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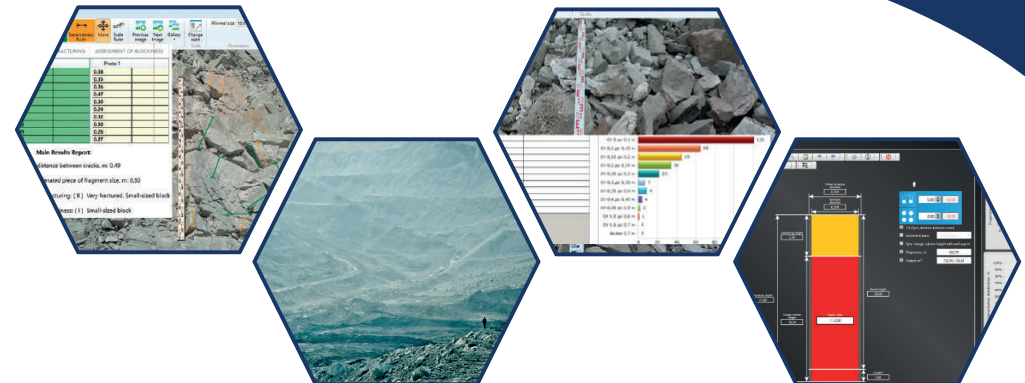
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Software for calculation of rational parameters of drilling and blasting operations

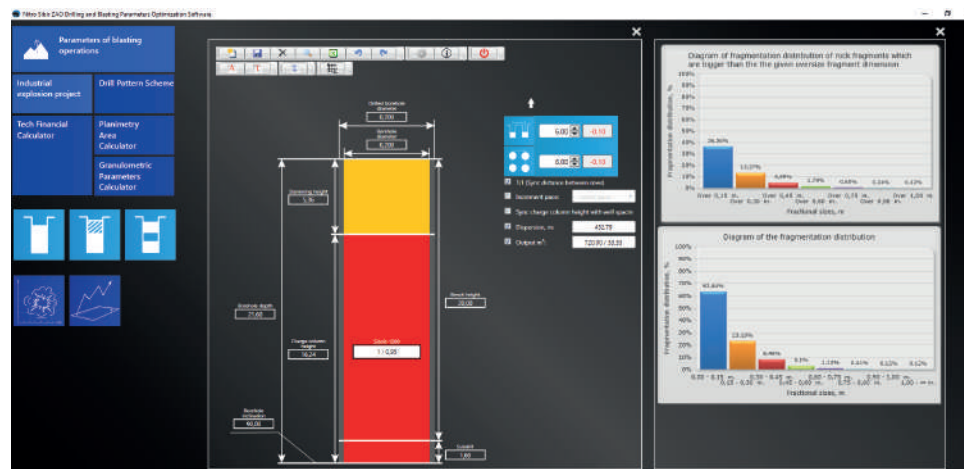


The modular software package developed by “NITRO SIBIR” AO for drilling and blasting operations is being developed since 2009 with the purpose of improving and advancing the methodology of “NITRO SIBIR” AO in drilling and blasting operations and IT-automation of mining specialists work.

The software package uses the methodology of calculations created for the effective use of emulsion explosives and tested in all mining and geological conditions.

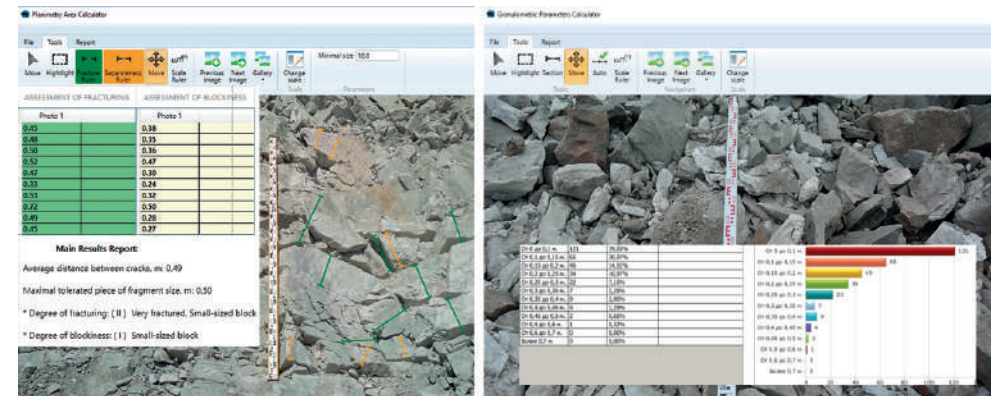
The software package is able to perform the following tasks:

- Calculate and model the parameters of drilling and charging for 3 types of industrial charges (continuous, combined, decked) with simultaneous output of the blasting results forecast based on the fractional composition of the blasted rock and the average rock size.



- Calculate the strength of explosives taking into account energetic characteristics of the explosive composition used as well as the physical and structural properties of the rock mass by the “NITRO SIBIR” AO patented method.

- Assess the actual structural properties of the blasted rock based on the free face photograph.
- Assess the actual fractional composition of the blasted rock.



- Select the effective diameter of drilling for given rocks and mining equipment.
- Calculate blasting and drilling parameters ensuring the fractional composition of the blasted rock mass being the closest to the Customer requirements.
- Conduct a comparative technical and economic assessment of the possible drilling and blasting parameters.
- Prepare design documentation.
- Carry out calculations of drilling and blasting parameters for underground mining operations.

