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CERTIFICATE SUPPLEMENT (*)

Austria

1. TITLE OF THE CERTIFICATE (DE) (1)

Lehrabschlussprüfungszeugnis Faserverbundtechnik

(1) in original language

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

Certificate of Apprenticeship “Fibre Composite Technology” (f/m)

(2) This translation has no legal status.

3. PROFILE OF SKILLS AND COMPETENCES

Specialist areas of competence:

Basics of fibre composite technology and materials engineering
The specialist in fibre composite technology is familiar with the basics of fibre composite technology with regard to the raw materials used (e.g. resins, fibres, hardeners), additives, plastic block materials and semi-finished plastic products (e.g. sheets, pipes, rods, glass mats, prepregs (pre-impregnated fibres, pre-impregnated reinforcement materials)), the moulds and tools used in fibre composite technology, the plastic machines for the manufacture of fibre composite products and the finishing and post-processing of the manufactured products, including the technical vocabulary of the industry. He/she is also aware of new trends in fibre composite technology, such as additive processes or special-purpose technologies. The specialist receives and identifies the raw materials delivered in different forms, additives, plastic block materials and semi-finished plastic products, checks them for usability and stores them or prepares them for production according to the order. Often these raw materials and additives still have to be prepared and further processed. For this purpose, the specialist uses technical documents and calculates, e.g. on the basis of recipes, the mixtures of raw materials and additives, which are mixed and homogenised as well as further processed.

Processing technology and fibre composite technology
The specialist in fibre composite technology prepares, for example, hand tools, machines, moulds and tools in accordance with the orders and work to be carried out, checks their safety by visual and functional inspections before use and takes appropriate measures if necessary. The specialist uses hand tools or machines to machine plastic block materials, semi-finished plastic products (e.g. sheets, pipes, rods, glass mats, prepregs) or fibre composite products with and without removing material, and to shape them while hot and join them (chemically and thermally) to carry out suitable work processes. He/she knows joining techniques and uses suitable tools to make detachable and non-detachable connections (screws, rivets, snap and plug-in connections, presses). The specialist detects and corrects any processing errors. In addition to the manual production of fibre composite products by hand lamination or vacuum processes, he/she also makes fibre composite products by machine. To this end, the specialist cleans, builds or equips plastic machines to prepare them for the manufacture of fibre composite products. Depending on the type of fibre composite products manufactured in the company and the associated production processes (such as fibre-resin spraying, pultrusion [extrusion process by pulling], winding, resin transfer moulding [RTM, injection moulding], sheet moulding compound [SMC, hot pressing process], fibre placement, prepreg/autoclave, gelcoat application [e.g. airless] and processes for the manufacture of organic sheets), the specialist operates and monitors the company-specific plastic machines after production start-up in order to ensure safe and trouble-free operation, and records, interprets and documents company-specific process data. The specialist prepares moulds or tools for production and carries out simple maintenance work on moulds or tools after the end of production. He/she is able to rectify faults on plastic machines professionally and safely, including by means of simple assembly and disassembly work. In addition, he/she also operates the company-specific equipment for finishing (e.g. UV/ozone pre-treatment, polishing, engraving, metallising, printing, laser marking, painting) the company’s fibre composite products in order to achieve the desired effects or properties. After checking the fibre composite products, the specialist reworks them manually or mechanically and finalises them.

Production and process management
The specialist in fibre composite technology recognises how the logistics processes from goods procurement, goods storage and internal logistics up to goods delivery influence production, ensures the material flow in production and optimises it. Within the framework of the company’s quality management system, the specialist uses different testing equipment to test intermediate products and end products (including visually) on the basis of specified test characteristics and to document the results. In addition, he/she is also involved in specialist mechanical, thermal or acoustic tests, in particular to test fibre composite products.

Interdisciplinary areas of competence:

- Working in an operational and professional environment
- Quality oriented, safe and sustainable work
- Digital work

4. RANGE OF OCCUPATIONS ACCESSIBLE TO THE HOLDER OF THE CERTIFICATE [3]

Range of occupations:
Employment including in workshops and production halls of plastics processing companies, in mechanical engineering, plant construction and vehicle construction companies as well as in companies that manufacture products in the sports and leisure industry (e.g. pools, model making, skis)

[3] if applicable

(*) **Explanatory note**
This document has been developed with a view to providing additional information on individual certificates; it has no legal effect in its own right. These explanatory notes refer to the Decision (EU) 2018/646 of the European Parliament and of the Council of 18 April 2018 on a common framework for the provision of better services for skills and qualifications (Europass).
More information on Europass is available at: http://europass.cedefop.europa.eu or www.europass.at

5. OFFICIAL BASIS OF THE CERTIFICATE

Name and status of the body awarding the certificate	**Name and status of the national/regional authority providing accreditation/recognition of the certificate**
Lehrlingsstelle der Wirtschaftskammer (Apprenticeship Office of the Economic Chamber; for the address, see certificate)	Bundesministerium für Wirtschaft, Energie und Tourismus (Federal Ministry for Labour and Economy)
Level of the certificate (national or international) NQF/EQF 4 ISCED 35	**Grading scale / Pass requirements** Overall performance: Pass with Distinction Good Pass Pass Fail
Access to next level of education/training Access to the *Berufsreifeprüfung* (i.e. certificate providing university access for skilled workers) or a vocational college for people under employment. Access to relevant courses at a *Fachhochschule* (i.e. university level study programme of at least three years' duration with vocational-technical orientation); additional examinations must be taken if the educational objective of the respective course requires it.	**International agreements** Between Germany, Hungary, South Tyrol and Austria, international agreements on the mutual automatic recognition of apprenticeship-leave examinations and other vocational qualifications have been concluded. Information on equivalent apprenticeship occupations can be obtained from the (Federal Ministry for Labour and Economy).

Legal basis
1. Training Regulation for Fibre Composite Technology BGBl. II (Federal Law Gazette) No. 184/2024 (company-based training)
2. Curriculum framework (education at the vocational school for apprentices)

6. OFFICIALLY RECOGNISED WAYS OF ACQUIRING THE CERTIFICATE

1. Training in the framework of the given Training Regulation for Fibre Composite Technology and of the curriculum of the vocational school for apprentices. Admission to the final apprenticeship examination upon completion of the apprenticeship period specified for the apprenticeship trade concerned. The final apprenticeship examination aims to establish whether the apprentice has acquired the skills and competences required for the respective apprenticeship trade and is able to carry out the activities particular to the learned trade herself/himself in an appropriate manner.
2. Admission to the final apprenticeship examination in accordance with Article 23 (5) of the *Berufsausbildungsgesetz* (Vocational Training Act). An applicant for an examination is entitled to sit the final apprenticeship examination without completing a formal apprenticeship training if she/he has reached 18 years of age and is able to prove acquisition of the required skills and competences by means of a relevant practical or an on-the-job training activity of appropriate length, by attending relevant courses etc.

Additional information:

Entry requirements: successful completion of 9 years of compulsory schooling

Duration of training: 3 years

Enterprise-based training: Enterprise-based training comprises $^{4}/_{5}$ of the entire duration of the training and focuses on the provision of job-specific skills and competences according to Article 3 of the Training Regulation, BGBl. II (Federal Law Gazette) No. 184/2024, enabling the apprentice to exercise qualified activities as defined by the profile of skills and competences specified above (cf. job profile).

Education at vocational school: School-based education comprises $^{1}/_{5}$ of the entire duration of the training. The vocational school for apprentices has the tasks of imparting to apprentices the basic theoretical knowledge, of supplementing their enterprise-based training and of widening their general education in the framework of subject-oriented part-time instruction.

More information (including a description of the national qualification system) is available at:
www.zeugnisinfo.at and www.edusystem.at

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