

三峡花岗岩在不同加载方式下的能耗特征

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摘要 采用RMT, MTS刚性伺服试验机, 研究了三峡工程中隔墩花岗岩在三点弯曲断裂、劈裂拉伸、三轴压缩及单轴抗压等4种加载方式下的能耗特征。试验表明, 在这4种方式中, 三点弯曲断裂破坏的能耗最小, 其次为劈裂拉伸、单轴抗压和三轴压缩。根据试验结果, 在岩石工程中可以选择合适的破岩方式及加固方式。

关键词 [岩石力学](#), [能耗](#), [三点弯曲](#), [劈裂拉伸](#), [三轴压缩](#), [单轴压缩](#), [三峡花岗岩](#), [伺服试验机](#)

分类号

ENERGY DISSIPATION PROPERTIES OF THREE GORGES GRANITE UNDER DIFFERENT LOADING MODES

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Abstract

In order to get the energy dissipation characters of Three Gorges granite under different loading modes, the complete procedure experiments of 3-point bending, Brazilian tension, uniaxial compression and triaxial compression are conducted with servo-controlled testing machines MTS and RMT. The energy dissipation of specimen under these 4 kinds of loading mode is calculated. According to experimental results, a 3-point bending specimen dissipates minimum energy, a Brazilian tension specimen dissipates much more energy than a 3-point bending specimen, and less than a uniaxial compression specimen, and a triaxial compression specimen dissipates maximum energy.

Key words [rock mechanics](#), [energy dissipation](#), [three-point bending](#), [Brazilian tension](#), [uniaxial compression](#), [triaxial compression](#), [Three Gorges granite](#), [servo-controlled testing machines](#)

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