

MAGMATIC BELTS OF THE PACIFIC ACTIVE MARGINS

GRANNIK V. M. Institute of Marine Geology & Geophysics, Far Eastern Branch,
Russian Academy of Sciences, Yuzhno-Sakhalinsk, Russia

It is known that convergent interaction of plates is accompanied by the formation of volcanic island arc volcano-plutonic and plutonic marginal- continental belts. Paleocene-Quaternary marginal-continental rift systems, along which sedimentary, sometimes oil-and-gas- bearing basins are developed within the Okhotsk Sea segment of Paleogene-Quaternary active margin of the Pacific, apart from tectonic elements (edge oceanic rampart, deep-sea trench, island volcanic arc, deep-sea basin) typical for it. In some cases volcano-plutonic belts, which are referred to magmatic arcs, taphrogenic structures of the Okhotsk Sea plate or to the structures of the transition stage of the Okhotsk Sea geoblock crustal evolution, are developed on the borders of these structures. It is suggested to consider the above belts as tectonic elements of Paleocene-Quaternary active margin of the Pacific. They are formed by destructive-reconstructive processes, activated by thick asthenosphere, generated by continuous, beginning from early Cretaceous, interaction of plates accompanied by migration of seismic focal zones towards the ocean