DAP Deutsches Akkreditierungssystem Prüfwesen GmbH

Anlage zur Akkreditierungsurkunde DPT-PL-3419.80 vom 27.08.2007
nach DIN EN ISO/IEC 17025:2005
Annex to the accreditation certificate
Accreditation based on DIN EN ISO/IEC 17025:2005

Inhaber der Akkreditierungsurkunde:
Holder of this accreditation certificate:

Slovenian Institute of Quality and Metrology (SIQ)

Tržaška c. 2
1000 Ljubljana
Slovenia

for its

Testing Technologies Department and
Electromagnetics Department

Der Geltungsbereich der Akkreditierung erstreckt sich auf die nachstehend genannten Gebiete und zugehörigen Prüfbereiche:
The scope of this accreditation indicates:

Electromagnetic compatibility:

Basic Standards	
Norm / Standard	**Titel / Definition**
IEC 61000-4-2 EN 61000-4-2 DIN EN 61000-4-2 VDE 0847 Teil 4-2	Electromagnetic compatibility (EMC) – Part 4-2: Testing and measuring techniques – Electrostatic discharge immunity test.
IEC 61000-4-3 EN 61000-4-3 DIN EN 61000-4-3 VDE 0847 Teil 4-3	Electromagnetic compatibility (EMC) – Part 4-3: Testing and measuring techniques – Radiated, radio-frequency, electromagnetic field immunity test.
ENV 50204 DIN V ENV 50204 VDE V 0847 Teil 204	Radiated electromagnetic field from digital radio telephones - immunity test.
IEC 61000-4-4 EN 61000-4-4 DIN EN 61000-4-4 VDE 0847 Teil 4-4	Electromagnetic compatibility (EMC) – Part 4: Testing and measuring techniques – Section 4: Electrical fast transient/burst immunity test.
IEC 61000-4-5 EN 61000-4-5 DIN EN 61000-4-5 VDE 0847 Teil 4-5	Electromagnetic compatibility (EMC) – Part 4: Testing and measuring techniques – Section 5: Surge immunity test.

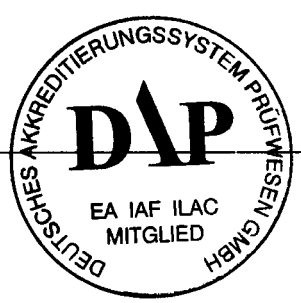
Norm / Standard	Titel / Definition
IEC 61000-4-6 EN 61000-4-6 DIN EN 61000-4-6 VDE 0847 Teil 4-6	Electromagnetic compatibility (EMC) – Part 4-6: Testing and measuring techniques – Immunity to conducted disturbances, induced by radio-frequency fields.
IEC 61000-4-8 EN 61000-4-8 DIN EN 61000-4-8 VDE 0847 Teil 4-8	Electromagnetic compatibility (EMC) – Part 4: Testing and measurement techniques – Section 8: Power frequency magnetic field immunity test
IEC 61000-4-11 EN 61000-4-11 DIN EN 61000-4-11 VDE 0847 Teil 4-11	Electromagnetic compatibility (EMC) – Part 4: Testing and measuring techniques – Section 11: Voltage dips, short interruptions and voltage variations immunity test.
IEC 61000-3-2 DIN EN 61000-3-2 VDE 0838 Teil 2	Electromagnetic compatibility (EMC) – Part 3-2: Limits – Limits for harmonic current emissions (equipment input current ≤ 16 A per phase).
IEC 61000-3-3 DIN EN 61000-3-3 VDE 0838 Teil 3	Electromagnetic compatibility (EMC) – Part 3-3: Limits – Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems for equipment with rated current ≤ 16 A.

Generic Standards	
Norm / Standard	**Titel / Definition**
IEC 61000-6-1 EN 61000-6-1	Electromagnetic compatibility (EMC) – Part 6-1 :Generic standards – Immunity for residential, commercial and light-industrial environments.
IEC 61000-6-2 EN 61000-6-2 DIN EN 61000-6-2 VDE 0839 Teil 6-2	Electromagnetic compatibility (EMC) – Part 6-2: Generic standards - Immunity for industrial environments.
IEC 61000-6-3 EN 61000-6-3 DIN EN 61000-6-3	Electromagnetic compatibility (EMC) – Part 6-3: Generic standards – Emission standard for residential, commercial and light industrial environments.
IEC 61000-6-4 EN 61000-6-4	Electromagnetic compatibility (EMC) – Part 6-4: Generic standards - Emission standard for industrial environments.

Product family Standards	
Norm / Standard	**Titel / Definition**
CISPR 11 EN 55011 DIN EN 55011 VDE 0875 Teil 11	Industrial, scientific and medical (ISM) radio-frequency equipment – Electromagnetic disturbance characteristics – Limits and methods of measurement.
CISPR 14-1 EN 55014-1 DIN EN 55014-1 VDE 0875 Teil 14-1	Electromagnetic compatibility – Requirements for household appliances, electric tools and similar apparatus – Part 1: Emission.
CISPR 14-2 EN 55014-2 DIN EN 55014-2 VDE 0875 Teil 14-2	Electromagnetic compatibility – Requirements for household appliances, electric tools and similar apparatus – Part 2: Immunity.
CISPR 15 EN 55015 DIN EN 55015 VDE 0875 Teil 15	Limits and methods of measurement of radio disturbance characteristics of electrical lightig and similar equipment
CISPR 22 EN 55022 DIN EN 55022 VDE 0878 Teil 22	Information technology equipment – Radio disturbance characteristics – Limits and methods of measurement.
CISPR 24 EN 55024 DIN EN 55024 VDE 0878 Teil 24	Information technology equipment – Immunity characteristics – Limits and methods of measurement.
EN 50130-4 DIN EN 50130-4 VDE 0830 Teil 1-4	Alarm systems -- Part 4: Electromagnetic compatibility - Product family standard: Immunity requirements for components of fire, intruder and social alarm systems.
EN 12015 DIN EN 12015	Electromagnetic compatibility - Product family standard for lifts, escalators and passenger conveyors – Emission.

Norm / Standard	Titel / Definition
EN 12016 DIN EN 12016	Electromagnetic compatibility - Product family standard for lifts, escalators and passenger conveyors – Immunity.
EN 300 386	Electromagnetic compatibility and radio spectrum matters (ERM); Telecommunication network equipment, Electromagnetic compatibility (EMC) requirements.

Product Standards	
Norm / Standard	**Titel / Definition**
IEC 60601-1-2 EN 60601-1-2	Medical electrical equipment; Part 1-2: General Requirements for the safety – Collateral Standard: Electromagnetic compatibility – Requirements and Tests.
EN 45501 DIN EN 45501	Metrological aspects of non-automatic weighing instruments.
EN 50199 DIN EN 50199 VDE 0544 Teil 206	Electromagnetic compatibility (EMC) - Product standard for arc welding equipment
IEC 61326 EN 61326 DIN EN 61326 VDE 0843 Teil 20	Electrical equipment for measurement, control and laboratory use - EMC requirements.
Other Standards	
IEEE Std 299-1997	IEEE Standard Method for Measuring the Effectiveness of Electromagnetic Shielding Enclosures.
IEC 61566	Measurement of exposure to radio-frequency electromagnetic fields – Field strength in the frequency range 100 kHz to 1 GHz.
ANSI C63.4-2003 and FCC part 15, subparts A, B and C	American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz and FCC (Federal Communications Commission) Part 15 (Radio Frequency Devices), subparts A (General), B (Unintentional Radiators) and C (Intentional Radiators) with the following restrictions: • Frequency range up to 26 GHz • 3 m test distance only



ANSI C63.4-2003	American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz

Für die fachliche Richtigkeit der Prüfberichte verantwortlich:
Technical responsibility for the test reports:

Marjan Mak	Head of Laboratory
Matjaž Šegula	Test Engineer

Safety of machinery

Norm / Standard	Titel / Definition
EN 692	Mechanical presses – Safety.
EN 693	Hydraulic presses – Safety.
EN 774	Garden equipment - Hand held, integrally powered hedge trimmers – Safety.
EN 786	Garden equipment - Electrically powered walk-behind and hand-held lawn trimmers and lawn edge trimmers - Mechanical safety.
EN 848-1	Safety of woodworking machines - One side molding machines with rotating tool – Part 1: Single spindle vertical molding machines.
EN 848-2	Safety of woodworking machines - One side molding machines with rotating tool - Part 2: Single spindle handfed/integrated fed routing machines.
EN 848-3	Safety of woodworking machines - One side molding machines with rotating tool - Part 3: Numerical control (NC) boring machines and routing machines.
EN 859	Safety of woodworking machines - Handfed surface planing machines.
EN 860	Safety of woodworking machines - One side thickness planing machines.
EN 861	Safety of woodworking machines - Surface planing and thicknessing machines.
EN 940	Safety of woodworking machines - Combined woodworking machines.
EN 1032	Mechanical vibration – Testing of mobile machinery in order to determine whole-body vibration emission value – General.
EN 1033	Hand-arm vibration Laboratory measurement of vibration at the grip surface of hand-guided machinery – General.
ISO 8662-1	Hand-held portable power tools - Measurement of vibrations at the handle - Part 1 : General.

Norm / Standard	Titel / Definition
ISO 8862-2 A1	Hand-held portable power tools - Measurement of vibrations at the handle - Part 2: Chipping hammers and riveting hammers.
ISO 8862-3 A1	Hand-held portable tools - Measurement of vibrations at the handle – Part 3: Rock drills and rotary hammers.
ISO 8862-4	Hand-held portable power tools - Measurement of vibrations at the handle - Part 4: Grinders.
ISO 8862-5 A1	Hand-held portable power tools - Measurement of vibrations at the handle - Part 5: Pavement breakers and hammers for construction work.
ISO 8862-6	Hand-held portable power tools - Measurement of vibrations at the handle - Part 6: Impact drills.
ISO 8862-7	Hand-held portable power tools - Measurement of vibrations at the handle - Part 7: Wrenches, screwdrivers and nut runners with impact, impulse or ratchet action.
ISO 8862-8	Hand-held portable power tools - Measurement of vibrations at the handle - Part 8: Polishers and rotary, orbital and random orbital sanders.
ISO 8862-9	Hand-held portable power tools - Measurement of vibrations at the handle - Part 9: Rammers
ISO 8862-10	Hand-held portable power tools - Measurement of vibrations at the handle - Part 10: Nibblers and shears.
ISO 8862-11 A1	Hand-held portable power tools - Measurement of vibrations at the handle - Part 11: Fastener driving tools.
ISO 8862-12	Hand-held portable power tools - Measurement of vibrations at the handle - Part 12: Saws and files with reciprocating action and saws with oscillating or rotating action.
ISO 8862-13	Hand-held portable power tools - Measurement of vibrations at the handle - Part 13: Die grinders.
EN 1501-1	Refuse collection vehicles and their associated lifting devices - General requirements and safety requirements - Part 1: Rear-end loaded refuse collection vehicles.

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Norm / Standard	Titel / Definition
EN 1807	Safety of woodworking machines - Band sawing machines.
EN 1870-1	Safety of woodworking machines - Circular sawing machines - Part 1: Circular saw benches (with and without sliding table) and dimension saws.
EN 1870-2	Safety of woodworking machines - Circular sawing machines - Part 2: Horizontal beam panel saws and vertical panel saws.
EN 1870-3	Safety of woodworking machines – Circular sawing machines – Part 3: Down cutting cross-cut saws and dual purpose down cutting/circular saw benches.
EN 1870-4	Safety of woodworking machines – Circular sawing machines – Part 4: Single and multi-blade rip sawing machines with manual loading and/or unloading.
EN 1870-5	Safety of woodworking machines – Circular sawing machines – Part 5: Combined circular saw bench/up cutting cross cut saw.
EN 1870-6	Safety of woodworking machines – Circular sawing machines – Part 6: Firewood sawing machine/circular saw bench with manual loading and/or unloading.
EN 1870-7	Safety of woodworking machines - Circular sawing machines - Part 7: Circular log sawing machine with integrated feeding table and manual loading and/or unloading.
EN 1870-8	Safety of woodworking machines - Circular sawing machines - Part 8: Single blade edging circular rip sawing machines with power driven saw unit and manual loading and/or unloading.
EN ISO 4871	Acoustics – Declaration and verification of noise emitted by machinery and equipment (ISO 4871:1996).
EN ISO 3744	Acoustics - Determination of sound power levels of noise sources using sound pressure - Engineering method in an essentially free field over a reflecting plane (ISO 3744:1994).
EN ISO 11201	Acoustics - Noise emitted by machinery and equipment - Measurement of emission sound pressure levels at a work station and at other specified positions - Engineering method in an essentially free field over a reflecting plane (ISO 11201:1995).

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Norm / Standard	Titel / Definition
EN ISO 11202	Acoustics - Noise emitted by machinery and equipment - Measurement of emission sound pressure levels at a work station and at other specified positions - Survey method in situ (ISO 11202:1995).
EN ISO 11203	Acoustics – Noise emitted by machinery and equipment – Determination of of emission sound pressure levels at a work station and at other specified positions from the sound power level (ISO 11203:1995).
EN ISO 11204	Acoustics - Noise emitted by machinery and equipment - Measurement of emission sound pressure levels at a work station and at other specified positions - Method requiring environmental corrections (ISO 11204:1995).
EN 60204-1	Safety of machinery – Electrical equipment -Part 1:General requirements.
EN ISO 12100-1	Safety of machinery. Basic concepts, general principles for design. Basic terminology and methodology
EN ISO 12100-2	Safety of machinery. Basic concepts, general principles for design. Technical principles

Für die fachliche Richtigkeit der Prüfberichte verantwortlich:
Technical responsibility for the test reports:

Zoran Svetik	Director, Testing and Measurement Technologies
Rok Hrovatin	Head of Testing Technologies
Dejan Lamovšek	Test Engineer
David Levpušček	Test Engineer
Anton Možina	Test Engineer
Otmar Močnik	Test Engineer

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The accreditation is valid for products, which are not mandatory to be tested, certified and/or inspected by third parties.

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