Cars Corp. - Mainly within R&D and Geometry assurance
- Ford of Europe, Sheet-metal-forming simulation
- Ford, Sheet-metal-forming simulation
- Universities in Sweden (Lund, Chalmers, Linköping, Luleå and Halmstad)
- Via above mentioned international research projects, I have many contacts with R&D with the automotive industry world wide.
- VDI-Gesellschaft Produktionstechnik (Verein Fur Deutscher Ingenieure) – former member in "AK-Simulation im Werkzeugbau"
- TMS (The Minerals, Metals, & Materials Society) – member in "Shaping and Forming Committee"
- Adjunct member in the board of the Production Academy
- Member in "Näringslivsrådet" (coordinator) in "Kungliga IngenjörsvetenskapsAkademin (IVA)"
- Member in "IndustriForskarGruppen (IFG)" in "Kungliga IngenjörsvetenskapsAkademin (IVA)"

Previous employment

- Test Engineer, SAAB Automobile 1994
- Simulation Engineer, Volvo Cars Corp. 1995
- R&D Engineer, Sheet-metal-forming simulation, Volvo Cars Corp. 1996

Commissions of trust

- Chairman of examination board for PhD-dissertation 2011

Assignment as reviewer for following international journals:

- Journal of Materials Processing Technology
- Journal of Engineering Manufacture
- International Journal of Material Forming

Received Awards

- Henry Ford Technology Award 2007
- European Technology Award 2006
- VCBC Quality Award 2007
- VCBC Quality Award 2006

Published articles in international journals and at international conferences:

- [1] Vahlund F. and Andersson A., Simulering av formpressning för fordonskomponenter i GMT, Plast Nordica nr. 3 1999
- [2] Andersson. A., Ohlsson. C-A., Mattiasson. K. and Persson.B., 1999, Implementation and Evaluation of the Karafillis-Boyce Material Model for Anisotropic Metal Sheets, Numisheet 1999, Besancon, France
- [3] Andersson A., Användning av formningssimulering vid design av formningsverktyg, Verkstäderna nr. 5, 2001
- [4] Andersson A., 2001, Information Exchange within the area of tool design and sheet-metal-forming simulations, Journal of Engineering Design, Vol. 12 No. 4, pp283-291.
- [5] Andersson A. and Hertzman J., 2001, Evaluation and comparison of surface defects on a simplified model for the area around the fuel filler lid by simulation and experiments Numiform 2001, Toyohashi, Japan
- [6] Andersson A., 2001, Use of FE-analysis in predicting and verifying the design of an automotive component forming process, with special regards to macro geometric defects, Lic thesis, 2001, Lund University, Sweden
- [7] Andersson A. and Holmberg S., 2002, Simulation and verification of different parameters effect on springback results, Numisheet 2002, Jeju Island, Korea
- [8] Andersson A., 2004, Comparison of sheet-metal forming simulation and try-out tools in the design of a forming tool, Journal of Engineering Design, Vol. 15 No. 6, pp551-561.
- [9] Andersson A., 2004, Macro-Geometric Defects – A numerical and experimental study of springback and surface defects, Ph.D thesis, Lund University, Sweden
- [10] Axelsson B. and Andersson A., 2005, Virtual pre-matching, IDDRG 2005, Besancon, France
- [11] Andersson A., 2005, Evaluation and Visualisation of Surface Defects – a Numerical and Experimental Study on Sheet-Metal Parts, Numisheet 2005, Detroit, MI, USA.
- [12] Andersson A., 2005, Numerical and experimental evaluation of springback in a front side member, Journal of Materials Processing Technology, Vol 169, pp 352-356.
- [13] Jansson, T., Andersson A., and Nilsson L., 2005, Optimization of draw-in for an automotive sheet metal part. An evaluation using surrogate models and response surfaces, Journal of Materials Processing Technology, Vol 159, pp 426-434.
- [14] Wiklund D., Nilsson, L., Nilsson, B., Andersson, A., Rosén, B-G., Gunnarsson, L., 2006, Implementation and evaluation of a roughness based friction model in FE simulations of sheet metal forming, the 12th Nordic symposium on tribology 7-9/6 2006, Helsingör, Denmark
- [15] Andersson, A., 2006, Simulation of springback in TRIP- and stainless steel, Materials Science and Technology 2006 conference and exhibition, Cincinnati, USA

- [16] Andersson, A. and Thilderkvist P., Failure analysis with a new tool geometry, X-die, in areas with high tension-compression strains, Accepted for publication at Numiform 2007, Porto, Portugal.
- [17] Andersson A., 2007, Numerical and Experimental Evaluation of Springback in Advanced High Strength Steel, Journal of Materials Engineering and Performance, Vol 16 No 3.
- [18] Andersson A., Wiklund, D., Cedell, T., Moshfegh R., Rosén B-G., Ståhl J-E., Nilsson L., Thilderkvist P., and Nilsson B., 2007, Flex-rail – a semi industrial test tool for various applications such as: Springback analysis, FE-model verification, Friction analysis, Analysis of in-process heating and process optimization, Swedish Production Symposium, Gothenburg, Sweden.
- [19] Andersson A., 2007, Springback analysis in Advanced High Strength Steel using a new flexible semi-industrial tool geometry, the flex-rail, 6th European LS-DYNA users´ Conference, May 29th-30th, Gothenburg, Sweden.
- [20] Andersson, A. and Sigvant M., 2007, Numerical evaluation of material models using a new tool geometry, X-die, International Deep Drawing Research Group (IDDRG), Olofström, Sweden.
- [21] Andersson, A., Thilderkvist, P., Liljengren, M., 2008, Experimental evaluation of high compression-tension strains in a new tool geometry, X-Die, Journal of Material Processing Technology, vol 200.
- [22] Cedell, T. and Andersson A., Evaluation of experimental set-up for determination of strain-induced phase transformation from austenite to martensite for TRIP steels, submitted to of Material Processing Technology, January, 2008
- [23] Andersson A, 2009, Evaluation and visualisation of surface defects on auto-body panels, Journal of Materials Processing Technology, Vol 209 No 2, pp. 821-837.
- [23] Ohlsson E., Funk P., and Andersson A., 2010, Case-Based Reasoning Applied to Geometric Production Measurements, International Journal of Systems Assurance Engineering and Management, No 13198
- [24] Govik A., Nilsson L., Andersson A., and Moshfegh R., 2011, Simulation of the forming and assembling process of a sheet metal assembly, Swedish Production Symposium 2011, Lund, Sweden
- [25] Lindau B., Andersson A., Lindkvist L., and Söderberg R., 2012, Using Forming Simulation Results In Virtual Assembly Analysis, ASME 2012 International Mechanical Engineering Congress & Exposition, Houston, USA
- [26] Lindau B., Andersson A., Lindkvist L., and Söderberg R., 2012, Body in White Geometry Measurements of Non-Rigid Components: a Virtual Perspective, ASME 17th Design for Manufacturing and Life CycleConference, Chicago, USA.
- [27] Lindau B., Andersson A., Lindkvist L., and Söderberg R., 2012, Statistical shape modeling in virtual assembly using PCA-technique, 4th CIRP Conference on Assembly Technologies And Systems, Ann Arbor, USA.

Invited speaker at international conferences:

- [P1] Andersson A. Experiences regarding springback in HSS: Simulation versus experiments, 2nd European Practice Conference – Variant-flexible steel forming in automotive production, Bad Nauheim/Frankfurt, Germany, 2002
- [P2] Andersson A., Analysis of surface defects - Coupling numerical and experimental analysis in sheet-metal parts, 6th European Automotive Conference, Bad Nauheim/Frankfurt, Germany, 2005
- [P3] Andersson A., Springback prediction and it's usefulness in an industrial perspective, Materials Science and Technology 2005 conference and exhibition, Pittsburg, USA, 2005
- [P4] Andersson A., New methods for improving the accuracy in sheet-metal-forming simulations, 9th European Automotive Conference, Bad Nauheim/Frankfurt, Germany, 2008

Best regards,

Alf Andersson