

Approvals, Tests and Certificates of AEROSOL FIRE EXTINGUISHERS manufactured by Dynamit Nobel Defence

Authority / Institute , Approval / Test / Certificate	Description, Comment
GERMANY	
Landesfeuerweherschule Nordrhein-Westfalen Amtliche Prüfstelle für Feuerlöschmittel und -gerät Fire Brigade Institute Nordrhein-Westfalen, Germany Certificate PL 4/97, DIN EN 2	Fires of fire class B (limited) Fires of fire class C
Bundesanstalt für Materialforschung und -prüfung Federal Institute for Material Research and Testing, Germany Registration 11565 and 11617, BAM-PT1-0567 and BAM-PT1-0615	Licensing of pyrotechnic product
Bundesanstalt für Materialforschung und -prüfung EU-conformity-declaration (CE)	CE Fire Extinguishing Generator is in accordance with the instructions of European Directive 2007/23/EC- Modul D
Det Norske Veritas / Germanischer Lloyd https://app.gl-group.com/ApprovalFinder/home.do Certificate No. 4424207	Approved Certificate for Dynameco Extinguishing Generators in ships and vessels
ISO 9001 ISO 14001	Management System Certificate

Authority / Institute , Approval / Test / Certificate	Description, Comment
EN 9100	Management System Certificate for aviation aerospace and Defence
VdS Verband der Schadenversicherer Association of Indemnity Insurers, Germany Test report CHL97036	Vibration tests of Fire Extinguishing Generator
Hygiene Institut des Ruhrgebietes Hygiene Institute of the Ruhr Region, Germany Institute of Environmental Hygiene and Environmental Medicine Fire-Hygienic Assessment	Fire-hygienic assessment and evaluation of Fire Extinguishing Generator
Hygiene Institut des Ruhrgebietes Hygiene Institute of the Ruhr Region, Germany Institute of Environmental Hygiene and Environmental Medicine Evaluation of <i>Dynameco</i> 's Ozone Depletion Potential	Confirmation that ODP is Zero
Umweltbundesamt Federal Environment Office, Germany Statement II 4.2-54 352-1	Zero Ozone Depletion Potential (ODP) and negligible Global Warming Potential (GWP) of Fire Extinguishing Generator
Innenministerium des Landes Schleswig-Holstein Ministry of the Interior of the State of Schleswig Holstein, Germany IV 350 c - 166.785	Licensing of installation in rotary printing press
Allianz Zentrum für Technik GmbH, Industrielle Technik, IT Allianz Center of Technology GmbH, Industrial Technology, IT, Germany Test report ADRN 99.03.043/01	No damage of computers caused by Aerosol of Fire Extinguishing Generator
DMT Independent test institute of TÜV- Nord (15.12.2009)	Certificate to use Dynameco in tooling machine

Authority / Institute , Approval / Test / Certificate	Description, Comment
TÜV – Süd Rail Certification for Trains /locomotive (08.08.2011)	Dynameco is approved according EN- requirement (EN 61373) and certified from TÜV Süd /Rail in the BOMBADIER TRAX F140 DE locomotive
MPA- Dresden Certification for Fire class F - fat and oil in kitchen ; (02.05.2011)	Abstract of examination report no. 2011-F-0805 Fire extinguishing System - AEROSOL EXTINGUISHING GENERATOR Dynameco 200-E02
Berufsgenossenschaft Nahrungsmittel und Gaststätten Professional Association of Food Industry and Restaurants, Germany Test reports 24/Ne, 50/Ne	No ignition of a propane oxygen atmosphere (high inflammable concentration) due to actuating of Fire Extinguishing Generator
Berufsgenossenschaft Nahrungsmittel und Gaststätten Professional Association of Food Industry and Restaurants, Germany Statement	No reservations about installation in rotary printing press
Institut für Verfahrenstechnik der RWTH Aachen Institute for Process Engineering, University Aachen, Germany Investigations of Aerosol emission and extinguishing effects	Experimental and theoretical investigations on Aerosol emission and evaluation of extinguishing effect
Fraunhofer-Gesellschaft Institut für Toxikologie und Aerosolforschung, Hannover Institute for Toxicology and Aerosol Research, Hanover, Germany Aerosol characteristics as function of time	Measurement of Concentration of aerosol as function of time Size of Aerosol particles
Forschungsgemeinschaft für Hochspannung- und Hochstromtechnik Research Association of High Voltage and High Current Technology, Germany Test report IS 95012/3	Influence of Aerosol on the insulating characteristics of medium voltage switch boards
Institut für Hochspannungs- und Messtechnik der TH Darmstadt Institute for High Voltage and Measuring Technique, University Darmstadt, Germany DIN/EN 3 T2 [1], DIN/VDE 0132 [2]	Evaluation considering the application in electrical systems
Dynamit Nobel Defence EC - Safety Data Sheet	Form and content pursuant according to Regulation 1907/2006 (REACH)

Authority / Institute , Approval / Test / Certificate	Description, Comment
Dynamit Nobel Statement of Department of Environmental Care	Zero Ozone Depletion Potential (ODP) and negligible Global Warming Potential (GWP) of Fire Extinguishing Generator
Dynamit Nobel Defence	COC - Certificate of Conformity
AUSTRIA	
TÜV (Technischer Überwachungsverein) Safety Standards Authority, Austria Test reports M/EMV-99/324, M/EMV-99/325	Electromagnetic compatibility approval according to EN 50081-1: 1992, EN 50082-2: 1995
TÜV (Technischer Überwachungsverein) Safety Standards Authority, Austria Test reports M/EMV-98/135, M/EMV-98/136, Approval e12 02 0017	Electromagnetic compatibility approval according to Guiding Rule 95/54/EG 72/245/EWG
TÜV (Technischer Überwachungsverein) Safety Standards Authority, Austria ETW0612/ZR	Approval in explosive atmosphere
Prüfstelle für Brandschutztechnik des Österreichischen Bundesfeuerwehrverbandes Fire Prevention Technique Inspection of Austrian Fire Brigade Association FT 9/289/97, 127.0	Aerosol Extinguishing System Application in fire class B, electrical cabinets up to 1000 V Fire class A (limited)
Bundesministerium für Wissenschaft und Verkehr Ministry of Research and Traffic, Austria Type licensing e12*72/245*95/54*0017*00	Use in engine compartment of watercrafts
BULGARIA	
Ministry of the Interior of Bulgaria National Service "Fire and Emergency Safety" NH 46/24.01.2000	Use on the territory of the Republic of Bulgaria. Class B (limited), C, electrical equipment under 1.000 V.

Authority / Institute , Approval / Test / Certificate	Description, Comment
CYPRUS	
Fire Brigade Authority of the Republic of Cyprus	Use and installation of Fire Extinguishing Generator
GREECE	
Greek Firebrigade Document Ref No.: 9259 Φ 701-6	Use in extinguishing A, B and C type fires
ISRAEL	
Standards Institution of Israel Mechanical Laboratory Test Report 3167700	Fires of fire class A, B
ITALY	
RINA Type Approval Certificate Genoa; August 2016 Certificate No. FPE0699116CS	Aerosol Fire Extinguishing System with Dynameco 200,300 and 2000 for use in machinery spaces of vessels
T.E.S.I. S.r.l. Tecnologie Sviluppo Industriale Industrial Research Technology, Italy Test report 017/C	Fires class B-C Class A Surface Fire
T.E.S.I. S.r.l. Tecnologie Sviluppo Industriale Industrial Research Technology, Italy	No damage of computers caused by Aerosol of Fire Extinguishing Generator

Authority / Institute , Approval / Test / Certificate	Description, Comment
Gazzetta Ufficiale Della Repubblica Italiana Official Register of the Republic of Italy Ministerial Decree 559/C.5826.XVJ (925)	Acceptance and classification of Fire Extinguishing System
Dynamit Nobel _____ Test report 30.01.98	Tests for Italian railway
Ansaldo Trasporti, Napolia Ansaldo Transport Company, Naples, Italy	Confirmation of Locomotive protection with Fire Extinguishing Generator
LATVIA	
Certification, Serija UT No. 0023 _____	
MALAYSIA	
IBU PEJABAT, JABATAN BOMBA DAN PENYELAMAT JPBM:PPP/005/44/17 AK SIRI: AK/DYNAMECO/2702003(T)	Approval Fire and Rescue Department Malaysia JPBM:PPP/005/44/17 AK SIRI: AK/DYNAMECO/2702003(T)
RUMANIA	
Ministry of the Interior of Rumania Aviz 40027 din 08/02/1999	
SLOVENIA	
ZAG, Zavod za gradbenistvo Slovenije Institute for fire protection, Slovenia St. M 646/00-530-1	Approvals on fires of fire class A, B, and C

Authority / Institute , Approval / Test / Certificate	Description, Comment
SPAIN	
Ministry of Science and Technology Register 17.01.01 001710	Authorization for use in Extinguishing Systems
Talgo Railway Company	Confirmation for use Dynameco in different compartment for engine and generators in locomotives and speed trains
L.G.A.I., Laboratori General D'Assaigs I Investigacions General Laboratory for Research and Investigations, Spain Test report 96014279	Fires of fire class C Tests according to UNE 23-110-5 (85) (EN 3/5)
L.G.A.I., Laboratori General D'Assaigs I Investigacions General Laboratory for Research and Investigations, Spain Test report 96016528___	Fires of fire class B Tests according to UNE 23-110-1 (96) (EN 3/5)
L.G.A.I., Laboratori General D'Assaigs I Investigacions General Laboratory for Research and Investigations, Spain Test report 96016658 Fire-Hygienic Assessment	Fire-hygienic assessment and evaluation of Fire Extinguishing Generator
L.G.A.I., Laboratori General D'Assaigs I Investigacions General Laboratory for Research and Investigations, Spain Test report 96016659	Dielectrics 35.000 V Tests according to European Norm EN 3/2 (UNE 23.11.80)
L.G.A.I., Laboratori General D'Assaigs I Investigacions General Laboratory for Research and Investigations, Spain Test report 96016708	Volume protection Inertiation of volumes
NISSAN MOTOR IBERICA, S.A. Spain	Use of Fire Extinguishing Generator in Nissan plants
Central Nuclear De Almaraz Almaraz Nuclear Power Plant, Spain	Real Fire Test in electric cabinet and small computer room



Dynamit Nobel Defence

Authority / Institute , Approval / Test / Certificate	Description, Comment
URUGUAY	
Sub Dirección Nacional de Bomberos National Fire Brigade Sub Director, Republic of Uruguay	
Dirección nacional de medio ambiente General Environment Department, Republic of Uruguay	
USA	
EPA, SNAP U.S. Environmental Protection Agency (EPA) Significant New Alternatives Policy (SNAP) program	Listing by EPA under SNAP

Please note:

Some approvals have been carried out with the predecessor model of *Dynameco* and will not be repeated with *Dynameco*.