

ISO 11393-4:2018 (E)

Protective clothing for users of hand-held chainsaws — Part 4: Performance requirements and test methods for protective gloves

Contents

	Foreword
	Introduction
1	Scope
2	Normative references
3	Terms and definitions
4	Designs and types
4.1	Designs and types of gloves
4.2	Design A
4.2.1	Description
4.2.2	Specified protective area, left- and right-hand gloves
4.3	Design B
4.3.1	Description
4.3.2	Specified protective area, left- and right-hand gloves or mitts
4.4	Attachment of protective material
5	Performance requirements
5.1	General
5.2	Protection against general mechanical risks
5.3	Protection against chainsaw cutting
5.3.1	Classification according to chain speed
5.3.2	Requirements for cut resistance
5.4	Ergonomic requirements
6	Test specimens
7	Assessment of protective coverage
8	Testing resistance to cutting by chainsaw
8.1	Test rig
8.2	Chainsaw-protective glove mounting device
8.2.1	Left and right artificial hands
8.2.2	Base
8.3	Test procedure for chainsaw cut tests
8.3.1	General
8.3.2	Cleaning
8.3.3	Mounting of glove on artificial hand
8.3.4	Cutting
8.3.4.1	General
8.3.4.2	Cuts across the back of gloves
8.3.4.2.1	Preparation of sample
8.3.4.2.2	Cut at an angle of 45°
8.3.4.2.3	Cut at an angle of 90°
8.3.4.3	Cuts across the back of the fingers of design B gloves
9	Ergonomic assessment and hand dexterity
9.1	General requirements
9.2	Hand grip test
9.2.1	General

9.2.2	Apparatus
9.2.2.1	Test bar
9.2.2.2	Compression force recording system
9.2.3	Test procedure
9.2.3.1	Selection of wearers
9.2.3.2	Testing
9.2.3.3	Expression of results
10	Test report
11	Marking
12	Pictogram
13	Information to be supplied by the manufacturer
Annex A (informative) Chainsaw use and the selection of appropriate gloves	
A.1	General
A.2	Risk analysis
A.2.1	General
A.2.2	Method
A.2.2.1	Step 1: Risk evaluation
A.2.2.2	Step 2: Risk reduction
A.3	Ergonomics
A.4	Choice between type 1 and type 2 gloves
A.5	Choice between design A and design B gloves
A.6	Compatibility of hands, gloves and chainsaws
A.7	Safe working
A.8	Acceptability

Page count: 20