TROX GmbH
Heinrich Trox Platz
D-47504 Neukirchen – Vluyn

C E R T I F I C A T E

In the TROX laboratories, certified according to DIN ISO 9001, the performance data of all TROX products are determined in accordance with applicable German and international standards and guidelines. The performance and quality of the measurements are checked at regular intervals by the DIN ISO 9001 quality management manual and following the instructions of the “Measuring Instrumentation and Calibration Proceedings” – document (MICPT @TROX R&D).

ACOUSTICS

DIN EN ISO 5135	Determination of sound power levels of noise from air-terminal devices, air-terminal units, dampers and valves by measurement in a reverberation room. 2020-12
DIN EN ISO 3741	Determination of sound power levels of noise sources using sound pressure – Precision methods for reverberation test rooms. 2011-01
DIN EN ISO 7235	Laboratory measurement procedures for ducted silencers and air terminal units - Insertion loss, flow noise and total pressure loss. 2010-01
VDI 2081 T1	Noise generation and noise reduction in air-conditioning systems. 2022-04
DIN EN ISO 5136	Acoustics - Determination of sound power radiated into a duct by fans and other air-moving devices - In-duct method (ISO 5136:2003)
VDI 3731 Blatt 2	Characteristic noise emission values of technical sound sources; fans

AERODYNAMIC & THERMAL COMFORT

DIN EN 12238	Ventilation for buildings – Air terminal devices – Aerodynamic testing and rating for mixed flow application. 2001-12
DIN EN 12239	Ventilation for buildings – Air terminal devices – Aerodynamic testing and rating for displacement flow applications. 2001-11
DIN EN 16445	Ventilation for buildings - Air diffusion - Aerodynamic testing and rating for mixed flow application: non-isothermal procedure for cold jet; 2013-05

DIN EN 16798-1	Indoor environmental input parameters for design and assessment of energy performance of buildings addressing indoor air quality, thermal environment, lighting and acoustics. 2022-03
DIN EN ISO 7730	Ergonomics of the thermal environment - Analytical determination and interpretation of thermal comfort using calculation of the PMV and PPD indices and local thermal comfort criteria. 2006-05
DIN EN 16798-3	Energy performance of buildings - Ventilation for buildings - Part 3: For non-residential buildings - Performance requirements for ventilation and room-conditioning systems. 2017-11
DIN EN 13182	Instrumentation requirements for air velocity measurements in ventilated spaces. 2002-12
DIN EN ISO 7726	Ergonomics of the thermal environment - Instruments for measuring physical quantities. 2002-04

CHILLED CEILING & BEAMS

DIN EN 14240	Ventilation for buildings - Chilled ceilings - Testing and rating. 2004-04
DIN EN 14518	Ventilation Ventilation for buildings - Chilled beams - Testing and rating of passive chilled beams. 2005-08
DIN EN 15116	Ventilation in buildings - Chilled beams - Testing and rating of active chilled beams. 2008-07

Performance Testing Fans

DIN EN ISO 5801	Fans - Performance testing using standardized airways (ISO 5801:2017)
DIN EN ISO 5802	Industrial fans - Performance testing in situ (ISO 5802:2001 + Amd 1:2015)
DIN EN ISO 13350	Fans - Performance testing of jet fans (ISO 13350:2015)
VDI 2044	Acceptance and performance tests on fans (VDI Code of Practice for Fans)
DIN EN ISO 13349 1-2	Fans - Vocabulary and definitions of categories (ISO 13349:2010)
ISO 12759 all parts	Fans - Efficiency classification for fans
DIN 24166	Fans; technical delivery conditions

TROX® TECHNIK

Fire and Smoke Protection

EN 1363-1	Fire resistance tests - Part 1: General requirements
EN 1363-2	Fire resistance tests - Part 2: Alternative and additional procedures
EN 1366-2	Fire resistance tests for service installations – Part 2: Fire dampers
EN 1366-3	Fire resistance tests for service installations – Part 3: Penetration seals
EN 1366-8	Fire resistance tests for service installations – Part 8: Smoke extraction ducts
EN 1366-9	Fire resistance tests for service installations – Part 9: Single compartment smoke extraction ducts
EN 1366-10	Fire resistance tests for service installations – Part 10: Smoke control dampers
EN 15650	Ventilation for buildings – Fire dampers

OTHERS

DIN EN ISO 5167-1	Measurement of fluid flow by means of pressure differential devices inserted in circular cross-section conduits running full. 2004-01
DIN EN 12599	Ventilation for buildings - Test procedures and measuring methods for handing over installed ventilation and air conditioning systems. 2013-01
DIN EN 1366-2	Fire resistance tests on service installations - Part 2: Fire dampers. 2015-09
DIN EN 12589	Ventilation for buildings - Air terminal units - Aerodynamic testing and rating of constant and variable rate terminal units – 2002-01
DIN EN 15727	Ventilation for buildings - Ducts and ductwork components, leakage classification and testing - 2010-10
DIN EN 1751	Ventilation for buildings - Air terminal devices - Aerodynamic testing of damper and valves – 2014-06
EN 12101 all parts	Smoke and heat control systems
VDI 3839 Blatt 4	Instructions on measuring and interpreting the vibrations of machines - Typical vibration patterns with fans and blowers for gases
DIN EN ISO 21940	Mechanical vibration - Rotor balancing

TROX® TECHNIK

ISO 14694 Industrial fans - Specifications for balance quality and vibration levels

TROX-
Research and Development
i. V. Dipl.-Ing. Thomas Wolters