



Operator of machines and equipment for plastics processing

1. Name of CAPW	Operator of machines and equipment for plastics processing
2. Economic sector, position	In the International Standard Classification of Occupations, ISCO-08 corresponds to the group: <ul style="list-style-type: none">• 8142 Plastic products machine operators. According to the Polish Classification of Activities (PKD 2007): <ul style="list-style-type: none">• Section C - Manufacturing. Occupation common name: <ul style="list-style-type: none">• operator;• Setter. chemical industry
3. CAPW level (also according to NQF)	Beginner (BG) Demonstrates basic knowledge and skills in practice, does not make decisions on his own, professional experience does not exceed 1 year.



4. Description of CAPW

Knowledge: (What the employee knows and understands)

1. knows and understands the principles of functioning of the selected company in the environment of the economic market;
2. knows and understands the principles of using machines and devices used in the production of plastic products;
3. knows and understands the principles of using control and measuring instruments used in the processes of manufacturing plastic products;
4. knows the methods of documenting the course and parameters of the process of manufacturing plastic products;
5. knows the principles of assessing the technical condition of machines, devices and tools used for plastics processing;
6. knows the principles of assembling the instrumentation of machines and devices used in the processing of plastics;
7. knows the MS Office package, knows the principles of operating computer office programs, Internet resources related to the conducted activity, other technical / technological solutions used in the processing of plastics;
8. has basic knowledge in the field of office work (IT software, office programs, professional secrecy, personal data protection, operation of equipment and office technology devices), etc.;
9. knows and understands the rules, procedures and health and safety standards relating to the performed professional tasks;
10. knows a foreign language (e.g. English) at a communicative/basic level;
11. knows the basic principles of ethics and culture in the performance of professional tasks;
12. knows the basic rules of communication necessary for the execution of orders and cooperation in a team;

Skills: (What the employee can do)

1. is able to use the technical documentation of machines and devices and to comply with the standards regarding the technical drawing;
2. can assess the technical condition of machines, devices and tools used in the processing of plastics;
3. can use tools and machines for the production of plastic products;
4. can prepare materials and raw materials for the production of plastic products;
5. can transport raw materials and semi-finished products from the warehouse to the workplace, from which plastic products will be made;
6. can determine the parameters of plastics processing on the basis of technological documentation;
7. can estimate the quality of plastic products;
8. can perform activities related to finishing, marking and packaging of plastic products;
9. can handle the daily maintenance of machines and devices



- used for plastics processing;
10. can report a failure of a machine and device used in plastics processing;
 11. is able to observe the principles of ergonomics, occupational health and safety and apply the law on fire protection and environmental protection;
 12. can operate a computer, office programs and use Internet resources to perform simple professional tasks;
 13. is able to work in interdisciplinary teams solving problems related to the plastics processing process;
 14. can use a foreign language at a communicative level with stakeholders;
 15. has organizational and analytical skills in their own work, e.g. planning and correcting according to the circumstances related to the plastics processing process;
 16. is able to shape working conditions taking into account the principles of occupational health and safety - observes the requirements resulting from technology and the principles of work organization; acts in accordance with the regulations and instructions that are related to the processing of plastics;
 17. is able to follow the received instructions, commands and follow the received advice related to the plastics processing process;
 18. is able to determine the easy to predict effects of his professional activities;
 19. can observe the principles of culture and ethics in professional contacts;
 20. can plan their own professional development.

Social competences: (Attitudes, features, values that a person represents, readiness to perform specific tasks and preparation to fulfill specific obligations; Ability to shape one's own development and autonomous and responsible participation in professional and social life. They take into account the ethical context of one's own conduct.)

1. planning and **organizational skills**;
2. **the ability to concentrate and divide attention**;
3. resistance to stress, resistance to working under time pressure;
4. openness, communicativeness;
5. **discipline** and commitment, taking responsibility for professional tasks;
6. accuracy, conscientiousness, **reliable performance of entrusted professional tasks**;
7. **readiness to exercise due diligence in performing professional activities**, including due care for the workplace, tools and materials;
8. observance of professional secrecy;
9. **readiness to follow instructions received; follow instructions and take advice**;



- 10. readiness to cooperate in the performance of professional activities;**
- 11. readiness to comply with applicable ethical standards and cultural principles;**
- 12. readiness to act in accordance with the regulations and procedures established by the employer, related to professional work - to comply with the principles of work discipline;**
- 13. readiness to take into account direct and deferred, easy to predict effects of the way of doing one's own work;**
- 14. readiness to communicate in the work environment in a way that:** does not interfere with the circulation of information related to the performed professional tasks, ensuring flexibility in communication with clients and good cooperation within the team;
- 15. readiness to complete and deepen own professional competences in the scope of performed tasks.**

The competencies and features that are particularly important for this level are bolded.



<p>5. Requirements for obtaining a CAPW (if any, requirements for education and / or training completed, duration of employment, competencies, etc.)</p>	<p>Formal requirements regarding education/Informal requirements regarding the candidate's professional experience necessary to take up the job</p> <p>The education formally required to perform the profession of an operator of machines and equipment for plastics processing is related to:</p> <ol style="list-style-type: none"> 1. the educational path applicable in a given country leading to obtaining formal qualifications necessary to perform the profession of an operator of machines and equipment for plastics processing, e.g. equipment for plastics processing e.g. technical school, vocational school (second-level school in Poland), vocational exam for qualifications in the profession of operating machinery and equipment for plastics processing (CHM.01. - occupation code 814209); 2. higher education path in a given country, e.g.: <ol style="list-style-type: none"> 1) graduation from higher education - first or second degree (engineer or master's degree) in the field of mechanics and mechanical engineering. These are studies in the field of engineering and technical sciences, whose curriculum focuses on issues in the field of technical mechanics, machine construction, robotics, machine diagnostics, plastics processing, and plastic forming. 2) completion of postgraduate studies in the field of study (e.g. Automation, Automation of industrial processes). <p>FORMAL REQUIREMENTS regarding the documentation of your education:</p> <ol style="list-style-type: none"> 1. a diploma confirming professional qualifications after graduating from a technical school, a 2nd degree vocational school or a post-secondary school or obtaining this education through other equivalent educational forms and after passing exams confirming qualifications in the profession. Maturity certificate. (PQF qualification level IV) or 2. 1st or 2nd degree diploma in the field of mechatronics (engineering and/or master's degree) - (PQF level VI and VII) or 3. diploma of postgraduate studies after completing 1st or 2nd degree studies in technical fields (PQF level VI and VII) or 4. Additionally, the employer may require/prefer other documents: other diplomas, attestations, certificates confirming qualifications useful for the profession of <i>Operator of machines and equipment for plastics</i>
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processing (e.g. level of foreign language skills, basic/advanced computer skills/advanced computer programs)

INFORMAL REQUIREMENTS regarding professional qualifications (if the employee does not meet the formal requirements): confirmation of acquired rights to practice the profession by proving professional experience in work in the field of the profession of *Operator of machines and equipment for plastics processing* in the period required by the employer (e.g. work in a technical profession was performed by candidate for at least 2 years in the last 5 years).

INFORMAL REQUIREMENTS regarding the documentation of competences to practice the profession (if the employee does not meet the formal requirements),

- 1) certificates from potential employers confirming the candidate's work in a profession of *Operator of machines and equipment for plastics processing* for a minimum of 2 years in the last 5 years before the date of issuing the certificate;
- 2) written recommendations of previous employers of the candidate applying for a position in the profession of *Operator of machines and equipment for plastics processing*

REQUIREMENTS FOR OBTAINING CAPW AFTER THE FIRST YEAR OF WORK IN THE OCCUPATION OF MACHINERY AND EQUIPMENT PROCESSING PLASTICS OPERATOR

Accession of the employee to the process of validation of the achieved learning outcomes, including:

- 1. identification by the employee** (independently or with the support of a career advisor/mentor/traineeship supervisor - operator of machines and equipment for plastics processing with more professional experience) of the learning outcomes that have been achieved;
- 2. documenting** the achievement of selected learning outcomes by the employee (e.g. in the form of certificates, certificates of completed practices/internships, work samples, video recordings, recommendations, job description); the documentation process can be carried out independently or with the support of a career advisor/professional mentor/traineeship supervisor;
- 3. verification** by the employer of learning outcomes (knowledge, skills and social competences) necessary to perform simple/not very complex professional tasks in the position of assistant operator of machines and equipment for plastics processing / junior



	operator of machines and equipment for plastics processing.
<p>6. Ways to acquire CAPW</p>	<p>Ways to acquire CAPW:</p> <ol style="list-style-type: none"> 1. through formal education (school, university) - the achievement of learning outcomes is confirmed by an appropriate diploma; 2. through non-formal education - vocational training, language courses, technical and IT training and in the field of improving the soft skills (building relationships, negotiation techniques, communication techniques, marketing techniques); 3. through informal learning - self-education, acquiring knowledge and specific skills while performing professional tasks, apprenticeship and professional internships in enterprises with a technical profile; 4. assistance/support of a career counselor/other professional mentor in diagnosing the achieved learning outcomes, identifying competence gaps, ways of eliminating them, and helping the employee plan his/her own professional development.
<p>7. Criteria for assessing the competencies that make up the CAPW (eg. statements illustrating the acquisition of the CAPW)</p>	<p>The verification/assessment of learning outcomes (knowledge, skills and social competences) necessary to perform simple/not very complex professional tasks at the workplace includes 6 sets of learning outcomes.</p> <p style="text-align: center;">1) The use of plastics processing technology</p> <p>CRITERIA: Employee</p> <ol style="list-style-type: none"> a) solves simple technical problems based on the knowledge of plastics processing laws; b) use the technical documentation of machines and devices and comply with the standards regarding the technical drawing; c) evaluates the quality of plastic products and perform activities related to finishing, marking and packaging of plastic products; d) performs daily maintenance of machines and devices used for plastics processing; e) determines the parameters of plastics processing processes on the basis of technological documentation; f) solves simple technical problems based on the knowledge of plastics processing laws; g) use the technical documentation of machines and devices and comply with the standards regarding the technical drawing; h) assess the quality of plastic products and perform activities related to finishing, marking and packaging



of plastic products;

- i) performs daily maintenance of machines and devices used for plastics processing;
- j) determines the parameters of plastics processing on the basis of technological documentation;
- k) operate a computer and programs used in the field of plastics processing;
- l) assesses the usefulness of basic methods and tools for solving tasks in the field of plastics processing;
- m) can clean and maintain operated devices;
- n) can distinguish between plastics;

2) Planning, organizing and monitoring the correct plastics processing proces

CRITERIA:

Employee

- a) uses tools and machines for the production of plastic products, assesses their technical condition and reports their failure;
- b) prepares materials and raw materials for the production of plastic products and transports them from the warehouse to the workplace;
- c) applies the provisions on the implementation of plastic product manufacturing processes;
- d) can accept orders for the production of plastic products;
- e) has the ability to control the processing of plastic products
- f) apply the principles of ergonomics, occupational health and safety as well as the provisions of law on fire protection and environmental protection;
- g) searches the Internet for potential suppliers, subcontractors and recipients;

3) Keeping records of simple/not very complex professional tasks related to the plastics processing proces

CRITERIA:

Employee

- a) develops and uses documentation related to simple professional tasks, e.g. quantitative data in the documentation of the plastics processing process;
- b) adjusts planned tasks related to plastics processing according to changing circumstances;
- c) develops documentation related to the plastics processing process and prepares a discussion of the results of this



	<p>task;</p> <p>d) keeps production and quality documentation;</p> <p style="text-align: center;">4) Cooperation with clients/contractors</p> <p>CRITERIA: Employee</p> <p>a) Can communicate (including in a foreign language at a basic level) with clients and contractors;</p> <p>b) Is able to present a commercial offer to the client;</p> <p>c) In contacts with customers and contractors, he can use negotiation and marketing techniques.</p> <p style="text-align: center;">5) Work organization and discipline</p> <p>CRITERIA: Employee</p> <p>a) apply the rules, procedures and health and safety standards relating to the performed professional tasks;</p> <p>b) uses a computer, uses Internet resources to perform simple professional tasks;</p> <p>c) works individually and in a team, solves problems related to the plastics processing process;</p> <p>d) is able to estimate the time needed to complete the assigned task, and is able to develop and implement a work schedule that ensures meeting the deadlines;</p> <p>e) acts in accordance with the regulations and procedures established by the employer, related to professional activities - observes the principles of work organization and discipline;</p> <p>f) complies with the requirements resulting from the technology;</p> <p style="text-align: center;">6) Social competences determining the proper performance of professional tasks</p> <p>CRITERIA: Employee</p> <p>a. is able to work under time pressure and cope with professional stress;</p> <p>b. respects the principles and culture of professional ethics;</p> <p>c. plans and organizes own professional development;</p> <p>d. is able to determine the foreseeable effects of his professional actions;</p> <p>e. shows willingness to cooperate in the course of performing professional activities;</p>
<p>8. Methods for assessing the competencies that make up the CAPW</p>	<p>1. Analysis of evidence and declarations (portfolio prepared by the employee);</p> <p>2. Unstructured interview;</p>



	<p>3. Theoretical test - (however, it carries the risk of excessive stress and resistance to verification in people who have achieved learning outcomes mainly outside formal education);</p> <p>4. Balance of competences;</p> <p>5. Observation in real/simulated workplace conditions.</p>
<p>9. Career opportunities for a person who has acquired a CAPW</p>	<p>Operator of machines and equipment for plastics processing can find a job in:</p> <ul style="list-style-type: none">- small and medium plants producing plastic parts, in all branches of industry in the country and abroad,- research and development departments dealing with the technology and processing of plastics. <p>His skills can also be useful in:</p> <ul style="list-style-type: none">- mechanical workshops,- machinery technical supervision services.

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