

Private Institution Center for Adult Education

HARTMANN & MAYER BRCKO DISTRICT BOSNIA AND HERZEGOVINA



**CURRICULUM FOR EDUCATION OF STUDENTS FOR THE  
TITLE OF MASTER WELDER (V DEGREE)**

### **Brief description of the profession of master welder:**

The aim of the program is to improve skills and knowledge needed to successfully:

- perform welding (planning, preparation, execution and quality control),
- use tools, energy, materials and time ,
- improve welding skills by manual arc welding (coated electrode),
- acquire arc welding skills in a protective atmosphere,
- train for joining parts by resistance welding,
- acquire welding skills by gas welding, as well as other welding processes
- work on machines for welding procedures: MIG, MAG, TIG, EPP, - welding with filled wire,
- improve skills of joining parts by soft and hard soldering,
- train control and testing of welded joints and elimination of defects in welded joints,
- train commercial and administrative tasks in the field of welding,
- develop the ability to properly apply quality standards and
- acquire knowledge on the proper application of regulations on occupational safety, the use of protective equipment and environmental protection.

### **Prerequisite for enrollment:**

Candidates for the profession of master welder must have a diploma in the acquired profession of skilled workers and at least two years of practice in the profession.

### **Aims and objectives of the educational program:**

- Acquisition of knowledge, skills and habits that will enable the pursuit of the profession: master welder
- Adopt knowledge of the importance of organizing the work of irrational use of energy.
- Get to know and instruct the students on the protection of nature, the preservation of health and a healthy human environment.
- Get acquainted with the basic properties, obtaining and applying the most important technical materials.
- To enable a student to choose the material according to the request of the technical drawing.
- Get to know how to read and apply draftsmanship in the maintenance of parts, assemblies or products.
- Be able to make simple draftsmanship.
- Get acquainted with the main parts of measuring tools, principles and rules of operation.
- Be able to apply measurements in practice.
- Get acquainted with the most important procedures of manual and machine processing by separating particles.
- Adopt the concepts of heat treatment.
- Be able to choose and apply the most important surface protection procedures.
- Get acquainted with the elements of power transmission and motion.
- Get to know and be able to make metal lock parts
- Get to know and be able to install parts, assemblies and systems in the profession for which they study.
- Be able to develop the technological process of making a metal fence and be able to make simple metal fences.
- Get to know how to develop the technological process of making metal structures and be able to make simple metal structures.
- Be able to develop the technological process of making metal doors and simple metal doors.
- Be able to develop the technological process of making a metal window and simple metal windows.
- Be able to develop the technological process of making metal stairs and simple metal stairs.

- Get to know how to develop the technological process of making a metal tank and simple metal tanks.
- Get to know how to choose elements and assemble simple pneumatic systems.
- Get to know how to choose elements and assemble simple hydraulic systems.
- Get to know and be able to benefit:

## CURRICULUM FOR THE PROFESSIONAL TITLE MASTER WELDER

No.	Course title	I semester total classes	I semester 20 weeks	II semester total classes	II semester 10 weeks	Total
<b>B) Common educational basis</b>						
1	Bosnian language and literature Serbian language and literature Croatian language and literature	2	40	-	-	40
2	Management	2	40	-	-	40
3	Mathematics	2	40	2	20	60
<b>B) Common basics of profession</b>						
4	Technical mechanics	2	40	-	-	40
5	Mechanical constructions	2	40	2	20	60
6	Measurement and control	2	40	-	-	40
7	Safety at work	-	-	3	30	30
8	Automation	2	40	-	-	40
9	Mechanical technology	2	40	2	20	60
10	Production organization	2	40	-	-	40
<b>C) Vocational education</b>						
11	Occupational technology	3	60	3	30	90
12	Practical classes	7	140	7	70	210
<b>TOTAL :</b>		<b>28</b>	<b>560</b>	<b>19</b>	<b>190</b>	<b>750</b>