

WELDING AND SURFACE

(name of the discipline)

ANNOTATION

TO THE CURRICULUM OF THE INSTITUTION OF HIGHER EDUCATION

Specialty 1-36 01 04 “Equipment and technologies for highly efficient material processing processes”

Direction of specialty _____

Specialization _____

| | Form of higher education |
|--|--------------------------|
| | Full-time (daytime) |
| Well | II |
| Semester | 4 |
| Lectures, hours | 34 |
| Laboratory classes, hours | 16 |
| Offset, semester | 4 |
| Classroom hours per academic discipline | 50 |
| Independent work, hours | 58 |
| Total hours per academic discipline / credit units | 108 / 3 |

1. Brief content of the discipline

The purpose of the discipline is to provide students with knowledge about the theoretical foundations of welding, modern methods of welding metals, alloys, plastics and surfacing, as well as technological processes and equipment used.

2. Learning outcomes

As a result of mastering the academic discipline, the student must:

know:

- the essence of the methods of basic technological methods for manufacturing products using welding and surfacing.

- technological capabilities of the methods, their purpose, advantages and disadvantages, scope;

- economic feasibility of using various technological methods and methods of welding and surfacing;

- Schematic diagrams of the operation of technological equipment, fixtures and fittings, their purpose and scope.

be able to:

- choose and justify a rational method for obtaining products using welding and surfacing;

- choose, based on the material, shape, purpose of the part, a rational method of welding or surfacing;

- draw up a technological process of welding (surfacing) in order to obtain a semi-finished product or a finished product that provides the necessary operational characteristics and properties of the product;

- evaluate the technical and economic efficiency of the selected technological process.

own:

- methods for choosing a method of welding or surfacing, rational selection of materials, taking into account the material, purpose, operating conditions;

- information about the possibilities of various methods of welding and surfacing of machine parts;

- have information about the schemes of operation of various types of technological equipment used in welding and surfacing.

3. Formed competencies

BPK - 18: know the equipment and technology of welding and surfacing and be able to apply this knowledge in professional activities.

4. Requirements and forms of current and intermediate certification.

When studying the discipline, a module-rating system for assessing knowledge is used. Used assessment tools for the academic discipline are stored at the department.