Global stone heritage: larvikite, Norway

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Larvikite has for more than hundred years been appreciated as one of the world’s most attractive dimension-stones, and at present time its production and use is more extensive than ever. The main reason for the continuous success of the larvikite on the world market is the blue iridescence displayed on polished surfaces, which is caused by optical interference in microscopic lamellae within the ternary feldspars. The larvikite complex consists of different intrusions defining several ring-shaped structures, emplaced during a period of approximately five million years. Following this pattern, several commercial subtypes of larvikite, characterised by their colour and iridescence, have been identified. The name "larvikite" was first applied by Waldemar Brogger, in his descriptions of the monzonitic rocks within the southern part of the Carboniferous-Permian Oslo Igneous Province. The name has its origin in the small coastal town of Larvik, situated almost right in the centre of the main plutonic complex of larvikite. From a geologist’s point of view, the larvikites are important for understanding the igneous mechanisms behind the formation of the Oslo rift, representing a series of semi-circular intrusions, varying from quartz-bearing monzonites in the east (earliest phases) towards nepheline-bearing monzonites and nepheline syenite in the west (latest phases). However, most other people see larvikite as a particularly beautiful rock. Production started already in the 1880s, and at present time the export value of rough blocks of dimension-stone from the Larvik Region is close to 100 million euro, distributed on approximately 20 individual quarries. Different types of larvikite have different market value, and the customers can choose between a range of types and qualities under trade names such as "Blue Pearl", "Emerald Pearl" and "Marina Pearl". Globally, larvikite has put a significant mark on architecture around the world, and should be included in the global stone heritage.