

**Federico Valente (M)**, master's degree in Electronic Engineering from the Polytechnic of Turin in 1994; MBA (Master of Business administration) with honour in 2015 at the school SAA of the University of Turin; he started working in 1994 at the Department of Physics Institute and at the Centro Ricerche Fiat, where he was involved in FEM analysis of forming processes, development of software and CAE methodologies, design and calculation of components made with innovative materials and technologies. From 2000 to 2013, he worked at the "Stamping" and "Wheel" Division of CLN Group, a supplier of sheet metal parts in the automotive sector, where he had responsibility for the activity of finite element calculation and management of product development projects, subsequently R&D and industrialization, technology management at the corporate level. He had worked on methods for quality management and continuous improvement, leading cross-functional teams on these issues. Since June 2013, he is responsible for the administrative and technical direction of "ITACAe", of which is co-founder and legal representative. He directly follows technical activities related to computer programming (fortran) and software engineering (research, design, develop and test operating systems-level software, compilers, and network distribution software). During the R&D activity, he followed several National European projects (DIGIMAN, ECOSTAMP, INT-PULS-FORM, HI-FLOW). Since April 2016, he is in the Board of AITA (Italian Association Additive Technologies). In the course of 2015 and 2016 he was appointed as an expert for the evaluation of RIA projects financed by the European Commission under the H2020 calls. In 2016 he obtained the "Green Belt Six Sigma" certification (DMAIC methodology) and in 2017 the "Black Belt Six Sigma" certification (DFSS methodology), issued by Ing. Pier Giorgio DELLA ROLE, Six Sigma Program Trainer & Master Black Belt. Training is some of the main activities carried out professionally. Among some of the most recent courses for which he was appointed teacher: "CAD 3D Solid Modeling", in 2014; "CAD 3D (Solid Modeling)", in 2015, "Finite element design and analysis methodologies" in 2016, "Design for Six Sigma" in 2017.

## Bibliography

- Demichelis F., Pirri C.F., Tresso E., Valente F., Bolzan E., Rigato V., “Deposition and Characterisation of  $\alpha$ -SiC:H Thin Films”, *Proceedings of “European Optical Society and International Society for Optical Engineering”*, vol. 2253 “Optical Interference Coatings”, Grenoble, France pages 539 – 550, 06-10 June 1994.
- Valente F. “Springback Calculation Methodology for Tools Corrections with Abaqus”, *Presentation at the National Abaqus Users’ meeting*, Milan, Italy, 1996.
- Valente F., Li X. & Messina A., “Springback Prediction for Stamping Tools Compensation by Numerical Simulation”, *Proceedings of the 5th International Conference on Computational Plasticity (COMPLAS V)*, Barcelona, Spain, vol. 2, pages 1431-1438, 17-20 March 1997.
- Valente F. & Roux F., “Nuovi Strumenti per la Riduzione di Costi e Time-to-Market (TTM): lo Stampaggio Virtuale”, *Modelform – Metalform ’97*, Turin, Italy, 2 October 1997.
- Valente F., Li X., Messina A., Properzi M. & Menin R., “A New Methodology for Improving Accuracy of Structural Analysis of Car Body Parts”, *Proceedings of the International Body Engineering Conference (IBEC) ’98*, Detroit, Michigan (USA), 29 September – 1 October 1998.
- Valente F. & Traversa D., “Springback Calculation of Sheet Metal Parts After Trimming and Flanging”, *Proceedings of the 4th International Conference on Numerical Simulations of 3-D Sheet Metal Forming (NUMISHEET) ’99*, Besançon, France, 13-17 September 1999.
- Schwarz M., Valente F., Fazio M., Calderale P. M., “Notes on Wheel Locking”, *ATA Magazine*, n. 11/12, pages 459-499, Nov - Dec 1999.
- Di Pardo M., Micucci E. & Valente F., “Manufacturing Simulation for Space Frame Structures: a Comprehensive Approach for the Process Optimisation”, *Proceedings of ATA Conference on Advanced Methodologies for Automotive Product Design and Development*, Como, Italy, 23-24 March 2000 / publ. *ATA Magazine* n. 3/4, pages 100-104, Nov – Dec 1999.
- Albertini G., Fiori F., Girardin E., Giuliani A., Lorentzen T., Valente F., “Stresses in a Formed Steel”, *Proceedings of MECASENS 2000*, Reims, France, 13-14 December 2000.
- Valente F., “Ruolo dello Stampaggio Lamiera nel Ciclo di Sviluppo Prodotto nell’Industria dell’Automobile”, *lesson at the Politecnico of Turin*, 27 March 2002.
- Valente F. “Compensation of Springback of Sheet Metal Forming by Die Design”, *Proceedings of the International Conference on Accuracy in Forming Technology (ICAFT) 2003*, Chemnitz, Germany, 15 October 2003.
- Valente F., Placidi F., Porta R., Sciaboni C., Tomassoni C., “An Optimisation Procedure for Developing Multi-Performance Car Products”, *Proceedings of the NAFEMS' biennial world congress 2005*, St Julians, Malta, 17-20 May 2005.
- Finzi A., Valente F., “Potential Applications of New HSS Grades for Wheels”, *Proceedings of the International Conference “Super-High Strength Steels” 2005*, Rome, Italy, 2-4 November 2005.
- Valente F., “Lo sviluppo di uno strumento per l’analisi dello stampaggio lamiera”, *published on “Deformazione”*, nr. 128, pages 51-55, Jun 2006

- Pérez I., Santos M.T., Gutierrez M.Á., Valente F., Notargiacomo S., *“Simulation of the Flowforming Process Applied to Wheel Rims” Proceedings of the 7th International Conference “Numisheet” ‘2008, Interlaken, Switzerland, September 1- 5, 2008.*
- Placidi F., Rizzo L., Valente F., Coppola T., *“Localised Heat Treatment to Improve Free Design of Structural Steel Components”, Proceedings of the International Conference “New Developments of Super High Strength Steels” 2008, Buenos Aires, Argentina, May 2008.*
- Valente F., Rovarino D. F., *“A new methodology based on LS-DYNA for integrating product & process engineering of a steel wheel” Proceedings of the International CAE Conference 2013, Lazise, Italy, 21 – 22 October 2013.*
- Valente F., Scardino S., *“Blasting simulation using LS-DYNA for safer industrial equipment” Proceedings of the International CAE Conference 2014, Lazise, Italy, 27 – 28 October 2014.*
- Scardino S., Faga M., Valente F., Schiavi I., Lai, M., *“DFAM: Design For Additive Manufacturing of the case for a rugged pc for aeronautical applications”, Lazise, Italy, 19 – 20 October 2015.*