

Metamorfny vývoj dolomitického mramoru z gréckeho ostrova Thassos

Metamorphic evolution of dolomitic marble from Thassos Island in Greece

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Abstract

Dolomitic marble from the Thassos Island in Greece consists of the Dol ± Cal + Tr ± Tlc + Srp retrograde mineral assemblage. The retrograde phase of metamorphism of the studied marble took place under the amphibolite facies conditions. The average calculated temperature of recrystallization of calcite reached $496 \pm 9^\circ\text{C}$, calculated according to the first calibration. Using the second calibration, the temperature range was estimated at $517 - 529^\circ\text{C}$ for a given pressure interval 300 - 350 MPa. The temperature $464 \pm 27^\circ\text{C}$ at a pressure of 350 ± 1 MPa was calculated from the retrograde univariant reactions intercept using THERMOCALC ver. 3.33.

Key words: geothermometry, tremolite, talc, dolomitic marble, Thassos, Greece

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