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The influence of minimum stress on the fatigue life of non strain-crystallising elastomers

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THE INFLUENCE OF MINIMUM STRESS ON THE FATIGUE LIFE OF NON STRAIN-CRYSTALLISING ELASTOMERS

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by

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List of publications and conference contributions

1. T. Alshuth and F. Abraham, "Strategies to Predict Dynamic Properties of Elastomer Products", *DKT 2000*, Nürnberg, DKG, September (2000)

2. F. Abraham, T. Alshuth, S. Jerrams, Poster: "Dependence of Fatigue Life of Elastomers on Stress Amplitude and Prestress", *Kautschuk Herbst Kolloquium 2000*, Hannover, DIK, 6.-8. November (2000) 405

3. T. Alshuth, F. Abraham, M. Klüppel, J. Schramm, "Fatigue Life of Elastomers - Parameter Influence, Criteria and FE-Applications" *DKG*, Hannover, December (2000), no paper

4. T. Alshuth, F. Abraham, "Fatigue Properties of Elastomers – Parameter Dependence and Criteria", *Rubber Symposium of the Countries on the Danube*, Budapest, 26-28 April (2001)

5. F. Abraham, T. Alshuth, S. Jerrams, "The Dependence on Mean Stress and Stress Amplitude of the Fatigue Life of Elastomers", *IRC 2001*, Birmingham, IOM, 12-14 June (2001)

6. F. Abraham, T. Alshuth, S. Jerrams, "Parameter Dependence of the Fatigue Life of Elastomers ", Conference: *Service Life Prediction of Elastomer Components*, London, IOM, 15 October (2001)

7. T. Alshuth, F. Abraham, S. Jerrams, "Parameter Dependence of the Fatigue Properties of Elastomer Products ", *Meeting of the Rubber Division, American Chemical Society*, Cleveland, Ohio, 16-19 October (2001)

8. F. Abraham, T. Alshuth, S. Jerrams, "Parameter Dependence of the Fatigue Life of Elastomers", Book: *Service Life Prediction of Elastomer Components*, London, IOM, 15 October (2001), accepted for publication

9. S. J. Jerrams and F. Abraham, "Predicting fatigue in non strain-crystallising rubbers", *Rubber Compounders and Processors Forum,* Midlands Plastic and Rubbers Group, The Institute of Materials, Burton College, 17th October (2001)

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11. F. Abraham, T. Alshuth and S. Jerrams, "The Dependence on Mean Stress and Stress Amplitude of the Fatigue Life of EPDM Elastomers", *Plastics, Rubber and Composites*, Vol. 30, No. **9** (2001) 421

12. F. Abraham, T. Alshuth "Lebensdauer von SBR- und EPDM-Elastomeren in Abhängigkeit der Vorkraft und der Kraftamplitude", *DKG Bezirksgruppe Rheinland-Westfalen*, Bad Neuenahr-Ahrweiler, DKG, 20-21 März (2002)

13. F. Abraham, T. Alshuth, S. Jerrams, "Parameterabhängigkeit und Kriterien der Ermüdung von Elastomeren", *Fortbildungsseminar: Bruchmechanik und Lebensdauer von Elastomeren*, Hannover, DIK, 25-26 März (2002)

14. T. Alshuth, F. Abraham, "Ermüdung von Elastomerwerkstoffen, Belastungsabhängigkeit und Kriterien", *IV. Hamburger Dichtungstechnisches Kolloquium – Dynamische Dichtungen*, TU Hamburg-Harburg, 23-24 Mai (2002)

15. F. Abraham, T. Alshuth, S. Jerrams, "The Dependence on Minimum Stress and Stress Amplitude of the Fatigue Life of Non Strain Crystallising Elastomers", EUROMECH Colloquium 438: *Constitutive Equations for Polymer Microcomposites: On the Border of Mechanics and Chemistry*, Vienna, 15-17 July (2002)

16. F. Abraham, T. Alshuth, S. Jerrams, "The Effect of Minimum Stress and Stress Amplitude on the Fatigue Life of Non Strain Crystallising Elastomers", *1. International Conference on Materials & Tribology 2002 (MT2002)*, Dublin, 12-13 September (2002)

17. A. Tabacović, S. Jerrams, B. Bowe, F. Abraham, "Surface Flaws in Elastomers and the use of Surface Treatments", *1. International Conference on Materials & Tribology 2002 (MT2002)*, Dublin, 12-13 September (2002)

18. T. Alshuth, F. Abraham, "Fatigue of Elastomers – Damage Criteria, Parameters for FEA-Calculation", *Internationale Fachtagung: Polymerwerkstoffe 2002*, Halle (Saale), 25-27 September (2002)

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21. F. Abraham, T. Alshuth, S. Jerrams, "Ermüdungsbeständigkeit von Elastomeren – Einfluss der Spannungsamplitude und der Unterspannung Teil 2", *KGK Kautschuk Gummi Kunststoffe*, Nr. 12/2002, **55**. Jahrgang (2002) 674

22. T. Alshuth, F. Abraham, S. Jerrams, "Parameter Dependence of the Fatigue Properties of Elastomer Products", *Rubber Chemistry and Technology*, No.4, Vol. **75** (2002), 635