

## **AN INTRA-VARISCAN SUTURE ZONE IN THE BOHEMIAN MASSIF RECORDED BY HP(HT)METAMORPHISM IN OCEANIC/CONTINENTAL ROCK SEQUENCE.**

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Tectonic stack of lower ophiolite sequence was welded with continental intermediate rocks and mantle-derived intrusives at the base of the continental crust during subduction and shortening. This melange was subject to fluid-assisted eclogitization and thermal relaxation and exhumed during subsequent collision leading to decompressional melting and ductile deformation. Late orogenic collapse and Alpine tectonics resulted in faulting, hydration and retrogression of HP rocks. Mylonitic amphibolites mark tectonically weak domains and form the mantle of the basic stack. At present, a relic of this assemblage forms the core of the Mariánské Lázně Complex (MLC) between the Teplá-Barrandian Unit (TBU) and the Saxothuringian Zone in western Bohemian Massif. Two geochemically distinct groups of gabbroic rocks occur along the contact of MLC and TBU. The marginal part of TBU was never deeply buried; peak regional metamorphic grade corresponds to upper amphibolite-facies. The south-eastern part of MLC comprises a carbonate-bearing volcanosedimentary relic of marginal marine sequence, exposed to the same MP/MT metamorphism. The TBU gabbros might represent initial basic intrusions into the thinned continental crust during early continental rifting. Gabbroic rocks in the MLC to the NW, together with continental rocks, form the protolith of partly retrogressed eclogites and granulites. Occurrences of the juxtaposed high-grade ophiolite rocks and the relatively low-grade volcanosedimentary sequence with inverted metamorphic pattern in western Bohemia, parts of the Münchberg Massif, and the Erbsdorf Vohenstrauß Zone represent remnants of the originally continuous suture zone between the Saxothuringian Zone and the Teplá-Barrandian Unit. Structural and lithological pattern of these units reflect probably different original depth of displaced blocks and different driving forces that separated them.