

PUBLICATIONS OF PROFESSOR B. CROSSLAND

1. 'On the Plastic Behaviour of Thick Tubes under Combined Torsion and Internal Pressure' 1953 - Journal of Mechanics and Physics of Solids, Vol. 2, p. 27. (with R. Hill).
2. 'Thread Inserts' 1954 - The Engineer, November 24th.
- ③ 'The Effect of Fluid Pressure on the Shear Properties of Alloy Steel' 1954 - Proceeding Institution of Mechanical Engineers, Vol. 168, p. 935.
4. 'An Apparatus for investigating the Film Lubrication of Plain Bearings' 1955 Bulletin of Mechanical Engineering Education, Vol. 1, part 4, p.37.
5. 'A Demonstration Dynamic Balancing Machine' 1955 - Bulletin of Mechanical Engineering Education, Vol. 1, part 6, p.28.
6. 'Vectorial and Analytical Solution for an Unsymmetrical Gyroscope' 1956 Bulletin of Mechanical Engineering Education, Vol. 1, part 7, p.23.
- ⑦ 'The Ultimate Strength of Thick-Walled Vessels subjected to Internal Pressure' 1955 - Engineering, Vol. 179, p.80 and 114. (with J. A. Bones).
8. 'Fatigue under Triaxial Stress: Development of a Testing Machine and Preliminary Results' 1956 - Proceedings of the Institution of Mechanical Engineers, Vol. 170, p.697 (with J.L.M. Morrison and J.S.C. Parry).
- ⑨ 'The Effect of Large Hydrostatic Pressures on the Torsional Fatigue Strength of an Alloy Steel' 1956 - International Conference on the Fatigue of Metals p.138.
10. 'Fatigue under Triaxial Stress: A Testing Machine and Preliminary Results' 1957 Engineering, Vol. 183, p.423 (with J.L.M. Morrison and J.S.C. Parry).
11. 'The Behaviour of Thick-Walled Steel Cylinders subjected to Internal Pressure' 1958 - Proceedings of the Institution of Mechanical Engineers, Vol. 172, p.777 (with J. A. Bones.)
12. 'The Plastic Flow and Fracture of a Brittle Material (Grey Cast Iron) with particular reference to the Effect of Fluid Pressure' 1958 - Proceedings of the Institution of Mechanical Engineers, Vol. 172, p.805 (with W.H. Dearden).
13. 'The Strength of Thick-Walled Cylinders' 1958 - Trans. of A.S.M.E. Series B, Vol. 81, p.95 (with S.M. Jorgensen and J. A. Bones).
- ⑭ 'The Effect of Hydrostatic Pressure on the Direct-Stress Fatigue Strength of an Alloy Steel' 1959 - Journal of Mechanical Engineering Science, Vol. 1, p.39 (with J.L.M. Morrison and D.J. White).
15. 'Fatigue Strength of Cylinders with Cross-Bores' 1959 - Journal of Mechanical Engineering Science, Vol. 1, p.207 (with J.L.M. Morrison and J.S.C. Parry).
16. 'The Strength of Thick Cylinders subjected to repeated Internal Pressure' 1960 Proceedings of the Institution of Mechanical Engineers, Vol. 174, p.95 (with J.L.M. Morrison and J.S.C. Parry).
17. 'Some Problems in the Design and Development of Equipment to withstand High Pressures' 1960 - Belfast Association of Engineers, 69th Session.
18. 'Behaviour of Compound Steel Cylinders subjected to Internal Pressure' 1961 Proceedings of the Institution of Mechanical Engineers, Vol. 175, p.1083 (with D.J. Burns.)
19. 'The Explosive Forming of Stainless Steel Dentures' 1963 - The Dental Practitioner, Vol. 13, p.413 (with G.A.S. Blair).
20. 'The Design of Thick-Walled Closed-Ended Cylinders based on Torsion Data' 1964 - Welding Research Council Bulletin No. 94.
21. 'An Introduction to Mechanics of Machines' published Longmans Green & Co. 1964 (with J.L.M. Morrison.)

22. 'Further Developments in the Explosive Forming of Stainless Steel Upper Dentures' 1964 - The Dental Practitioner, Vol. 14, p.499 (with A.S. Bahrani and G.A.S. Blair)
23. 'Mechanical Engineering Forerunner of Scientific Thought' 1963 - New Lecture Series No. 21, The Queen's University of Belfast.
24. 'Explosive Welding and Cladding: An Introductory Survey and Preliminary Results' 1964 - Proceedings of the Institution of Mechanical Engineers, Vol. 179, p.264 (with A. S. Bahrani).
25. 'New Techniques in the Forming of Stainless Steel Dentures' 1965 - A.S.T.M.E. Material Forming 65, Book 2 (with A.S. Bahrani and G.A.S. Blair).
26. 'Slow Rate Hydraulic Forming of Stainless Steel Dentures' 1965 - British Dental Journal, Vol. 118, p.425 (with A.S. Bahrani and G.A.S. Blair).
27. 'Low Endurance Fatigue Strength of Thick-Walled Cylinders: Development of a Testing Machine and Preliminary Results' 1965 - Proceedings of the Institution of Mechanical Engineers 1966, Vol. 180 (with B.A. Austin).
28. 'Torsion Testing Machines' 1966 - Proceedings of the Institution of Mechanical Engineers - Convention on Machines for Materials and Environmental Studies September 1965.
29. 'Equipment for Testing High Pressure Components' 1966 - Proceedings of the Institution of Mechanical Engineers - Convention on Machines for Materials and Environmental Studies September 1965 (with B.A. Austin).
30. 'Some Observations on Explosive Cladding and Welding' 1966 - Annual Conference of the A.S.T.M.E. (with A.S. Bahrani).
31. 'The Mechanics of Wave Formation of Explosive Welding' 1967 - Royal Society Proceedings, A, Vol. 296, p.123 (with A.S. Bahrani and T.J. Black).
32. 'Further Experiments on Explosive Welding and Cladding with particular reference to the Strength of the Bond' - 1966 - Applied Mechanics Convention 1966, paper 22, published by the Institution of Mechanical Engineers, Vol. 180, p.31 (with A.S. Bahrani).
33. 'Explosive Cladding' 1966 - Welding and Metal Fabrication 1966, Vol. 34, p.252 (with A.S. Bahrani).
34. 'Explosive Welding of Tubes to Tube-Plates' 1967 - Welding and Metal Fabrication Vol. 35, p.88 (with A.S. Bahrani, J.D. Williams and V. Shribman).
35. 'A review of Explosive Welding Research Carried out in the Queen's University of Belfast' - The First International Conference of the Centre for High Energy Forming, June 1967 (with A.S. Bahrani).
36. 'Fundamentals of Explosive Welding' 1 Contemporary Physics 1968 Vol. 9, p.71 (with A.S. Bahrani).
37. 'Explosives and Their Use in Engineering' Part I Vol. 16, p.41 - Part II Vol. 16. p.68 (with A.S. Bahrani.)
38. 'Creep of Thick-Walled Cylinders Subjected to Internal Pressure: Review of Literature. - Proceedings of the Institution of Mechanical Engineers 1967 Vol. 182 Part 3C, p.132 (with W. J. Skelton)
39. 'Creep of Thick-Walled Cylinders : Development of a Testing Machine and Preliminary Results' - Proceedings of the Institution of Mechanical Engineers 1967 - Vol. 182 Part 3C p.139 (with W.J. Skelton).
40. 'Results of High Sensitivity Tensile Creep Tests on a 0.19% Carbon Steel used for Thick-Walled Cylinder Creep Tests' - Proceedings of the Institution of Mechanical Engineers 1967, Vol. 182, Part 3C p.151, (with W.J. Skelton).

41. 'Correlation of Tension and Thick-Walled Cylinder Creep Based on Experimental Data' - Proceedings of the Institution of Mechanical Engineers 1967, Vol. 182 Part 3C, p.159 (with W.J. Skelton).
42. 'Effect of Varying Hardness on the Fatigue Strength of Thick-Walled Cross-Bore Cylinders of EN25' - Proceedings of the Institution of Mechanical Engineers 1967, Vol. 182, Part 3C p.106 (with W.J. Skelton).
43. 'High Pressure Intensifiers : Development of a Unit for Pressures of 200,000 lbf/in² and Possible Improvements in Design'. - Proceedings of the Institution of Mechanical Engineers 1967 - Vol. 182, Part 3C, p.175 (with W.J. Skelton and W.R.D. Wilson.)