THE OUTSIDE JUDGMENT AND INTENTION FOR THE CREEP EXPERIMENTS IN INDUSTRIAL COMPANIES AND MAKERS

Tadashi KAWAMURA

1Ritsumeikan University, Ki-kyu-kai of Department of Mechanical Engineering, Main Office; 1-1-1, Noji-cho, Kusatsu city, Shiga prefecture, JAPAN, 525-8577

Keywords: Creep, Uniaxial, Multiaxial, Experiments

Abstract

In the industrial companies and makers, it is usually performed the uniaxial creep experiments for the creep experiments. The other hands, it is reported as the study’s results from the organizations which study for the multiaxial creep fatigue failure in the conservative and unconservative zones for the uniaxial creep experiments. If it considers for the worked loads to the structural bodies and parts in the actually, the evaluations of multiaxial creep is appropriated. In the industrial companies and makers, it is considered that the evaluations of the uniaxial creep is occupied mainly in order to be planed the maintenance and exchange for the structural bodies and parts.

1. Introduction

It almost have been worked the multiaxial stress and strain for the structural material in generally. Otherwise, it have been performed the uniaxial creep experiments for the mechanical properties experiments in the research sections in the companies and makers[1]. Case by case, it seems to be appropriated in the evaluations of products though the uniaxial creep experiments evaluate the shorter side or longer side of creep fatigue life for the multiaxial creep experiments.

The author1 of this technical report paper described to the review with the results of previous papers, publishes and so on.

2. Review

The author1 of this report paper describes the following views as the results of this technical report paper.

1) The evaluations with uniaxial creep experiments is selected in the industrial companies and products makers.

2) The multiaxial creep and/or fatigue experiments is essentially for the specialty studies universities and graduate schools in the engineering specialty fields rather than the research of companies and makers[2][3].
3. Conclusion
It was omitted the conclusion by the author\(^1\) of this report paper.

Appendix
It have shown the simple concept shapes from Figure1 to Figure3.

Figure1. The simply uniaxial tensil load and stress for the cylindriacal specimen.

Figure2. The mixed load and stress for the tension and torsion in the cylindrical specimen.
Figure 3. The simply torsion for the cylindrical specimen.

References