Finnish Institute of Occupational Health

FIOH
notified by the Ministry of Social Affairs and Health
and identified under 0403 grants

EC TYPE EXAMINATION CERTIFICATE

16298DMS01rev1

for electrostatic dissipative high visibility clothing
against heat and flame, and thermal effects of electric arc
as defined in EN 1149-5:2008, EN ISO 20471:2013, class 2,
EN ISO 11612:2015, A1+A2 B1 C1 F1,
and IEC 61482-2:2009 class 1 (4 kA)

Single-Layer Anti-Static FR High Visibility Clothing
Trousers 76771

Red Wing Shoe Company Inc.
Minnesota, USA

This product complies with Directive 89/686/EEC,
as amended

Helsinki, 16 October 2017
Expiry date: 15 October 2022

Minna Torenius
Specialist

Erja Tammela
Senior Specialist

FINAS
Finnish Accreditation Service
S039 (EN 45011)
(ISO/IEC Guide 65)

This certificate comprises 3 pages and one appendix.
This certificate replaces certificate 16298DMS01, 2016-08-15

Finnish Institute of Occupational Health, Notified Body No. 0403,
Topeliuksenkatu 41 b, FI-00250 Helsinki, Finland

1. Applicant

Red Wing Shoe Company Inc.
314 Main Street
Red Wing
55066 Minnesota
USA

2. Description and identification of the product

Type: Electrostatic dissipative high visibility clothing against heat and flame, and thermal effects of electric arc as defined in EN 1149-5:2008, EN ISO 20471:2013, EN ISO 11612:2015 and IEC 61482-2:2009

EN ISO 20471: Class 2
EN ISO 11612: A1+A2 B1 C1 F1
IEC 61482-2: Class 1 (4 kA)

Name: Single-Layer Anti-Static FR High Visibility Clothing, Style Trousers 76771

Description: Trousers are made of Quality 29: Art# 642881, 74% CO, 24% PES, 2% Carbon, 290 g/m² (Daletec AS, Norway). Fluorescent parts are in fluorescent yellow colour 2080 and non-fluorescent parts in colours 5781 Night Blue or 3928 Red.

Pocket bag and knee pocket material is Art# 101731, 100% CO, 170 g/m² (Daletec AS, Norway).

Retroreflective material is Loxy art. 9801 Silver (Loxy AS, Norway).

Representative in Europe: Red Wing Shoe BV, Van Diemenstraat 272, NL-1013 CR Amsterdam, Netherlands

Picture of the style is on page 3.

3. Adequacy and validity of the technical documentation

The documentation supplied by the applicant is listed in Appendix 1. The technical documentation is considered adequate and valid. Materials and the product have been tested in accordance with harmonized European standards EN 1149-5:2008, EN ISO 20471:2013, EN ISO 11612:2015 and IEC 61482-2:2009 by accredited testing laboratories. The model of the product supplied by the applicant conforms to the technical documentation.

4. Compliance with basic health and safety requirements

The product and the technical documentation relating to it comply with the relevant basic health and safety requirements stated in Directive 89/686/EEC Annex II as amended, last amended by 96/58/EC.

Note: Any modification in design, materials, or in the technical documentation, carried out on this type examined product must be brought to the attention of FIOH.

Picture of the product

Trousers 76771

Appendix 1. Technical documentation

End of EC type examination certificate 16298DMS01rev1.

Technical documentation regarding EC type examination certificate 16298DMS01rev1

Product name: Single-Layer Anti-Static FR High Visibility Clothing, Style Trousers 76771

Applicant: Red Wing Shoe Company Inc., 314 Main Street, Red Wing, 55066 Minnesota, USA

Item of technical documentation	*Document identification*	*Assessment*
1. Application for the EC type examination	2016-07-12 Revision request, 2017-10-02	
2. Product drawing, construction, and material list	Garment specification, 2016-07-13	Product is identified and described, materials are specified
3. Compliance with Directive 89/686/EEC relevant basic requirements	The compliance assessment is based on reports mentioned below items 3.1-3.13	
3.1 FIOH assessment of relevant Directive basic requirements	2017-10-16	The applied harmonised standards EN ISO 13688:2013, EN 1149-5:2008, EN ISO 20471:2013 and EN ISO 11612:2015 support the relevant requirements
3.2 West Yorkshire Materials Testing Service test report	No. 62958, 2014-01-21 Quality 29, Art# 642881, colour 2080, HV Yellow	Material and colour meets the requirements of EN ISO 20471:2013 for a woven background material
3.3 West Yorkshire Materials Testing Service test report	No. 65056, 2014-05-01 Quality 29, Art# 642881, colour 5781, Night Blue No. 66077 (Amendment 2), 2014-09-18 Quality 29, Art# 642881, colour 3928 Red	Non-fluorescent colours meet the requirements of EN ISO 20471:2013
3.4 West Yorkshire Materials test report	No. 57165, 2013-03-19 No. 57165-02, 2013-04-15 Quality 29, Art# 642881	Material meets the requirements of EN ISO 11612:2015, A1 B1 C1 E2 F1 and EN 1149-5:2008
3.5 FIOH test report	No. 364104T01, 2017-10-02 Quality 29, Art# 642881	Material meets the requirements of EN ISO 11612:2015 for limited flame spread A2
3.6 West Yorkshire Materials test report	No. 57165-04, 2013-05-21 Quality 29, Art# 642881	Material meets the requirements of IEC 61482-2:2009 class 1 (4 kA)
3.7 Aitex test report	No. 2011EP0532, 2011-06-21 Coverall 601 in quality art 4531, quality 00	Garment meets the requirements of IEC 61482-2:2009 class 1 (4 kA). Result can be applied to the garments with the same type of quality and accessories
3.8 West Yorkshire Materials Testing Service test report	No. 36291, 2008-08-22 Art# 101731	Lining material meets the requirement of EN ISO 14116:2015 index 3 for limited flame spread
3.9 FIOH test certificate	No. 325539T01rev1, 2016-11-11 LOXY 9801	Retroreflective material meets the requirements of EN ISO 20471:2013, EN ISO 11612:2015 for limited flame spread and heat resistance and EN 1149-5:2008
3.10 FIOH test report	No. 163633T01rev1, 2011-06-30 Seam, chain stitch with overlocking and two stitchings	Seam meets the requirements of EN ISO 11612:2015 for limited flame spread A1+A1 and for seam strength

3.11 FIOH test record	Assessment of the design and measurement of the areas, 2016-08-11	Design of garment meets the requirements of EN ISO 20471:2013, EN 1149-5:2008, EN ISO 11612:2015 and IEC 61482-2:2009. Trousers meet class 2 for areas of visible materials as defined in EN ISO 20471:2013. Areas of visible materials in size W24"L28": reflex 0.13 m², fluorescent 0.54 m²
3.12 Draft information sheet	User information Heat and flame High Visibility	Documents meet the requirements of the Directive, EN ISO 13688:2013, EN 1149-5:2008, EN ISO 20471:2013, EN ISO 11612:2015 and IEC 61482-2:2009
3.13 Product markings	Drafts of markings in the garment specification	Markings meet the requirements of EN ISO 13688:2013, EN 1149-5:2008, EN ISO 20471:2013, EN ISO 11612:2015 and IEC 61482-2:2009
4. Description of the production quality system and related product control and test facilities	ISO 9001:2008 Certificate No. 43276, 2012-05-21	Agreement with FIOH on the EC quality control system for the final product (PPE category III product)

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Topeliuksenkatu 41 b
FI-00250 Helsinki
Finland

Tel. +358 - 30 - 4741
Fax +358 - 30 - 474 2115
www.ttl.fi
e-mail: firstname.lastname@ttl.fi