EA MLA Signatory
Český institut pro akreditaci, o.p.s.
(Czech Accreditation Institute)
Hájkova 2747/22, Žižkov, 130 00 Praha 3

issues

according to section 16 of Act No. 22/1997 Coll., on technical requirements for products and on changes and amendments to some Acts, as amended

CERTIFICATE OF ACCREDITATION

No. **534/2025**

Element Materials Technology Pilsen s.r.o.
with registered office Podnikatelská 1184/39, Skvrňany, 301 00 Plzeň
Company Registration No. 25235940

for the Testing Laboratory No. **1685**
Element Materials Technology Pilsen

Scope of accreditation:

Testing of strength and plastic properties of materials, metallographic tests, destructive tests on welds and testing of mechanical properties of materials to the extent as specified in the appendix to this Certificate.

This Certificate of Accreditation is a proof of accreditation issued on the basis of assessment of fulfillment of the accreditation criteria in accordance with

ČSN EN ISO/IEC 17025:2018

In its activities performed within the scope and for the period of validity of this Certificate, the abovementioned Accredited Body is entitled to refer to this Certificate, provided that the accreditation is not suspended and the Accredited Body meets the specified accreditation requirements in accordance with the relevant regulations applicable to the activity of an accredited conformity assessment body.

This Certificate of Accreditation replaces, to the full extent, Certificate No.: 500/2024 of 26/09/2024, and/or any administrative acts building upon it.

The Certificate of Accreditation is valid until: **22/10/2030**

Prague: 22/10/2025

Český institut pro akreditaci, o.p.s. «CAI»

Signed in the Czech original:
Jan Velíšek on 22/10/2025

Jan Velíšek
Director of the Department
of Testing and Calibration Laboratories
Czech Accreditation Institute

This translation of the Czech original has been issued by: Eliška Frycová

The Appendix is an integral part of
Certificate of Accreditation No: 534/2025 of 22/10/2025

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

Element Materials Technology Pilsen s.r.o.
CAB number 1685, Element Materials Technology Pilsen
Podnikatelská 1184/39, Skvrňany, 301 00 Plzeň

The laboratory applies a flexible approach to the scope of accreditation.
The current list of activities carried out within the flexible scope is available on the laboratory's website https://www.element.com/locations/europe/pilsen in the form of the „List of activities within the flexible scope of accreditation".

Tests:

Ordinal number[1]	Test procedure / method name	Test procedure / method identification[2]	Tested subject	Degrees of freedom[3]
1	**Mechanical testing**			
1.1	Tensile test	EL-AEE-OP-MEC-PLZ-MD102855 (ASTM E8/E8M; ASTM B557; ASTM A370, cl. 7-15; ASTM E21; BS EN ISO 6892-1; BS EN ISO 6892-2; BS EN ISO 5178; BS EN ISO 4136; BS EN 2002-1; BS EN 2002-2; RRMS 30020); EL-AEE-OP-MEC-PLZ-MD102863 (ASTM A370, cl. 7-15; ASTM B557; ASTM E8/E8M; BS EN ISO 6892-1; BS EN 2002-1; RRMS 30020; BS EN ISO 12385-1+A1; BS EN 818-1+A1; BS EN 1677-1+A1; BS EN 12195-2; BS EN 1492-2+A1)	Metallic materials	D

The Appendix is an integral part of
Certificate of Accreditation No: 534/2025 of 22/10/2025

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

Element Materials Technology Pilsen s.r.o.
CAB number 1685, Element Materials Technology Pilsen
Podnikatelská 1184/39, Skvrňany, 301 00 Plzeň

Ordinal number[1]	Test procedure / method name	Test procedure / method identification[2]	Tested subject	Degrees of freedom[3]
1.2	Tensile test at elevated temperature	EL-AEE-OP-MEC-PLZ-MD102855 (ASTM E8/E8M; ASTM B557; ASTM A370, cl. 7-15; ASTM E21; BS EN ISO 6892-1; BS EN ISO 6892-2; BS EN ISO 5178; BS EN ISO 4136; BS EN 2002-1; BS EN 2002-2; RRMS 30020) EL-AEE-OP-MEC-PLZ-MD102643 (ASTM A370, cl. 7-15; ASTM B557; ASTM E21; BS EN 2002-2; BS EN ISO 6892-2; RRMS 30020)	Metallic materials	D
1.3	Tensile test at low temperature	EL-AEE-OP-MEC-PLZ-MD102855 APP F (BS EN ISO 6892-3)	Metallic materials	D
1.4	Stress rupture test	EL-AEE-OP-MEC-PLZ-MD27093 (ASTM E139; ASTM E292; ASTM F519; BS EN 2002-005, cl. 16; BS EN ISO 204)	Metallic materials	D
1.5	Uniaxial creep test in tension	EL-AEE-OP-MEC-PLZ-MD27087 (ASTM E139; ASTM E292; BS EN 2002-005, cl. 17; BS EN ISO 204)	Metallic materials	D
1.6	Brinell hardness test	EL-AEE-OP-MEC-PLZ-MD27091 (BS EN ISO 6506-1; BS EN ISO 6506-2; ASTM E10)	Metallic materials	D
1.7	Rockwell hardness test	EL-AEE-OP-MEC-PLZ-MD27080 (ASTM E18; BS EN ISO 6508-1; BS EN ISO 6508-2)	Metallic materials	D

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

Element Materials Technology Pilsen s.r.o.
CAB number 1685, Element Materials Technology Pilsen
Podnikatelská 1184/39, Skvrňany, 301 00 Plzeň

Ordinal number[1]	Test procedure / method name	Test procedure / method identification[2]	Tested subject	Degrees of freedom[3]
1.8	Vickers hardness test	EL-AEE-OP-MEC-PLZ-MD27069 (BS EN ISO 6507-1; BS EN ISO 9015-1; RRMS 30038; ASTM E92; ASTM E140; ASTM E370)	Metallic materials	D
1.9	Impact test	EL-AEE-OP-MEC-PLZ-MD27071 (BS 131:1961, Part 1); EL-AEE-OP-MEC-PLZ-MD27073 (BS EN ISO 148-1; BS EN ISO 148-2; BS EN ISO 148-3; BS EN ISO 9016); EL-AEE-OP-MEC-PLZ-MD27085 (ASTM E23; ASTM A370, cl. 20-32)	Metallic materials	D
1.10	Tensile test	EL-AEE-OP-MEC-PLZ-MD102863 APP D (BS EN 12385-1+A1, cl. 6.4)	Steel wire ropes	D
1.11	Tensile test	EL-AEE-OP-MEC-PLZ-MD102863 APP E (BS EN 818-1+A1, cl. 6.5)	Short link chains for lifting purposes	D
1.12	Tensile test	EL-AEE-OP-MEC-PLZ-MD102863 APP E (BS EN 1677-1+A1, cl. 6.2 3, 6.2.4)	Components for slings	D
1.13	Fatigue test	EL-AEE-OP-FE-PLZ-MD27089 (BS 3518, Part 1 a 3; ASTM E466; ASTM E467; ASTM E468; BS EN 6072); EL-AEE-OP-FE-PLZ-MD27090 (ASTM E606/606M; BS 3518, Part 1 a 3; BS 7270; GE E50TF148)	Metallic materials	D
1.14	Fracture toughness test	EL-AEE-OP-FE-PLZ-MD27061 (ASTM E399; ASTM B645; ASTM E561; BMS 7-323)	Metallic materials	D
1.15	Stress Relaxation in tension	EL-AEE-OP-MEC-PLZ-MD27028 (ASTM E328, A method)	Metallic materials	D

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

Element Materials Technology Pilsen s.r.o.
CAB number 1685, Element Materials Technology Pilsen
Podnikatelská 1184/39, Skvrňany, 301 00 Plzeň

Ordinal number[1]	Test procedure / method name	Test procedure / method identification[2]	Tested subject	Degrees of freedom[3]
1.16	Isothermal Stress Relaxation in tension	EL-AEE-OP-MEC-PLZ-MD27034 (BS 5896; BS EN ISO 15630-3, cl. 8; ASTM A416/A416M; ASTM E328)	Prestressing steel and steel for the reinforcement and prestressing of concrete	D
2	**Metallography**			
2.1	Metallographic determination of inclusion content	EL-AEE-OP-MET-PLZ-MD27082 (ASTM E45; ISO 4967; DIN 50602:1985); ASTM E45; ISO 4967; DIN 50602:1985	Steels	D
2.2	Metallographic determination of grain size	EL-AEE-OP-MET-PLZ-MD27064 (ASTM E112; ASTM E1181; ASTM E930; BS EN ISO 643); ASTM E112; ASTM E1181; ASTM E930; BS EN ISO 643	Metallic materials	D
2.3	Metallographic assessment of macrostructure and grain flow	EL-AEE-OP-MET-PLZ-MD27084 (ASTM E381; ASTM A604/A604M; BS EN 2715); ASTM E381; ASTM A604/A604M; BS EN 2715	Metallic materials	D
2.4	Metallographic determination of depth of decarburisation and depth of carburized and hardened cases	EL-AEE-OP-MET-PLZ-MD27052 (ASTM E1077; BS EN ISO 3887); ASTM E1077; BS EN ISO 3887	Steels	D
2.5	Metallographic determination of alpha case	EL-AEE-OP-MET-PLZ-MD27065 (GE P3TF19; BS EN 2003-009); GE P3TF19; BS EN 2003-009	Ti-alloys	D

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

Element Materials Technology Pilsen s.r.o.
CAB number 1685, Element Materials Technology Pilsen
Podnikatelská 1184/39, Skvrňany, 301 00 Plzeň

Ordinal number[1]	Test procedure / method name	Test procedure / method identification[2]	Tested subject	Degrees of freedom[3]
2.6	Metallographic determination of phase volume fraction	EL-AEE-OP-MET-PLZ-MD27077; EL-AEE-OP-MET-PLZ-MD27077 APP 1 (ASTM E562); ASTM E562; EL-AEE-OP-MET-PLZ-MD27077 APP 2 (AMS 2315); AMS 2315; EL-AEE-OP-MET-PLZ-MD27077 APP 3 (BS EN 3683; BS EN 3684); BS EN 3683; BS EN 3684	Metallic materials	D
2.7	Metallographic determination of microstructure	EL-AEE-OP-MET-PLZ-MD27053	Metallic materials	D
2.8	Metallographic determination of resistance to intergranular corrosion	EL-AEE-OP-MET-PLZ-MD27047 (BS ISO 21601; GOST 6032-2003, method AM; ASTM A262, method E; BS EN ISO 3651-2, method A); ASTM A262, method E; GOST 6032-2003, method AM; BS EN ISO 3651-2, method A; BS ISO 21601	Steel	D
2.9	Evaluation of IGO / IGA (intergranular oxidation/intergranular attack)	EL-AEE-OP-MET-PLZ-MD30934	Metallic materials	D
2.10	Vickers microhardness test	EL-AE-OP-MET-PLZ-MD27058 (BS EN ISO 18203; ASTM E384; ASTM E92; BS EN ISO 6507-1); BS EN ISO 18203; ASTM E384; ASTM E92; BS EN ISO 6507-1	Metallic materials	D
3	**Chemical Composition Analysis**			
3.1	Determination of hydrogen content by thermal conductivity detection (TCD)	EL-AEE-OP-CH-PLZ-MD27078 (ASTM E1447)	Ti and Ti-alloys	A, D

The Appendix is an integral part of
Certificate of Accreditation No: 534/2025 of 22/10/2025

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

Element Materials Technology Pilsen s.r.o.
CAB number 1685, Element Materials Technology Pilsen
Podnikatelská 1184/39, Skvrňany, 301 00 Plzeň

Ordinal number[1]	Test procedure / method name	Test procedure / method identification[2]	Tested subject	Degrees of freedom[3]
3.2	Determination of oxygen by infrared detection (IR)	EL-AEE-OP-CH-PLZ-MD30949 (ASTM E1409); EL-AEE-OP-CH-PLZ-MD114449 except cl.. 5.1.1.2 (ASTM E1409)	Ti and Ti-alloys	A, D
3.3	Determination of nitrogen content by thermal conductivity detection (TCD)	EL-AEE-OP-CH-PLZ-MD114449 except cl.. 5.1.1.1 (ASTM E1409)	Ti and Ti-alloys	A, D
4	**Destructive tests on welds**			
4.1	Macroscopic and microscopic examination of welds	EL-AEE-OP-MET-PLZ-MD27084 (BS EN ISO 17639; BS EN ISO 5817; BS EN ISO 15614-1+A1); BS EN ISO 17639; BS EN ISO 5817; BS EN ISO 15614-1+A1	Metallic materials	D
4.2	Transverse tensile test	EL-AEE-OP-MEC-PLZ-MD102855 (BS EN ISO 4136)	Metallic materials	D
4.3	Longitudinal tensile test	EL-AEE-OP-MEC-PLZ-MD102855 (BS EN ISO 5178)	Metallic materials	D
4.4	Bend test	EL-AEE-OP-MEC-PLZ-MD27032 (BS EN 910:1996; BS EN ISO 5173+A1; BS EN ISO 7438)	Metallic materials	D
4.5	Hardness test	EL-AEE-OP-MEC-PLZ-MD27069 APP I (BS EN ISO 9015-1)	Metallic materials	D
4.6	Impact test	EL-AEE-OP-MEC-PLZ-MD27073 (BS EN ISO 9016)	Metallic materials	D
5	**Testing of textile web lashings and roundslings**			
5.1	Tensile test	EL-AEE-OP-MEC-PLZ-MD102863 APP G (BS EN 1492-2+A1, cl. 6.2)	Roundslings made of man-made fibres	D
5.2	Tensile test	EL-AEE-OP-MEC-PLZ-MD102863 APP H (BS EN 12195-2, cl. 6.3, 6.4)	Web lashing made from man-made fibres	D

[1] asterisk at the ordinal number identifies the tests, which the laboratory is qualified to carry out outside the permanent laboratory premises

[2] if the document identifying the test procedure is dated, only these specific procedures are used. If the document identifying the test procedure is not dated, the latest valid edition of the specified procedure is used (including any changes)

[3] degrees of freedom: A – Flexibility concerning materials/products (subject of the test), B – Flexibility concerning components/parameters/characteristics, C – Flexibility concerning the performance of the method, D – Flexibility concerning the method

The Appendix is an integral part of
Certificate of Accreditation No: 534/2025 of 22/10/2025

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

Element Materials Technology Pilsen s.r.o.
CAB number 1685, Element Materials Technology Pilsen
Podnikatelská 1184/39, Skvrňany, 301 00 Plzeň

The laboratory can modify the test procedures with the specified degree(s) of freedom in the scope of accreditation while maintaining the principle of measurement. If no degree of freedom is specified, the laboratory cannot apply a flexible approach to the scope of accreditation for the test.

Explanations:

EL-AEE-OP - AS, P, ME	Internal procedure
ASTM	American Society for Testing and Materials
BS	British Standard
BMS	Boeing Material Specification
GE P3TF19	GE Aircraft Engines Specification
AMS	Aerospace Material Specification
GOST	Standard of the Euro-Asian Council for Standardization Metrology and Certification
MTL	Technical Specifications for MTU Aero Engineer

"This document is an appendix to the certificate of accreditation. In case of any discrepancies between the English and Czech versions, the Czech version shall prevail, both for the certificate appendix and the certificate itself."