عنوان مقاله:

Numerical and Experimental Study on Cyclic Behavior of SS316 Stainless Steel under Strain Control Uniaxial Cyclic Loading

محل انتشار:

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نویسندگان:

Hamed Mehrabi - *Department of Mechanical Engineering, Shahrood University of Technology, Shahrood, Iran*
Corresponding Author

Mahmoud Shariati - *Department of Mechanical Engineering, Ferdowsi University of Mashhad, Mashhad, Iran*

خلاصه مقاله:

In this study, the cyclic behavior of SS316 stainless steel under strain control uniaxial cyclic loading is investigated experimentally and numerically at roomtemperature. The experimental tests were carried out by an INSTRON servo-hydraulic machine and ABAQUS software was considered for numerical simulation. Thesoftening or hardening behavior of the material under various loading condition as well as the effects ofRelaxation on asymmetric cyclic loading are studied.Moreover, the effects of mean strain and strain amplitude on low cycle fatigue of the material areinvestigated. The numerical results showed acceptable compatibility with experimental results in most cases. Therefore, the ABAQUS software could use to simulatethe cyclic behavior of SS316 stainless steel appropriately

کلمات کلیدی:

Cyclic Behavior, Hardening ، Softening,Numerical, Uniaxial cyclic loading