

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

52 5432 07 FÉMIPARI ANYAGTECHNIKUS

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

- perform technical development, management, material testing and quality control related tasks concerning structural materials produced and applied in different fields of the industry;
- give first-aid within his/her competence;
- perform certain physical jobs requiring a higher level of professional preparedness;
- perform laboratory and quality control related as well as material testing tasks;
- perform trial run, failure detection and troubleshooting related tasks;
- take part in experimental projects;
- check:
 - = compliance with the technological routines,
 - = characteristics of materials and indirect materials used in the course of operation, production, repair and regular maintenance,
 - = technical parameters of products (mechanical characteristics, technological characteristics, texture).
- take part in:
 - = the development of structural materials,
 - = the update of products, machines and equipment,
 - = the selection of necessary structural materials,
 - = the design and introduction of new technologies,
 - = the design of the quality assurance system of a given product and in the actual process of quality assurance,
 - = the safe management of material production processes,
 - = the classification and testing of products,
 - = the detection of the root cause of a quality related problem and in the troubleshooting activities to be performed;
- manage raw material and indirect material supply required for continuous operation as well as production and maintenance related activities.

4. RANGE OF OCCUPATIONS ACCESSIBLE TO THE HOLDER OF THE CERTIFICATE3129 Metallurgical materials technician
7414 Temperer**(*) 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>Name and status of the institute issuing the certificate</p>	<p>Name and status of the national/regional authority providing accreditation/recognition of the certificate</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>Level of the certificate (national or international)</p> <p>Level of vocational qualification according to the National Qualification Register: 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>ISCED97 code: 4CV</p>	<p>Grading scale / Pass requirements</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>Certificate number: PT K</p> <p>Serial number: 123456</p> <p>Certificate issue date: 2023.09.14</p>	<p>Description of vocational theoretical and practical subjects and their grades according to the five-grade scale</p> <p>1. Grades of vocational theoretical examination subjects</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;">Topics/subjects of written examination</td> </tr> <tr> <td style="width: 85%;">Mechanics</td> <td style="width: 15%; text-align: center;">5</td> </tr> <tr> <td>Machine Parts, Mechanics, Representations Used in Technical Documents</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Electrical Machinery and Equipment</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Control technology</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Knowledge of Materials and Related Technology</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Knowledge of Related Mechanical Engineering Issues</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" style="text-align: center;">Topics/subjects of oral examination</td> </tr> <tr> <td>Knowledge of Materials and Related Technology</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Knowledge of Related Mechanical Engineering Issues</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Related Financial Issues, Labour Law, Labour Safety and Environmental Protection</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Grade of Vocational Theory</td> <td style="text-align: center;">5</td> </tr> <tr> <td colspan="2" style="text-align: center;">2. Assessment of vocational practical preparedness</td> </tr> <tr> <td colspan="2" style="text-align: center;">Subjects of practical examination</td> </tr> <tr> <td>Tempering</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Laboratory Measurements</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Testing of Materials</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		Mechanics	5	Machine Parts, Mechanics, Representations Used in Technical Documents	5	Electrical Machinery and Equipment	5	Control technology	5	Knowledge of Materials and Related Technology	5	Knowledge of Related Mechanical Engineering Issues	5	Grade of Written Examination	5	Topics/subjects of oral examination		Knowledge of Materials and Related Technology	5	Knowledge of Related Mechanical Engineering Issues	5	Related Financial Issues, Labour Law, Labour Safety and Environmental Protection	5	Grade of Vocational Theory	5	2. Assessment of vocational practical preparedness		Subjects of practical examination		Tempering	5	Laboratory Measurements	5	Testing of Materials	5	Grade of Vocational Practice	5
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<p>Other information concerning the vocational training process</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 46/1997. (IX.5.) of the Minister of Industry and Trade and Tourism (IKIM) on vocational and examination requirements of Metallurgical materials technician,
Central programme approved by the Minister of Labour (MüM) under approval number 4576/97. 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

Descriptive Geometry	74 hours
Initial Education in Technical Drawing for Mechanical Engineering	56 hours
Study of materials	253 hours
Technical Mechanics	152 hours
Machine Elements	148 hours
Electrical machines	35 hours
Quality Assurance	37 hours
Occupational safety and environmental protection	37 hours
Basic studies in economics	70 hours
Control technology	35 hours
Technology of the Metal Industry	105 hours
Fundamentals of Engineering	70 hours
Applied IT Technology	232 hours

MANDATORY VOCATIONAL PRACTICAL SUBJECTS

Basic Practice in the Field of Metallurgy	95 hours
Basic Measurements	111 hours
Training Laboratory Practice	140 hours
Knowledge of Materials in Practice	105 hours
Testing of Structures	195 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