

# CERTIFICATE SUPPLEMENT (\*)

## 1. TITLE OF THE CERTIFICATE (NL)

**Diploma Beroepsonderwijs**  
**Kwalificatie: : Eerste monteur service en onderhoud werktuigkundige installaties**  
**Kwalificatiedossier: Service- en onderhoudstechniek**  
In the original language

## 2. TRANSLATED TITLE OF THE CERTIFICATE (EN)

**Certificate Senior Secondary Vocational Education**  
**Qualification: Skilled mechanic service and maintenance mechanical installations**  
**Qualification file: Service and maintenance technology**  
This translation has no legal status

## 3. PROFILE OF SKILLS AND COMPETENCES

The most important duties of a Skilled mechanic service and maintenance mechanical installations are:

Core task 1: Inspects equipment, installations, and systems

- 1.1. Prepares inspection of equipment, installations and systems
- 1.2. Takes precautions for inspection working duties
- 1.3. Performs sensory inspection of equipment, installations and systems
- 1.4. Performs measurements and tests on equipment, installations and systems
- 1.5. Makes an initial diagnosis and report results
- 1.6. Rounds off inspection work on equipment, installations and systems

Core task 2: Optimises equipment, installations and systems, and takes care of technical problems.

- 2.1 Rounds off inspection work on equipment, installations and systems
- 2.2 Take precautionary measures for troubleshooting and optimisation of equipment, installations and systems
- 2.3 Disassembles, modifies, repairs and assembles components of equipment, installations and systems
- 2.4 Checks and tests work performed on equipment, installations and systems
- 2.5 Delivers equipment, installations and systems
- 2.6 Rounds off maintenance and modification work

Core task 3: Locates technical problems in mechanical equipment and installations.

- 3.1 Does preparatory work for locating malfunctions in mechanical installations
- 3.2 Locates and analyses (complicated) malfunctions in the mechanical installations
- 3.3 Adjusts the mechanical installations and fine tunes them
- 3.4 Supervises less experienced colleagues

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

The Skilled mechanic service and maintenance mechanical installations works for service companies focusing on service, repairs, and maintenance on installations for warm tap water, and climate control (such as water pumps,

### \* 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 is available at: <http://www.europass.cedefop.europa.eu/>

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

mechanical ventilation systems, hot water machines, gas machines, cooling machines, boilers, and solar boilers. These are both small and large companies that are active both in the region and nationwide. He doesn't work on installations which are covered by inspection duties according to the Activities Decree and the Dutch decree on emission limits for medium-sized combustion plants (BEMS).  
The Skilled mechanic service and maintenance mechanical installations carries out maintenance on mechanical installations and solves malfunctions which may be complex and performs possible repairs and modifications.

#### 5. OFFICIAL BASIS OF THE CERTIFICATE

<b>Name and status of the body awarding the certificate</b> The certificate issued on completion of the programme is signed by the examination board at the school where the pupil attended the programme.	<b>Name and status of the national/regional authority providing accreditation/recognition of the certificate</b> Ministry of Education, Culture and Science
<b>Level of the certificate (national or international)</b> Qualification level 3 of the Dutch VET qualification structure Characteristics: implementation of more than just the own block of tasks. The professional is able to account for his or her actions towards colleagues, and monitors and supervises the work of others. The range of tasks also includes drafting work preparation procedures. NLQF level 3 - EQF level 3 - ISCED 3C	<b>Grading scale / Pass requirements</b> 10 excellent 9 very good 8 good 7 very satisfactory 6 pass 5 fail 4 unsatisfactory 3 very unsatisfactory 2 poor 1 very poor
<b>Access to next level of education/professions</b> The Skilled mechanic service and maintenance mechanical installations can be transferred to technician service and maintenance mechanical installations - he might be working on complex installations -, maintenance technician measure and control technology, technician gas and infra technology or to a project coordinator. He can expand his knowledge to a skilled mechanic service and maintenance electro technology and instrumentation, skilled technician service and maintenance tool making or professions in the refrigeration technology.	<b>International agreements</b> The profession of Skilled mechanic service and maintenance mechanical installations is not regulated in the Netherlands. However the education and training for this profession on qualification level 3 is regulated under the European directive 2005/36/EC, amended by directive 2013/55/EU. The regulated education and training gives access to regulated professions at the level of a diploma according to article 11 of this directive.
<b>Legal basis</b> Act on Vocational Education and Training (WEB), registered number of qualification (crebo): 25307 The education and training for this qualification is offered as of August 1, 2015.	

#### 6. OFFICIALLY RECOGNISED WAYS OF ACQUIRING THE CERTIFICATE

Senior secondary vocational education features two learning pathways: the school-based pathway (bol) and the training on the job pathway (bbl).  
In the school-based pathway, the majority of the course consists of theory at school. The extent of the practical component (vocational practice) is between 20% and 60%. In the training on the job pathway, the extent of vocational practice is at least 60% of the course. The participant works four days a week in a training company, and attends school for theory subjects just one day a week.  
In principle it is possible to follow both learning pathways, but which pathway is offered will depend on the individual educational institution.

<b>Average duration of the education/ training leading to the certificate</b>	<b>3 years) (4800 study hours) (depending on previous education)</b>
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## 6. OFFICIALLY RECOGNISED WAYS OF ACQUIRING THE CERTIFICATE

### **Entry requirements**

The certificate preparatory vocational secondary education (vmbo) advanced vocational programme, combined programme, or theoretical programme, or a comparable level.

## 7. ADDITIONAL INFORMATION

Dutch senior secondary VET is based on qualification files, that each contain one or more qualifications. The information included in part 3 and 4 is derived directly from the qualification file determined by the Minister of Education, Culture and Science. The complete qualification file can be found at <http://kwalificaties.s-bb.nl/>, only in Dutch.

Optional subjects are linked to the qualification. The optional subjects have a total size of 15% of the course duration. The optional subjects completed by the student are listed on the certificate.

Additional information, including a description of the Dutch national qualifications system, is available at the Netherlands National Reference Point (NRP): [www.s-bb.nl](http://www.s-bb.nl). The NRP is the information centre for vocational qualifications in the Netherlands. SBB has been appointed in this capacity by the Ministry of Education, Culture and Science.