

Two types of mylonitization in the Pankenushi gabbroic body of the Hidaka metamorphic belt, Hokkaido, Japan

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The Pankenushi gabbro mylonite in the Hidaka metamorphic belt, Hokkaido, Japan, is divided into two groups: granulite facies mylonites formed under high-temperature conditions (800-900C) and retrograded amphibolites facies mylonites occurred under low-temperature conditions (ca. 650C). The former make thick mylonite zones and are widely developed in the Pankenushi gabbroic body. The later make relatively narrow zones and are locally developed in the western part of the gabbroic body. In some areas, low-temperature mylonitic foliation cuts across high-temperature mylonitic foliation. The low-temperature mylonitization has been likely controlled by reaction softening and appearance of hydrous minerals.