

**1. TITLE OF THE CERTIFICATE (HU)**

52 5449 02 VEGYIPARI GÉPÉSZTECHNIKUS

**2. TRANSLATED TITLE OF THE CERTIFICATE (EN)**CHEMICAL MECHANIC AND TECHNICIAN  
(THIS TRANSLATION HAS NO LEGAL STATUS)**3. PROFILE OF SKILLS AND COMPETENCES****A typical holder of the certificate is able to:**

- take part in:
  - = the update of machines and devices used in chemical engineering
  - = the design of structural elements of machines and devices used in chemical engineering,
  - = the design and implementation of new technologies,
  - = the quality assurance of products concerned,
  - = the management of safe operation of machines, equipment and instruments,
  - = failure analyses,
  - = the specification of corrective technologies.
- continuously control:
  - = adherence to technological processes,
  - = technical parameters of materials, indirect materials, machines, measuring devices used during operation, production, repair work and regular maintenance,
- ensure:
  - = suitable technical condition of machines, instruments and equipment within his (her) competence;
  - = ensure proper supply of materials, indirect materials, machines, tools, devices, measuring instruments and the availability of power supply necessary for continuous operation, production, maintenance and repair work.
- operate complicated chemical engineering equipment;
- perform trial runs, failure analyses and troubleshooting,
- perform laboratory tasks of mechanical kind;
- take part in test jobs.

**4. RANGE OF OCCUPATIONS ACCESSIBLE TO THE HOLDER OF THE CERTIFICATE**

3117 Mechanical engineering technician

**(\*) Explanatory notes:**

This document is designed to provide additional information about the specified certificate and does not serve as a legal certificate of vocational qualification. The format of the description is based on the following documents:

Council Resolution 93/C 49/01 of 3 December 1992 on the transparency of qualifications; Council Resolution 96/C 224/04 of 15 July 1996 on the transparency of vocational training certificates, and Recommendation 2001/613/EC of the European Parliament and of the Council of 10 July 2001 on mobility within the Community for students, persons undergoing training, volunteers, teachers and trainers.

More information on transparency is available at: <http://europass.cedefop.europa.eu/>

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## 5. OFFICIAL BASIS OF THE CERTIFICATE

<p><b>Name and status of the institute issuing the certificate</b></p>	<p><b>Name and status of the national/regional authority providing accreditation/recognition of the certificate</b></p> <p>In the case of vocational qualifications belonging to the competence of the Ministry of Education (ME), a vocational qualification-related independent professional committee commissioned by the ME</p>																																
<p><b>Level of the certificate (national or international)</b></p> <p><b>Level of vocational qualification according to the National Qualification Register:</b> 52 Intermediate vocational qualification entitling the holder to fill positions requiring physical or intellectual work, which is based on the input competence determined in the vocational and examination requirements, on preliminary vocational qualification or on the baccalaureate.</p> <p><b>ISCED97 code:</b> 4CV</p>	<p><b>Grading scale / Pass requirements</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Five -grade:</td> <td style="width: 10%; text-align: center;">5</td> <td style="width: 75%;">excellent</td> </tr> <tr> <td></td> <td style="text-align: center;">4</td> <td>good</td> </tr> <tr> <td></td> <td style="text-align: center;">3</td> <td>satisfactory</td> </tr> <tr> <td></td> <td style="text-align: center;">2</td> <td>pass</td> </tr> <tr> <td></td> <td style="text-align: center;">1</td> <td>fail</td> </tr> </table> <p>Vocational qualification examination after the completion of vocational training</p> <p>Parts of the examination: - Vocational theory - Vocational practice</p> <p>A successful vocational qualification examination requires a pass grade both in vocational theory and practice.</p>	Five -grade:	5	excellent		4	good		3	satisfactory		2	pass		1	fail																	
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<p><b>Certificate number:</b> PT K</p> <p><b>Serial number:</b> 123456</p> <p><b>Certificate issue date:</b> 2023.09.14</p>	<p><b>Description of vocational theoretical and practical subjects and their grades according to the five-grade scale</b></p> <p><b>1. Grades of vocational theoretical examination subjects</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2">Topics/subjects of written examination</td> </tr> <tr> <td style="width: 85%;">Chemical Engineering Machines and Processes</td> <td style="width: 15%; text-align: center;">5</td> </tr> <tr> <td>Technology Skills</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Grade of Written Examination</td> <td style="text-align: center;">5</td> </tr> <tr> <td colspan="2">Topics/subjects of oral examination</td> </tr> <tr> <td>Chemical Engineering Machines and Processes</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Basic Vocational Knowledge and Computer Technology</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Economics and Management</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Grade of Vocational Theory</td> <td style="text-align: center;">5</td> </tr> </table> <p><b>2. Assessment of vocational practical preparedness</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2">Subjects of practical examination</td> </tr> <tr> <td style="width: 85%;">The Operation of Chemical Engineering Machines; Measuring and Assessment of Characteristic Parameters</td> <td style="width: 15%; text-align: center;">5</td> </tr> <tr> <td>Fitting Practice</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Material Tests</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Preparation of Plate Forms</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Measurement and Control Engineering Tasks</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Grade of Vocational Practice</td> <td style="text-align: center;">5</td> </tr> </table>	Topics/subjects of written examination		Chemical Engineering Machines and Processes	5	Technology Skills	5	Grade of Written Examination	5	Topics/subjects of oral examination		Chemical Engineering Machines and Processes	5	Basic Vocational Knowledge and Computer Technology	5	Economics and Management	5	Grade of Vocational Theory	5	Subjects of practical examination		The Operation of Chemical Engineering Machines; Measuring and Assessment of Characteristic Parameters	5	Fitting Practice	5	Material Tests	5	Preparation of Plate Forms	5	Measurement and Control Engineering Tasks	5	Grade of Vocational Practice	5
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<p><b>Access to next level of education/training</b></p> <p>To higher education</p>	<p><b>International agreements</b></p>																																
<p><b>Other information concerning the vocational training process</b></p>																																	

### **Legal basis**

Act LXXVI of 1993 on vocational training,  
Decree 27/2001 (VII. 27.) OM of the Minister of Education on the amendment of Decree 7/1993 (XII. 30.) MüM of the Minister of Labour on the National Qualifications Register,  
Decree 26/2001 (VII. 27.) OM of the Minister of Education on the general rules and rules of procedure of vocational examinations,  
Decree no. 50/1999. (IX.10.) GM of the Minister of Economic Affairs on the amendment of Decree no. 5/1997. (III.5.) IKIM of the Minister of Industry, Trade and Tourism on qualifications required for performing specific industrial, commercial and tourism related activities,  
Decree 20/1996. (III.28.) of the Minister of Industry and Trade (IKM) on vocational and examination requirements of Chemical mechanic and technician,  
Central programme approved by the Minister of Labour (MüM) under approval number 3479/97. III. 23.

## 6. OFFICIALLY RECOGNISED WAYS OF ACQUIRING THE CERTIFICATE

Description of vocational education and training received	Percentage of total programme %	Duration (hours/weeks/months/years)
School-/training centre-based	Theory: 70 % Practice: 30 %	
Workplace-based		
Accredited prior learning		
Total duration of the education/training leading to the certificate		2 years

**Entry requirements:**

- Baccalaureate

**Further information:**

**MANDATORY VOCATIONAL THEORETICAL SUBJECTS**

Occupational safety and environmental protection	100 hours
Labour Law, Enterprises and Management	100 hours
Descriptive Geometry	100 hours
Initial Education in Technical Drawing for Mechanical Engineering	100 hours
Initial Education in CAD	100 hours
Industrial Materials and Prefabricated Products	100 hours
Technical Mechanics	100 hours
Machine Elements	100 hours
Electrical machines	100 hours
Control technology	100 hours
Quality Assurance	100 hours
Technology	100 hours
Measurement and Control Engineering	100 hours
Fundamentals of Engineering	100 hours
Chemical Engineering Machines and Processes	100 hours
Chemical Engineering	100 hours
Chemical Technology	100 hours
Design practice	100 hours

**MANDATORY VOCATIONAL PRACTICAL SUBJECTS**

Basic Measurements	100 hours
Basic Practice in the Field of Metallurgy	100 hours
Instruments and Measurements	100 hours
Workshop Training	100 hours
Vocational training	100 hours

**Further information (including the description of the national grading method):**

The basis of the grading system is a list of vocational and examination requirements compiled in accordance with uniform criteria and structure, issued in the form of legal regulation that includes the following:

- identification number and description of the vocational qualification as specified in OKJ and the relevant FEOR number,
- school and vocational prequalification required for the start of the training, aptitude and vocational competence requirements and prescribed practice,
- the most typical occupation or activity accessible to the holder of the vocational qualification certificate, the short job description, and the list of related vocational qualifications,
- the duration of the training required for the vocational qualification; maximum number of hours; the ratio of theoretical and practical training; the number of vocational training classes in the vocational training school; the duration of initial training period; the possibility of organising a grade examination assessing the efficiency of practical training,
- occupational requirements of vocational qualification,
- requirements pertaining to vocational examination.

The vocational and examination requirements will be classified by the occupational group committees of the National Qualification Register (OKJ) and by the National Council for Vocational Training, and subsequently they will be issued in the form of legal regulations.

Vocational and examination requirements are available at: <http://www.nive.hu>

This certificate supplement was prepared on the basis of the instruction for filling in the Certificate Supplement published on the homepages of the National Reference Point and the National Europass Centre.

**National Reference Point – NSZFH – <http://nrk.nive.hu>**

Head of Examination Organiser:

Issue date: 2023.09.14

**SEAL**

SAMPLE