# ANNOTATION

# TO THE CURRICULUM OF THE INSTITUTION OF HIGHER EDUCATION

# PRESSURE WELDING TECHNOLOGY

**Specialty** 6-05-0714-03 Engineering and technical design and production of materials and products from them

**Profiling** Equipment and technology of welding production

| | **Form of higher education** | | |
|---|---|---|---|
| | **Full-time (daytime)** | **Correspondence (abbreviated)** | **Correspondence** |
| Well | 3 | 2 | 3 |
| Semester | 5 | 4 | 6 |
| Lectures, hours | 50 | 10 | 10 |
| Practical lessons, hours | 16 | 4 | 4 |
| Laboratory classes, hours | 16 | 4 | 4 |
| Coursework, semester | 5 | 4 | 6 |
| Exam, semester | 5 | 4 | 6 |
| Classroom hours for the academic discipline (including hours for managed independent work) | 82 | 18 | 18 |
| Independent work, hours | 62 | 126 | 126 |
| Total hours per academic discipline/ credits | 144/4 | | |

**1. Brief content of the discipline**

The purpose of teaching the discipline is to obtain and master knowledge by students in the field of the physical foundations of various methods of pressure welding, principles of operation, devices and features of the operation of resistance welding equipment, as well as the effective use of the knowledge gained in practical activities.

**2. Learning outcomes**

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

**know:**

- basics of physical processes occurring during pressure welding; types and methods of pressure welding used in production; features of technological processes and technologies for welding various metals;

**be able to:**

- choose welding methods and equipment that ensure the quality of the welding process; develop technologies for welding structures in real production conditions;

**have a skill:**

- method for choosing a rational method of pressure welding of a specific metal structure and calculating the parameters of the welding mode; methods of setting up welding machines for a given mode of operation.

**3. Formed competencies.**

- Know the physical essence, types and methods of pressure welding, be able to develop a technology for welding metals and alloys in production conditions and apply quality control methods for welded joints.

**4. Requirements and forms of current and intermediate certification.**

The current certification is presented in the form of test tasks for control works, a list of questions for the protection of laboratory work, a list of questions for the protection of practical classes. Intermediate certification is the defense of a course project, an exam.