

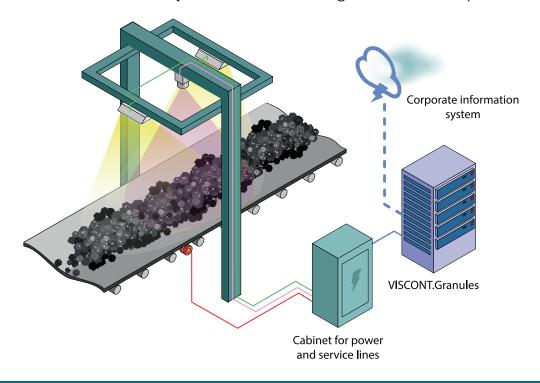
# Intelligent system for assessment of granulometric composition of bulk materials

Most often, the assessment of granulometric composition of bulk materials on the conveyor belt at mining, processing and metallurgical production facilities is performed manually by laboratory analysis of randomly picked samples and visual inspection performed by an operator of a conveyor belt. On average, the accuracy of the granulometric composition analysis of the bulk materials and their dimensions performed by the production line operator reaches 70-80% mark. However, the cost of potential mistake is exceptionally high.

The system based on the machine vision technologies allows to reach the accuracy of 95% for the assessment of granulometric composition even in the harshest industrial environments.

#### Purpose of the system

The system performs real-time intelligent assessment and control of the size of bulk materials (i.e. the size of individual granules) that move on the conveyor belt. VISCONT.Granules presents an alternative to the most commonly used methods for the granulometric composition analysis.





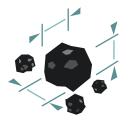
## **VISCONT.Granules**

#### Advantages of the system implementation

- Reduction of the costs for laboratory analysis of the fractions.
- Minimisation of the production operating costs.
- Reduction of the defects in the final products.
- Prevention of industrial accidents.
- Optimisation of the production process management.
- Control of the transportation process.

#### Functionality of the system

- Detection of granules.
- Evaluation of the granule's linear dimensions.
- Automatic granulometric analysis for the depth of all exposed rock.
- Classification of the granules across different types based on their linear dimensions.
- Detection of abnormal and oversized granules, notification of their detection.
- Configuration of system modules to meet individual needs of the customer.







### Stages for the system implementation

- Installation and setup of the equipment at the production facility.
- Installation and setup of the system libraries and interfaces to meet the individual customer needs.
- Collection of image samples for further system learning.
- Integration with the corporate information systems.

MALLENOM SYSTEMS is one of the leading Russian developers of machine vision and machine learning systems.

