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ANALYSIS OF THE FEATURES OF DECORATIVE GABBRO

One of the main properties of a natural stone, which gives it uniqueness and soleness is decorative value. On this exponent depends: the value of the facing stone, an objective idea of the possible cost and liquidity of future products, as well as the choice of areas of application of natural stone. Especially these indicators are of concern of potential subsoil users and investors.

The assessment of decorative value of the natural stones and the image of its dynamics in the area of the deposit is essential for the certification of raw materials, the justification of home trademarks, the possibility of extracting natural stone with given characteristics and identifying optimal technological complexes for the development of various parts of the deposit.

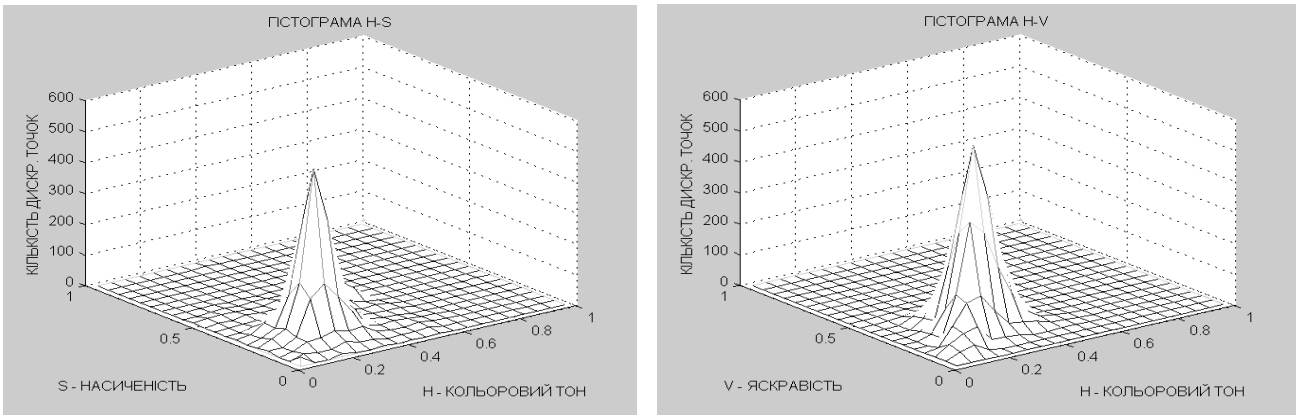
The analysis was carried out using a complex methodology developed by the Institute of building materials and, also, a method for determining the artistic and aesthetic qualities of a decorative stone.

The first one is based on the hierarchical scheme of additive consideration of certain attributes of decorative value expressed in the three main groups of characteristic parameters that are responsible for the natural color, natural texture and surface texture.

The second one is based on the assessment of the decorative quality of stoneswas solved in the context of their use for certain types of products, taking into account the existing historical and cultural traditions.

For the measurements, target samples were selected from the northern and southern faces of the Torchinsky deposit according to the necessary requirements.

In fig. 1 shows two-dimensional histograms for the distribution of the values of the color tone H, the saturation S of the color tone and the brightness V for all points of the investigated image.



a b

Fig. 1. Volume diagrams decorative

As a result of the analysis of the received colorimetric diagrams, certain features of decorative values of gabbro were revealed.

As for samples of all three directions, the gabbro has a clearly distinct green component, which slightly less manifests itself in a plane oriented perpendicular to the plane fracture.

Deposits of gabbroid stones are known to occur in the amphibolization of pyroxenes, substitution by their epidemic and other secondary minerals, etc.

The maximum saturation of colors of all three directions is shifted towards the values of the indicator ~ 0,3. It is observed in samples from the southern and northern faces.

A fairly complex distribution of saturation is specific for these samples (the maximum is within the range of values 0,3-0,4). Irisation is the best shown in the samples taken in sections 1 and 2 (the plane parallel to the formation of the crack plane and the formation plane)

This indicates a greater decorative value of the stones in these fields. Maximum brightness values tend to be 0.2 for all analyzed samples.

This is especially clearly seen on the H-S and H-V histograms, which are more vivid for comparing the decorative features of different samples (lot) of one deposit.

Thus, the analysis showed the regularity of the distribution of secondary mineralization from the crack in all directions. And also feature of gabbro in the demonstration of irisation to shift the indicators of color tone in the direction of the green-blue component, but partly red component is traced.