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MINISTRY OF TECHNOLOGY

AND

FIRE OFFICES' COMMITTEE

JOINT FIRE RESEARCH ORGANIZATION

FIRE RESEARCH NOTE

NO.622

LIST OF TESTING AND APPROVAL AUTHORITIES FOR HAND FIRE EXTINGUISHERS

by

P. A. DONOHUE

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April, 1966.

Fire Research Station. Boreham Wood. Herts.

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Summary

This note lists the testing and approval authorities for hand fire extinguishers in 28 countries. In preparing this note, 44 countries were approached, and 28 of them gave some or all of the required information. Where gaps occurred, they have been filled as far as possible by information gained from other sources; where this has not been possible notes have been appended.

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Country	Testing Authority	Approval Authori ty	Extinguisher	Standard Number	Notes
Argentine	Instituto Argentino de Racionalización de Materiales of Calle Chile 1192		Soda acid 4.5 and 9 litres Foam C.T.C. Gas cartridge CO Soda ² acid	IRAM 3501 3502 3504 3506 3509 3511 3517 3518	Manual fire extinguishers Low expansion foaming liquid for fire extinguishers.
Australia	Standards Association of Australia Science House 157 Gloucester Street SYDNEY	As for Testing Authority	Water types Chemical (Soda acid) Gas container type Stored pressure type Foam types Chemical Gas container type C.T.C. and C.B.M. Hand pump type Gas pressure Dry chemical type CO2	A.S. A31 Pt. 1 Pt. 2 Pt. 3 A.S. A32 Pt. 1 Pt. 2 A.S. A45 Pt. 1 Pt. 2 A.S. A45 Pt. 1 Pt. 2 A.S. A137 A.S. A138	
Austria	Österreichischer Normenausschuss "ONA" Wien 1, Bauernmarkt Nr 13	"Õ N A"		ONORM F1050 F1051	General requirements
Belgium	Fédération Royale des Corps de Sapeurs Pompiers Bruxelles 3, le Place Colignon	Commission des Extincteurs Automatiques 240 Beherensheyde (Waterm), Bruxelles.		NBN 368	In preparation

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Country	Testing Authority	Approval Authority	Extinguisher	Standard Number	Notes
Canada	Underwriters' Laboratories of Canada 7 Crouse Road, Scarborough, Ontario	Dominion Board of Insurance Underwriters now Canadian Underwriters' Association, 460 St. John Street Montreal	$\begin{array}{c} \text{CO}_2\\ \text{Dry chemical}\\ \text{Foam 1 and } 1\frac{1}{4} \text{ Imp. gal.}\\ \text{Foam 2 Imp. gal.}\\ \text{Foam 27}\frac{1}{2} \text{ Imp. gal.}\\ \text{Vaporizing liquid}\\ \text{Hand pump } 2\frac{1}{2} \& 5 \text{ Imp. gal.}\\ \text{Soda acid 2 Imp. gal.}\\ \text{Soda acid 1 and } 1\frac{1}{4}\\ \text{Imp. gal.}\\ \text{Water and antifreeze}\\ 2 \text{ Imp. gal.}\\ \end{array}$	$\begin{array}{c} C-154\\ C-299\\ C-7(a)\\ C-7(b)\\ C-68\\ C-42(a)\\ C-7(e)\\ C-7(c)\\ C-7(c)\\ C-7(d)\\ C-7(f)\end{array}$	
Czechoslovaki	a Vydavatelstvi Uřad Pro Normalizaci Praha, 3, Nové Město, Czechoslovakia.	Urad Pro Normalizaci Praha 1, Nove Mesto, Václavské Náměstí 19	Water Foam Foam CO ₂ Dry powder C.T.C.	CSN 38.9010 CSN 38.9100 CSN 38.9120 CSN 38.9125 CSN 38.9130 CSN 38.9135 CSN 38.9138 CSN 38.9140 CSN 38.9190	General General Compressed air Transport vessels for fillings of fire extinguishers
Denmark	Statsproveanstalten Amager Boulevard 108, København 5.	Dansk Brandvaerns Komite. Nygårds Plads 9, København, Valby, Denmark.	·	None	Requirements of Ministry of Justice

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Country	Testing Authority	Approval Authority	Extinguisher	Standard Number	Notes
France	Service Officiel des Mines Station d'Essais Laboratoire du Feu. (S.T.E.L.F.) Champs Sur Marne Centre Nationale de Prévention et de Protection, 5 Rue Daunou, Paris 2 ^e .	Ministère De L'Industrie 99-101 Rue de Grenelle, Paris 7 ^e .			Rules and circulars published by this authority regulating the manufacture of fire extinguishers of over 5 litres capacity. Hydraulic test (obligatory) Extinguishers under 5 litres capacity not subject to ruling. The above papers are under revision, but those in force can be obtained from Societe Anonyme Document Appareil Vapeur Electrique, (S.A.D.A.V.E.) 5 Rue Blanche, Paris 9 ^e .
Germany	Amtliche Prüfstelle für Feuerlöschmittel undgeräte Wolbeckerstr 237, Münster i.W. Westdeutschland.	Herrn Innenminister Landes Nordrhein- Westfalen.		DIN 14406	Fire protection specification published by Rd Erl of Ministry of Interior 9/11/52

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Country	Testing Authority	Approval Authority	Extinguisher	Standard Number	Notes
Hungary	No information	Office Hongrois de Normalisation	co ₂	MSZ 1033-63	Fire-fighting apparatus using carbon dioxide.
		(Hungarian Office for Standardization) Ulloi-Ut 25, Budapest IX,	Vaporizing liquid	MSZ 1034-63	Fire-fighting apparatus using gas (supersedes MSZ 1034-53, 1036-53, 15638-53, 15639-54).
		Hungary.	Dry powder	MSZ 103 <u>7</u> -63	Fire-fighting apparatus using powder.
			Foam	MSZ 1038-63	Foam fire-fighting apparatus. (supersedes MSZ 1038-53, MSZ 1039-53, 15644-54, 15645-54).
				MSZ 1040-63	Brackets for fire extingui- shers. (supersedes 1040-53, 1041-53).
	·			MSZ 10076-63	Classification of fire extinguishers from the point of view of their suitability for extinguishing various types of fire.

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Country	Testing Authority	Approval Authority	Extinguisher	Standard Number	Notes
India	Indian Standards Institution, Manak Bhavan, 9 Mathura Road, New Delhi, 1.	Indian Standards Institution, Manak Bhavan, 9 Mathura Road, New Delhi, 1.	Foam Soda acid C.T.C. Water (Bucket pump) C.B.M.	I.s.933- 1959 I.s.934- 1960 I.s.935- 1959 I.s.1924- 1961 I.s.1933- 1961	An Indian Standard Code of Practice for selection, installation and maintenance of portable first aid fire appliances is with the printers. Fire extinguishers installed in premises insured against fire by the Insurance Association of India are generally tested and approved by them in accordance with their rules and regulations.
1 6 1	Standards Institution	Insurance Association of India - Bombay, Regional Council, Radia House, 2nd Floor, 6 Rampart Row Fort, Bombay			All appliances shall conform to Indian standards relating to fire extinguishers, and in the absence of Indian standards, British specifi- cations are to be followed. The Council Inspectorate must have access to the factory to carry out performance and operation tests. Periodically samples of the appliances selected by the Inspectorate from stock are to be forwarded to the Government Alipore Test House to check that manufac- ture conforms to standard requirement. An extinguisher will immediately be struck from the approved list should it not conform.

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Country	Testing Authority	Approval Authority	Extinguisher	Standard Number	Notes
Iran	No information	Institute of Standards and Industrial Research of Iran Ministry of Commerce P.O. Box 2937 Teheran, Iran.			Extinguishers made in England, France and Western Germany are used.
Ireland	None	Institute for Industrial Research and Standards, Industrial Research Centre, Ballymun Road, Dublin 9, Eire.	co ₂		The Institute is examining the question of preparing a standard specification for CO_2 -type hand appliances, and is considering the adoption of B.S. 3326.
Israel	Standards Institution of Israel, Buey Yisra'el Street, Ramat-Aviv, Tel-Aviv, Israel.	Standards Institution of Israel, Buey Yisra'el Street, Ramat-Aviv, Tel Aviv, Israel.	C.T.C. Foam Soda acid C.T.C.	S.I. 51 S.I. 66 S.I. 74 S.I.114 S.I.129 S.I.212 S.I.213 S.I.283 S.I.283	Portable fire extinguishers, installation, maintenance and operation. Portable soda acid extingui- shers, charge and filling solutions. Filling for portable C.T.C. extinguishers. Portable foam extinguishers, fillings and solutions.
			CO2 C.T.C. Dry powder Dry powder	S.I.318 S.I.460 S.I.463 S.I.570	Up to 0.5 litre. Separate gas cylinder. Stored gas pressure.

Country	Testing Authority	Approval Authority	Extinguisher	Standard Number	Notes
Japan	Fire Research Institute of Japan, 700 Shinkawa, Mitaka, Tokyo.	Fire Research Institute of Japan.			"Standard for fire extinguishers" and "Standard of extinguishing agents for fire extinguishers".
Netherlands	Inspectorate of Fire Services of the Home Office Groot Hertoginnellaan The Hague, Netherlands.	Ministerie van Binnenlandse Zaken, Spui 49, Den Haag.	•	Statute Book 284 Stb. 211 Stb. 282- 284	General requirements
New Zealand	"An Approved Testing Authority" No further information	New Zealand Standards Institute, Private Bag, Wellington, C.1.	Soda acid Foam Water (gas pressure) Foam (gas pressure) C.T.C. (1 quart)	N.Z. 1241 N.Z. 1242 N.Z. 1243 N.Z. 1244 N.Z. 356 C.P. 10	Code of Recommended Practice for the installation, main- tenance and operation of first-aid fire extinguishers
			Bucket pump Hydraulic hose reels C.T.C. and C.B.M.	N.Z. 986 N.Z. 1168 B.S. 1721: 1960) Under consideration for) adoption in New Zealand.
			CO ₂ Dry powder	B.S. 3326: 1960 B.S. 3465: 1962	

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Norway	Norges Branntekniske Laboratorium Trondheim, Norway.	Det Norske Veritas Oslo, Norway.			Rules for testing and classi- fication are under revision in Norway, but "it is most probable that" the rules will correspond to those used by Det Norske Veritas Addi- tional Fire Protection for Cargo Vessels. Hand Fire Extinguishers - Chapt. XII Sec. 14 in the Steel Ship Rules.
Poland	No information	Polski Komitet Normalizacyjny, Warszawa 51 ul Świetokrzyska 14.	Water	PN-61/M- 51081	Pump tank extinguisher.
Portugal	Inspeccoes De Incendios Das Zonas Norte Ou Sul.	Conselho Nacional Dos Servicos De Incendios. (National Council of Fire Services)			Extinguishers are also imported from France, Germany, United Kingdom and United States.
Rhodesia and Nyasaland		Standards Association of Rhodesia and Nyasaland, Pax House, Union Avenue, Salisbury.		•	The British Standards and those of other countries are used for reference. Fire brigades in Salisbury and in general throughout Southern Rhodesia will approve any extinguisher that is cons- tructed to B.S. requirements or to the requirements of the Governmental body in its country of manufacture provided it has the approval of the Fire Offices' Committee and Underwriters' Laboratories of United States

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Country	Testing Authority	Approval Authority	Extinguisher	Standard Number	Notes
South Africa		South African Bureau of Standards, Private Bag, 191 Pretoria, Republic of S.A.		SABS. 035 Chapt. 14	No standard specifications, but the large organizations purchasing the appliances stipulate that their con- struction and performance should be in accordance with the relevant British or American standards. South African Railways require additional performance tests for appliances conforming to B.S. 138, 740 and 1721. "Fire Protection" of the Comprehensive Model Building Regulations.
				SABS. 035 Chapt. 14	This requires that where the provision of fire- extinguishing media is essential, approved appliances shall be provided on a fixed scale determined by the area of the building and the classification of fire loading. Inspection, maintenance and the labelling of extinguishers is carried out by the owner of the building.

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Country	Testing Authority	Approval Authori ty	Extinguisher	Standard Number	Notes
Spain		Instituto Nacional de Racionalizacion del Trabajo, Serrano, 150, Madrid, 6,	Chemical foam " Dry powder " CO "2 General	UNE 23001 UNE 23002 UNE 23003 UNE 23004 UNE 23005 UNE 23006 UNE 23026 UNE 23031	Use Characteristics and function Use Characteristics and function Use Terminology Location and labelling
Sweden	Statens Provningsanstalt Drottning Kristinas Vag 31, Fack, Stockholm O	Sveriges Standard- iseringskommission Box 3295 Stockholm 3 Statens Brandinspektion Sturegatan 29, Stockholm.	Water CO ₂ Dry powder	SMS 1192 SMS 1193- 95 SMS 1196 1956:5 1958:6 1962:2	General notes Not yet published. Informative recommendations Very small portable extinguishers Portable chemical fire extinguishers Fire extinguishers for pleasure boats.
•	Statens Provningsanstalt			Circular 18 Bt 81-1. 81-2 81-3	Examination of portable extinguishers Testing regulations for portable extinguishers

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Switzerland		Sekretariat der Vereinigung kantonal- schweizerischer Feuerversicherung- sanstalten			Richtlinien (Rules, regula- tions) 1953 for hand fire extinguishers. As above in French.
		Vorsteherdes des Technischen, Bureau des Schweiz, Feuerwehr Vereins, Mühlebachstr-43, Zürich.		BVD Blatt AL/45/2390	List of portable extinguishers
U.K.	Ministry of Technology and Fire Offices' Committee Joint Fire Research Organization, Boreham Wood, Herts.	Fire Offices' Committee, Aldermary House, Queen Street, London, E.C.4. (For insurance purposes)	CO2 C.T.C. and C.B.M. Foam Foam (gas pressure) Dry chemical Water type (gas pressure) Soda acid Stirrup pumps	B.S. 33263266 B.S. 17211721 B.S. 740 Part 1 B.S. 740 Part 2 B.S. 3465 B.S. 1382 B.S. 138 B.S. 1901	Tests are carried out according to British Standards specifications, with additional tests for certain types of extinguisher and manufacturing process and extinguishers must at least conform to the relevant British Standards, before they can be considered by the Fire Offices' Committee for approval.
5	Ministry of Public Building and Works, Southbridge House, Southwark Bridge Rd, London, S.E.1.	Ministry of Public Building and Works, Southbridge House, Southwark Bridge Rd, London, S.E.1.			Ministry of Public Building & Works also purchase extinguishers for Departmenta use, according to relevant Defence specifications.

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Country	Testing Authority	Approval Authori ty	Extinguisher	Standard Number	Notes
U.S.	Underwriters' Laboratories Inc. 207E Ohio Street, Chicago 7, Illinois.	American Insurance Association, 110 William Street, New York, N.Y. 10038.	$\begin{array}{c} \text{CO}_2\\ \text{Dry chemical}\\ \text{Foam } (2\frac{1}{2} \text{ gal})\\ \text{Foam } (33 \text{ gal})\\ \text{Vaporizing liquid}\\ \text{Soda acid } (2\frac{1}{2} \text{ gal})\\ \text{Soda acid}\\ (1\frac{1}{4} \text{ and } 1\frac{1}{2} \text{ gal})\end{array}$	UL 154 UL 299 UL 7(b) UL 68 UL 42(a)) UL 7	
Yugoslavia	-	Jugoslovenski Zavod Za Standardizaciju, Cara Urosa Ul.54 Post. Preg. 933 Beograd Yugoslavia.	Soda acid Foam Dry powder ^{CO} 2 C.T.C.	Jus.Z. C2 020 Jus.Z.C2 025 Jus.Z. C2 030 Jus.Z. C2 035 Jus.Z. C2 040 Jus.Z. C2 045	General specifications

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