



Professor Magnus Langseth

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Biography:

Magnus Langseth is a Professor at the Department of Structural Engineering at NTNU. At the same time he is Director of SFI CASA – Centre for Research-based Innovation at NTNU for the period 2015-2023. Professor Langseth is a member of the Royal Norwegian Society of Sciences and Letters and the Norwegian Academy of Technical Sciences. He was awarded the "Médaille Albert Portevin", Société Française de Métallurgie et de Matériaux in 2005. In 2009 he was appointed Honorary Doctor at the Université de Valenciennes et du Hainaut-Cambrésis. He is the Editor-in-Chief of the International Journal of Impact Engineering and sits on the editorial boards of the Multidiscipline Modeling in Materials and Structures and Ships and Offshore Structures. Langseth graduated from the Norwegian Institute of Technology (NTH) in 1976 and worked for some years as a consulting engineer. In 1983 he went back to NTH (now NTNU) where he took his doctorate in 1988 and was appointed professor in 1995. He was the Director of SFI SIMLab from 2007-2014. SIMLab did research on the design of crashworthy and protective structures made from steel, aluminum and polymers. The follow-up SFI CASA does multiscale testing, modelling and analysis of materials and structures for industrial applications.

Research:

The research of Professor Langseth is primarily related to impact and crashworthiness of aluminum and high-strength steel structures as well as lightweight ballistic protection. Included here is the development of test

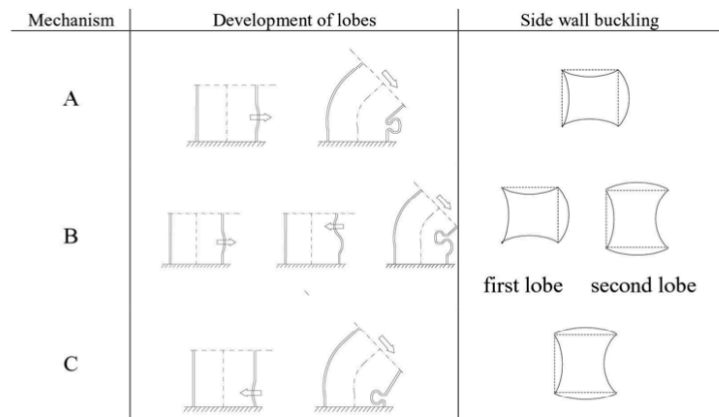


Figure 6 Deformation modes



Figure 7 Pictures from experiments and numerical analyses: s5-2.5 and s30-2.5

From: Reyes A., Langseth M. and Hopperstad O.S., Square aluminum tubes subjected to oblique loading, International Journal of Impact Engineering, (28), 1077–1106 (2003)

facilities for material testing at elevated rates of strain as well as facilities for impact and crashworthiness testing of components and structures.

Selected Publications:

- Langseth, T. Berstad, O.S. Hopperstad, and A.H. Clausen, "Energy absorption in axially loaded square thin-walled aluminium extrusions. In Madrid, Spain, Bulson, P.S. (Ed.), Southampton, UK: Computational Mechanics Publications, 1994, pp. 401–410.
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