

# OCCUPATIONAL QUALIFICATION STANDARD

## Electronic Equipment Assembler, EstQF Level 2

An occupational qualification standard is a document which describes the set of skills, knowledge and attitudes, i.e. competence requirements, needed to successfully accomplish duties. Occupational qualification standards are used for compiling curricula and awarding qualifications.

Occupational title	Level of Estonian Qualifications Framework (EstQF)
Electronic Equipment Assembler, EstQF Level 2	2

Possible partial professional qualifications and titles on occupational qualification certificate	
Title of partial professional qualification	Level of Estonian Qualifications Framework (EstQF)
Electronic Component Assembler, EstQF Level 2	2
Cable Assembly Manufacturer, EstQF Level 2	2

### Part A DESCRIPTION OF WORK

<b>A.1 Description of work</b>
<p>The profession of Electronic Equipment Assembler comprises three qualifications: Electronic Equipment Assembler, Level 2, made up of two specialisations; Electronic Equipment Assembler, Level 3, made up of two specialisations; and Electronic Equipment Technician, Level 4, made up of two specialisations.</p> <p>Electronic equipment assemblers usually work for industrial companies that assemble and operate electronics or products involving electronics.</p> <p>Electronic Equipment Assembler, Level 2, manufactures wire and cable assemblies and/or electronic assemblies according to the given instructions, generally for producing serial products.</p>
<b>A.2 Tasks</b>
<p>A.2.1 Manufacturing electronic assemblies</p> <ol style="list-style-type: none"> <li>1. Assembling electronic assemblies</li> <li>2. Hand soldering in the manufacturing of electronic devices</li> <li>3. Identifying errors in electronic assemblies</li> </ol> <p>A.2.2 Manufacturing cable assemblies</p> <ol style="list-style-type: none"> <li>1. Assembling cable assemblies</li> <li>2. Identifying errors in cable assemblies</li> </ol>
<b>A.3 Work environment and specific nature of work</b>
<p>An electronic equipment assembler works in indoor rooms with certain special conditions that may require special garments to be worn. The specific nature of the work may involve working with small parts, which requires good eyesight and colour differentiation. An electronic equipment assembler may come into contact with chemicals in their work.</p>
<b>A.4 Tools</b>
<p>The main tools used by an electronic equipment assembler are handheld mechanical and electrical tools, computer-guided tools (such as test tools), tools for assembly (e.g. assembly fixture) and computers.</p>

<b>A.5 Personal qualities required for work: abilities and characteristics</b>
The work of an electronic equipment assembler requires tolerance of routines, accuracy in movement and good eyesight (including colour differentiation).
<b>A.6 Professional preparation</b>
Electronic Equipment Assembler, Level 2 has usually gained their professional skills at work or through vocational or further education.
<b>A.7 Most common occupational titles</b>
The most common occupational titles for an electronic equipment assembler are assembly operator, operator, fitter and assembler.

## Part B COMPETENCY REQUIREMENTS

<b>B.1 Structure of occupation</b>
Mandatory competences B.2.1-B.2.2 and B.2.3 (recurring competence) must be certified when applying for the qualification of Electronic Equipment Assembler. Mandatory competences B.2.1 and B.2.3 must be certified when applying for the qualification of Electronic Component Assembler, Level 2. Mandatory competences B.2.2 and B.2.3 must be certified when applying for the qualification of Cable Assembly Manufacturer, Level 2.

<b>B.2 Competences</b>
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### MANDATORY COMPETENCES

<b>B.2.1 Manufacturing electronic assemblies</b>	<b>EstQF Level 2</b>
Performance indicators: 1. assembles electronic assemblies following work instructions and fulfilling the quality criteria for the assembly and the requirements of IPCA-610 or another similar standard; 2. uses hand-soldering tools and follows the principles of hand-soldering when doing so; 3. identifies visually detectable errors in electronic assemblies following work instructions.	
Knowledge: 1) names of electronic components; 2) quality criteria of IPCA-610 or a similar standard for electronic assemblies.	
<b>B.2.2 Manufacturing cable assemblies</b>	<b>EstQF Level 2</b>
Performance indicators: 1. assembles cable and wire assemblies according to work instructions and fulfils the quality criteria for assembly and the requirements of IPC/WHMA-A-620 or a similar standard; 2. uses hand tools and devices for the manufacturing of different cables; 3. identifies visually detectable errors in cable assemblies according to work instructions.	
Knowledge: 1) names of cable components; 2) quality criteria of IPC/WHMA-A-620 or a similar standard for cable assemblies.	

### RECURRING COMPETENCES

<b>B.2.3 Recurring competences of Electronic Component Assembler, Level 2</b>	<b>EstQF Level 2</b>
Performance indicators: 1. follows the work process and pays attention to quality and efficiency;	

<p>2. uses their work zone for its intended purpose and keeps it organised (5S principles) and uses materials and tools prudently and economically;</p> <p>3. follows working environment and safety requirements (including waste sorting) by using work safety equipment and safe and ergonomic work methods;</p> <p>4. follows ESD and RoHS principles;</p> <p>5. uses specialist terminology and understands and follows the requirements of instructional documents;</p> <p>6. participates in teamwork.</p>
<p>Assessment method(s): Recurring competences are evaluated as part of the assessment of the other competences listed in the occupational qualification standard.</p>

## Part C GENERAL INFORMATION AND ANNEXES

<b>C.1 Information concerning compilation and certification of occupational qualification standard and reference to classification of occupations</b>	
1. ID of occupational qualification standard in register of occupational qualifications	08-16022018-1.1/3k
2. Occupational qualification standard compiled by:	Karin Andressoo, Enics Eesti AS Milko Milatskov, Stoneridge Electronics AS Arno Kolk, Elektroonikatööstuse Liit Mart Ronk, Pärnumaa Kutsehariduskeskus Andres Ojalill, Tallinna Polütehnikum
3. Occupational qualification standard approved by:	Information Technology and Telecommunication
4. No. of decision of Sectoral Council	8
5. Date of decision of Sectoral Council	16.02.2018
6. Occupational qualification standard valid until	09.02.2023
7. Occupational qualification standard version no.	3
8. Reference to International Standard Classification of Occupations (ISCO 08)	8212 Electrical and Electronic Equipment Assemblers
9. Reference to European Qualifications Framework (EQF)	2
<b>C.2 Occupational title in foreign language</b>	
English:	Electronic Equipment Assembler, EstQF Level 2
English:	Electronics Assembly Operator, EstQF Level 2
Russian:	Сборщик электронных устройств
<b>C.3 Annexes</b>	