



1. TITLE OF THE CERTIFICATE (NL)

Diploma Beroepsonderwijs
Kwalificatie: Technisch Specialist Verbrandingsmotoren
Kwalificatiedossier: Verbrandingsmotortechniek

In the original language

2. TRANSLATED TITLE OF THE CERTIFICATE (EN)

Certificate Senior Secondary Vocational Education
Qualification: Technical specialist combustion engines
Qualification file: Combustion engine technology

This translation has no legal status

3. PROFILE OF SKILLS AND COMPETENCES

Core task 1: Performs maintenance work on combustion engines

- 1.1 Prepares for maintenance assignment on combustion engine
- 1.2 Checks the combustion engine
- 1.3 Performs maintenance work on combustion engine
- 1.4 Completes maintenance assignment on combustion engine

Core task 2: Repairs combustion engines

- 2.1 Prepares for repair assignment on combustion engine
- 2.2 Performs repair work on combustion engine
- 2.3 Completes repair assignment on combustion engine

Core task 3: Assembles parts of combustion engines and adjusts them

- 3.1 Prepares for assembly assignment on combustion engine
- 3.2 Constructs combustion engine and/or adjusts it
- 3.3 Completes assembly assignment on combustion engine

Core task 4: Diagnoses combustion engines

- 4.1 Prepares for diagnosis assignment on combustion engines
- 4.2 Does diagnosis on combustion engine
- 4.3 Completes diagnosis assignment on combustion engine

Core task 5: Commissions combustion engines

- 5.1 Prepares commissioning
- 5.2 Provides/coordinates tests on combustion engine/installation
- 5.3 Provides/coordinates adjustments, commissioning and delivery
- 5.4 Maintains contact with clients and other internal and external specialists

Core task 6: Takes the lead when working in a team

- 6.1 Plans and distributes the working duties
- 6.2 Supervises and coaches technical workers
- 6.3 Monitors and evaluates processes and procedures

*** 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

The Technical specialist combustion engines works in the workshops of combustion engine companies. These companies have specially equipped workshops for revision, maintenance and repairs. The Technical specialist combustion engines also often works at the customer's location. These are (large) diesel and gas engines for ships, generating sets, cogeneration plants for greenhouses and (mobile) equipment for example. The Technical specialist combustion engines works on the most difficult diagnostic jobs, especially when electronics, measuring and control technology are involved.

5. OFFICIAL BASIS OF THE CERTIFICATE

<p>Name and status of the body awarding the certificate The certificate issued on completion of the programme is signed by the examination board at the school where the pupil attended the programme.</p>	<p>Name and status of the national/regional authority providing accreditation/recognition of the certificate Ministry of Education, Culture and Science</p>																				
<p>Level of the certificate (national or international) Qualification level 4 of the Dutch VET qualification structure Characteristics: non-job related skills such as tactical and strategic capacities. The professional bears his or her own responsibility, which is not only related to practical implementation in terms of monitoring and supervision, but also a more formal, organisational responsibility. The range of tasks also includes drafting new procedures. NLQF-niveau 4 - EQF level 4 - ISCED 3A</p>	<p>Grading scale / Pass requirements</p> <table border="0"> <tr><td>10</td><td>excellent</td></tr> <tr><td>9</td><td>very good</td></tr> <tr><td>8</td><td>good</td></tr> <tr><td>7</td><td>very satisfactory</td></tr> <tr><td>6</td><td>pass</td></tr> <tr><td>5</td><td>fail</td></tr> <tr><td>4</td><td>unsatisfactory</td></tr> <tr><td>3</td><td>very unsatisfactory</td></tr> <tr><td>2</td><td>poor</td></tr> <tr><td>1</td><td>very poor</td></tr> </table>	10	excellent	9	very good	8	good	7	very satisfactory	6	pass	5	fail	4	unsatisfactory	3	very unsatisfactory	2	poor	1	very poor
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<p>Access to next level of education/professions The Technical specialist combustion engines could acquire a second diploma on level 4 such as After sales manager mobility industry. There are several possibilities to progress to higher vocational educations like Electronic engineering, Car technology, Civil technology, Mechanical engineering or the course which trains students to become a teacher of technology or motor vehicles technology. The Technical specialist combustion engines could also develop through several associated degree courses within the mobility industry.</p>	<p>International agreements Technical specialist combustion engines is not a regulated profession in the Netherlands. However, the education and training for this profession on qualification level 4 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.</p>																				
<p>Legal basis Act on Vocational Education and Training (WEB), registered number of qualification (crebo): 25237 The education and training for this qualification is offered as of 01-08-2015.</p>																					

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.

<p>Average duration of the education/ training leading to the certificate</p>	<p>4 years (6400 study hours) (depending on previous education)</p>
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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 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. 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.