



CERTIFICATE SUPPLEMENT (*)



TITLE OF THE QUALIFICATION (FI)

TITLE OF THE QUALIFICATION (SV)

***Kone- ja metallialan perustutkinto 120 ov,
valmistustekniikan koulutusohjelma/osaamisala,
koneenasentaja, koneistaja, levyseppähitsaaja, työvälinevalmistaja, hienomekaanikko (FI)***

Tutkinnon perusteiden voimaantulopäivä 1.8.2010

TRANSLATED TITLE OF THE QUALIFICATION (EN)

***Vocational Qualification in Metalwork and Machinery, 120 credits,
Study Programme/Competence Area in Manufacturing Technology,
Mechanical Fitter, Machinist, Plater-welder, Toolmaker, Precision Mechanic (EN)***

Requirements of the Qualification entered into force on 1st August 2010

This translation has no legal status.

PROFILE OF SKILLS AND COMPETENCES

Composition of the qualification

*The compulsory modules of the Vocational Qualification in Metalwork and Machinery for all candidates are **basic installation and automation work** (10 cr.), **basic machining work** (10 cr.) and **basic plate, sheet-metal and welding work** (10 cr.). Candidates specialising as Machinists must also take the **machining** module (20 cr.), those specialising as Plater-welders must take the **plate work and welding** module (20 cr.), those specialising as Mechanical Fitters must take the **machinery installation** module (20 cr.), those specialising as Toolmakers must take the **toolmaking** module (20 cr.) and those specialising as Precision Mechanics must take the **precision mechanical manufacturing** module (20 cr.). In addition, candidates must take optional modules that support vocational specialisation, such as welding aluminium and stainless steel, IW welding, mechanised and automated welding, sheet-metal work, operating plate and sheet-metal machining centres, CNC turning, CNC milling, preparation of 3D CAD/CAM paths, operating flexible manufacturing systems, workshop measurements, EDM machining, micromechanical manufacturing, machinery and equipment repairs, pipeline manufacturing and hydraulic installations. Furthermore, it is possible to choose modules from other vocational, further and specialist qualifications.*

In addition, students on curricular (school-based) upper secondary VET programmes may also take qualification modules developed to meet the needs of the local world of work.

The total scope of vocational qualification modules is 90 credits (scopes do not apply to competence-based qualification modules). In addition, students on curricular (school-based) upper secondary VET programmes must take 20 credits of core subjects and 10 credits of free-choice qualification modules. Students may individually choose modules to expand the qualification.

Vocational skills and competences required for completion of the qualification

Those who have completed the qualification shall:

- know how to use machinery, equipment and hand tools;*
- know how to operate and program machining tools;*
- know how to operate and program plate and sheet-metal machining centres;*
- command the basics of CAD/CAM design and programming;*
- either command the basics of welding or specialise in welding;*
- know how to repair machinery and equipment;*
- know how to perform mechanical engineering measurements and daily calibration of measuring instruments;*
- be able to work in compliance with the principles of business operations and sustainability;*
- be able to assume responsibility for their own work, assess their own work performance and develop their vocational skills;*
- be able to manage in work-related interactive situations in both national languages and in one foreign language.*

RANGE OF OCCUPATIONS ACCESSIBLE TO THE HOLDER OF THE CERTIFICATE

Those who have completed the qualification may work as mechanical fitters, machinists, plater-welders, toolmakers or precision mechanics on manufacturing and machining assignments, plate and sheet-metal, welding and structural steel assignments and assembly assignments within the machinery and metal products industry and on machinery and equipment installation and repair assignments within the technology industry and in other fields.

OFFICIAL BASIS OF THE CERTIFICATE

<p>Name and status of the body awarding the certificate</p> <p><i>A vocational education and training provider authorised by the Ministry of Education and Culture. The qualification certificate for an upper secondary vocational qualification completed as a competence-based qualification is awarded by the Qualification Committee appointed by the National Board of Education.</i></p>	<p>Name and status of the national/regional authority providing accreditation/recognition of the certificate</p> <p><i>Ministry of Education and Culture Finnish National Board of Education, a central administrative board operating under the auspices of the Ministry of Education and Culture</i></p>
<p>Level of the certificate (national or international)</p> <p><i>EU classification level 3 Upper secondary level, ISCED 3</i></p>	<p>Grading scale/Pass requirements</p> <p><i>Excellent 3 Good 2 Satisfactory 1 Lowest acceptable performance 1</i></p>
<p>Access to the next level of education/training</p> <p><i>The qualification confers eligibility to continue at higher education institutions.</i></p>	<p>International agreements</p>
<p>Legal basis</p> <p><i>Vocational Education and Training Act (630/1998); Vocational Education and Training Decree (811/1998) Vocational Adult Education Act (631/1998); Vocational Adult Education Decree (812/1998)</i></p>	

OFFICIALLY RECOGNISED WAYS OF OBTAINING THE CERTIFICATE

<p><i>By virtue of statutes, the qualification certificate may be obtained in one of three ways:</i></p> <ol style="list-style-type: none"> <i>1. The qualification may be completed as upper secondary vocational education and training, where the studies primarily take place at an educational institution. The education and training also include practical studies at the educational institution as well as studies at a workplace with a scope of at least 20 credits. The qualification certificate is awarded by the education provider with an authorisation granted by the Ministry of Education and Culture to provide education and training.</i> <i>2. The qualification may be completed as a competence-based qualification, where vocational skills are assessed regardless of how they have been acquired. The qualification certificate is awarded by the Qualification Committee appointed by the National Board of Education.</i> <i>3. The qualification may be completed as apprenticeship training. In this case, 70–80% and 30–20% of studies take place at a workplace and at an educational institution respectively. The student has a fixed-term contract of employment. The qualification certificate is awarded by the education provider or by the Qualification Committee.</i>
<p>Entry requirements</p> <p><i>The syllabus of basic education (primary and lower secondary levels) or a corresponding previous syllabus in curricular upper secondary vocational education and training. Competence-based qualifications may be completed irrespective of how the vocational skills and competences have been obtained. No formal entry requirements have been specified for those participating in competence tests.</i></p>
<p>Additional information</p> <p><i>Learning outcomes are assessed nationally by field, either based on samples or covering all students. The Finnish National Board of Education is responsible for national assessments of learning outcomes. The statutory teaching qualifications required in upper secondary vocational education and training are a higher education degree and pedagogical studies with a scope of 35 credits. In addition, teachers of vocational studies are required to have three years of experience in their teaching field. More information (including a description of the national qualifications system) is available at: www.oph.fi/info/recognition.</i></p>
<p>National Reference Point (NRP)</p> <p><i>Finnish National Board of Education P.O. Box 380 FI-00531 Helsinki, Finland recognition@oph.fi</i></p>

(*) **Explanatory note**

This document is designed to provide additional information about the specified certificate and does not have any legal status in itself. The format of the description is based on the following texts: 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 by going to: www.cedefop.eu.int/transparency

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