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Sokhibova Zarnigorkhon Mutalibjon kizi, Ibragimova Dinora Marufjon kizi, Andijan Machine Building Institute, Uzbekistan **TECHNOLOGY OF OBTAINING SILICON GRANULES.**

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Abstract: Silicon granules were obtain based on powder technology. Its raw material was monocrystalline silicon, designed for the solar cell manufacturing industry. Preliminary research have found that silicon granules range in size from 400 nanometers to 1,000 micrometers and have a rough surface.

Keywords: silicon granules, powder technology, monocrystalline silicon, solar cell.

There are many technologies available for the production of micro- and nanoscale granulated semiconductors. Among them, powder technology is distinguished by its simplicity compared to others, does not require complex technological processes. However, one of the disadvantages of powder technology is that since the preparation of the powder is done by mechanical methods, the ingress of ingress by the external environment creates various defects in the size and surface of the material, as a result, the powder is contaminate in the process from raw material to powder preparation. To solve these problems, washing and vacuum drying are first carried out to remove the powder. The powder is then cleaned by a special magnetic method [2, 4]. The process of obtaining powder is performed in a ceramic hammer with high hardness and a smooth ball mill with surfaces (Figure 1a).

Cleaning the powder uses a permanent magnetic field, which is inexpensive because no additional energy is required [5]. To clean the powder, first a magnet is placed at an angle of 85 degrees and filter paper is placed on its surface. The powder is applied to the surface of the filter paper in the required quantities, at a certain distance. The powder is rube with filter paper and the inserts with magnetic properties remain on the surface of the paper. The result is a layer of inserts on the surface of the filter paper (Figure 1b). The process of preservation of magnetic inputs on the surface of filter paper can be explain as follows.

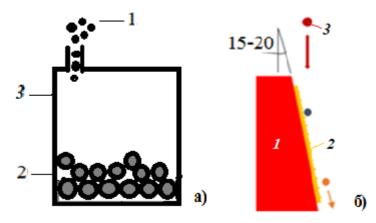


Figure 1.a) a mill for powdering crushed crystals; 1 - crushed crystals, 2 - steel balls, 3 - mill walls;

b) magnetic powder cleaning scheme; 1 - *permanent magnet,* 2 - *filter paper,*

3 - powder.

It is known from magnetostatics that the magnetization of permanent magnets indicates the presence of microcurrents in them. In substances introduced into the magnetic field, a process of magnetization is observed. The process of magnetization is a process similar to the process of charging. This phenomenon is especially strong in metals. When powder is passed through a magnetic field, the metal particles are magnetized or charged under the influence of the field. As a result, they are retained on the filter paper on the magnetic surface. This requires replacing the filter papers several times and repeating the cleaning process. With each change of filter paper, the amount of input atoms on the surface of the paper decreases. This process is performed until the filter paper is 100% clean. In our study, it was found that replacing the filter papers 4 times was sufficient.

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Aslitdin Nizamov, Doctor of Economic Sciences, Professor, Bukhara Engineering and Technological Institute, Uzbekistan Shakhlokhon Gafurova, Master student of Bukhara Engineering and Technological Institute, Uzbekistan DIRECTIONS FOR PROVIDING THE QUALITY OF EDUCATIONAL SERVICES IN HIGHER EDUCATIONAL INSTITUTES A.Nizamov, Sh.Gafurova

Abstract. The article looks at the research of the quality of educational services of higher education institutes. The factors affecting the quality of education and ensuring the competitiveness of native HEI in the educational services market are identified and analyzed by the authors. Also the article clarifies and systematizes various approaches to managing the quality of educational services to ensure competitiveness in the area of higher education of the Republic of Uzbekistan.

Key words: quality management, educational services, factors, the concept of the development of higher education, higher education, total quality management, modern approaches.

The transition to market relations determines the increase in requirements for the quality composition of engineering and technical workers, their level of competence. Without creative engineering, high professionalism, knowledge of the achievements of science, it is impossible to create and introduce into production perfect, competitive, highperformance and economical machines and mechanisms, replace obsolete equipment with more efficient, up-to-date equipment. Therefore, the problem of strengthening industry with qualified engineering and technical personnel is of great importance at the present stage. Indeed, the power of any developed country largely depends on the quantity and quality of its engineers, their knowledge, skills, experience, and rational use of their labor. Therefore, at this time, the problems of improving the quality of specialists in higher educational institutions are very widely discussed. And the quality management system of educational organizations is currently one of the most important mechanisms of internal guarantees of the quality of education.

Nowadays in our country technologies are being created for clear, stable and promising higher education assessment procedures. It is worth noting