

Fig. 4 Typical computed deformed profiles at different values of compression



Professor Pramod Kumar Gupta

See:

<http://www.iitr.ac.in/departments/CE/pages/People+Faculty+pkgupfce.html>

<https://scholar.google.com/citations?user=xX9wCQcAAAAJ&hl=en>

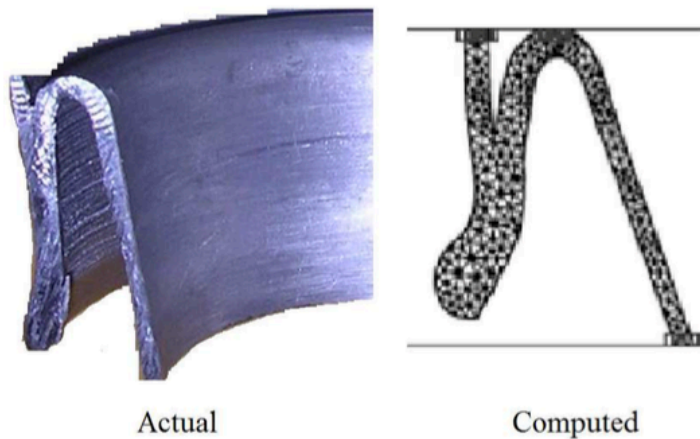


Fig. 5 Comparison of deformed shapes of specimen F5 after compression

From: P. K. Gupta, "A study on mode of collapse of metallic shells having combined tube-frusta geometry subjected to axial compression", World Academy of Science, Engineering and Technology, Vol. 5, 2012

Indian Institute of Technology Roorkee, India

Education:

2001 Ph.D.	Structural Mechanics	Indian Institute of Technology Delhi
1992 Master	Structural Engineering	R. D. University Jabalpur
1988 B.E.	Civil Engineering	G. G. D. University Bilaspur

Award:

2011 Endeavour Research Award Government of Australia

Selected Publications:

1. Gupta N. K., Sekhon, G. S. and Gupta P. K. "A study of fold formation in axisymmetric axial collapse of round tubes", *International Journal of Impact Engineering*, 27 (2002), pp. 87-117.
2. Gupta N. K., Sekhon, G. S. and Gupta P. K. "A study of lateral collapse of square and rectangular metallic tubes", *International Journal of Thin-Walled structures*, 39 (2001), pp. 745-772.
3. Sekhon, G. S., Gupta N. K. and Gupta P. K. "An analysis of external inversion of round tubes", *International Journal of Materials Processing Technology*, 133 (2003) pp 243-256.
4. Gupta N. K., Sekhon, G. S. and Gupta P. K. "Study of lateral compression of round metallic tubes", *International Journal of Thin-Walled structures*, 43 (2005) pp 895-922.
5. Gupta P. K. and Gupta N. K. "Multiple barreling in axial compression of cylindrical tubes ", *Latin American Journal of Solids and Structures*, 2 (2005) pp 195-217.
6. Gupta P. K. and Khapre R. N., "Finite Element Analysis of metal forming problems using parallel computing technique" *International Journal for Computational Methods in Engineering Sciences & Mechanics* 7:1-11, (2006).
7. Gupta P. K. and Gupta N. K. "Computational and experimental studies of crushing of metallic hemispherical shells" *Archive of Applied Mechanics* (2006) 76: 511–524.
8. Gupta P. K. and Gupta N. K. "An experimental and computational study of crushing of metallic hemispherical shells between two rigid flat platens" *Journal of Strain Analysis for Engg. Design* Vol. 41, No. 6, (2006) pp 453-466.
9. Gupta P. K., Sarda S. M. and Sampath Kumar M. "Experimental and Computational study of Concrete filled round tubular columns under axial loads" *Journal of Construction Steel research-An International Journal*, 63 (2007) 182–193.
10. Gupta P. K. "A study of axial compression of metallic thin walled conical shells", *International Journal of Thin-Walled structures*, 46 (2008) pp 561-571.
11. Gupta P. K. and Gupta N. K. "A study of axial compression of metallic hemispherical domes" *International Journal of Materials Processing Technology*, 209 (2009) pp 2175-2179.
12. P K Gupta "A Study on Mode of Collapse of Metallic Shells Having Combined Tube-Frusta Geometry Subjected to Axial Compression" *International Journal of Mechanical and Aerospace Engineering* 6 2012 pp 64-68.
13. P K Gupta "A study on inversion of metallic thin walled conical shells" *International Journal of Crashworthiness* 2011.
14. R R Sahu and P K Gupta "Studies on Geometrical Featured Metallic Shell Structures for Inward Inversion" *International Journal Of Civil Engineering And Technology (IJCIET)*, 3:2 2012 pp 251-264.
15. R R Sahu and P K Gupta "Comparative Large Deformations Studies on Circular Tubes" *International Journal of Civil and Structural Engineering* volume 3, no 2, 2012, doi:10.6088/ijcser.201203013035, Integrated publishing services, issn 0976 – 4399.

16. Sahu RR and Gupta PK (2013). Geometrical metallic shell behavior study under compression. *International Journal of Advanced Structural Engineering*. 5:5 2013 pp 1-12.
17. Sahu RR and Gupta PK (2013). Experimental and numerical studies on various section geometries for inward inversion. *International Journal of Scientific & Technology Research* volume 2, issue 2, February 2013, ISSN 2277-8616.
18. P K Gupta and N K Gupta "A study on axial compression of tubular metallic shells having combined tube-cone geometry" *Thin-Walled Structures* 62 (2013) 85–95.
19. P. K. Gupta, V. K. Verma, H. Singh, Z. Kubba and Nabam Ajay "Ductility and Energy Absorbing Capacity of Concrete Filled UPVC Tubes" *International Journal of Construction Materials and Structures* Volume 1, No. 1, April 2013 pp 1-10.
20. Gupta PK and Sahu RR (2013). "Inward Inversion Studies on the Stepped Shape Frusta" *Advances in Structural Engineering- International Journal* Vol. 16 No. 11 2013 pp. 1871-1884.
21. P K Gupta and R R Sahu "Experimental and numerical studies on the tube contraction using a conical-cylindrical die" *Journal of Strain Analysis and Design*, Volume 48 Issue 8 November 2013 pp. 482 - 493.
22. Sahu RR and Gupta PK (2013). "Blast Diffusion by Different Shapes of Vehicle Hull" *International Journal of Automotive Engineering and Technologies* Vol. 2, Issue 4, pp. 130 – 139, 2013.
23. G. Tiwari, M. A. Iqbal and P. K. Gupta "Influence of Target Convexity and Concavity on the Ballistic Limit of Thin Aluminum Plate against by Sharp Nosed Projectile" *International Journal of Engineering Research and Technology*. Volume 6, Number 3 (2013), pp. 365-372.
24. Gupta P. K. and Khapre R. N., "Cluster Computing in Finite Element Programing to Study the Large Deformation Problems" *International Journal of Innovation in Science and Mathematics* Volume 2, Issue 1, 2014, ISSN (Online): 2347–9051, pp. 53-60.
25. Sahu RR and Gupta PK "Studies on Geometrical Metallic Frusta for Inward Inversion by Finite Element Simulation" Accepted in press *International Journal of Computer Aided Engineering and Technology*.
26. PK Gupta, VK Verma Study of concrete-filled unplasticized poly-vinyl chloride tubes in marine environment *Proceedings of the Institution of Mechanical Engineers, Part M: Journal of Engineering for the Maritime Environment* (2014).
27. RR Sahu, PK Gupta Improvement of crush can configuration *International Journal of Crashworthiness* 19 (6), 600-612 (2014).
28. PK Gupta, AK Ahuja, ZA Khaudhair Modelling, verification and investigation of behaviour of circular CFST columns *Structural Concrete* 15 (3), 340-349 (2014).
29. PK Gupta Numerical Investigation of Process Parameters on External Inversion of Thin-Walled Tubes *Journal of Materials Engineering and Performance* 23 (8), 2905-2917 (2014).
30. PK Gupta, NK Gupta A study of different modes of collapse in metallic hemispherical shells resting on flat platen and compressed with hemispherical nosed indenter *International Journal of Solids and Structures* 51 (13), 2518-2528 (2014).
31. PK Gupta, SK Katariya Effect of cross-section on flexural capacity of square concrete-filled steel tube (CFST) beams *Int J Appl Eng Res* 9 (7), 783-789 (2014).
32. P.K. Gupta, V.K. Verma, Ziyad A. Khaudhair and Heaven Singh Effect of tube area on the behavior of concrete filled tubular columns *Computers and Concrete*, Vol.15, No.2 141-166 (2015).
33. MA Iqbal, G Tiwari, PK Gupta, P Bhargava Ballistic performance and energy absorption characteristics of thin aluminium plates *International Journal of Impact Engineering* 77, 1-15 (2015).
34. RR Sahu, PK Gupta **Blast Diffusion by Different Shapes of Domes** *Defence Science Journal* 65 (1), 77-82 (2015).
35. PK Gupta, SK Katariya Effect of Concrete Strength on Bending Capacity of Square and Rectangular CFST Elements *Advances in Structural Engineering*, 2117-2129 (2015).

