

TECHNICAL REPORT FOR EU TYPE-EXAMINATION CERTIFICATE of Personal Protective Equipment (PPE)

EU TYPE EXAMINATION No:

UE-000458/00

APPLICATION DATE:

07/11/2023

DATE OF ISSUE:

28/11/2023

APPLICANT:

Weldas Europe B.V.
Blankenweg 18, 4612 RC Bergen op Zoom, The Netherlands

PPE TYPE:

Arm protector

REFERENCE (PPE):

44-7190

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ANNEX.- EU Type-Examination Certificate

1. PPE IDENTIFICATION

1.1 Description and photograph

Arm protector made with yellow knitted fabric that covers the arm from the elbow to the wrist and includes a hole to fit the thumb finger.



1.2 Description of the components

PPE components according to the information supplied by the manufacturer:

No	TYPE OF MATERIAL	COMPOSITION	COLOR	MATERIAL CODE
A1.	Fabric – knitted	100% cotton	Yellow	SK-41

1.3 Sizes

The size chart supplied by the manufacturer:

SIZE	One size
Length (mm)	450-500
Circumference (cm)	180-420

1.4 Samples given for certification

The 17th of October two samples were received.

2. CERTIFICATION SCOPE

- **EN ISO 21420:2020** Protective gloves – General requirements and test methods
- **EN 388:2016/A1:2018** Protective gloves against mechanical risks

For the protection of the hands of the user against the following risks:

- Mechanical risks of abrasion.
- Mechanical risks of blade cut.
- Mechanical risks of tear.
- Mechanical risks of puncture.
- Mechanical risks of impact.

3. DOCUMENTATION SUBMITTED

Technical documentation, including the next points:

- Complete description of the PPE and of its intended use
- Assessment of the risks against which the PPE is intended to protect
- List of the essential health and safety requirements that are applicable
- Design and manufacturing drawings and schemes of the PPE and of its components and explanations
- Reference of the harmonized standards and/ or other technical specifications
- Reports on the tests carried out to verify the conformity of the PPE
- A description of the means used by the manufacturer during the production (Modulo C)
 - Manufacturer's instructions
 - Marking
 - Declaration of conformity

4. RELATIONSHIP BETWEEN THIS EUROPEAN STANDARD AND ANNEX II OF REGULATION (EU) 2016/425 ON PPE

- **EN ISO 21420:2020** Protective gloves – General requirements and test methods

Essential Health and Safety Requirements, according to Annex II of Regulation (EU) 2016/425	Clause(s) / sub-clause(s) of the standard EN ISO 21420:2020	Result
1.2.1.1 Suitable constituent materials	4.2	Meet <input checked="" type="checkbox"/>
		Not meet <input type="checkbox"/>
		Not applicable <input type="checkbox"/>
1.2.1.3 Maximum permissible user impediment	5.2	Meet <input checked="" type="checkbox"/>
		Not meet <input type="checkbox"/>
		Not applicable <input type="checkbox"/>
1.4 Manufacturer's instructions and information	7.3	Meet <input checked="" type="checkbox"/>
		Not meet <input type="checkbox"/>
		Not applicable <input type="checkbox"/>
2.4 PPE subject to ageing	4.3; 7.2.1.1 f) and 7.2.2 g)	Meet <input checked="" type="checkbox"/>
		Not meet <input type="checkbox"/>
		Not applicable <input type="checkbox"/>
2.5 PPE which may be caught up during use	7.3.7	Meet <input type="checkbox"/>
		Not meet <input type="checkbox"/>
		Not applicable <input checked="" type="checkbox"/>
2.6 PPE for use in potentially explosive atmospheres	4.4	Meet <input type="checkbox"/>
		Not meet <input type="checkbox"/>
		Not applicable <input checked="" type="checkbox"/>
2.12 PPE bearing one or more identification markings or indicators directly or indirectly relating to health and safety	7.2.1.1 d); 7.2.2 e) and 7.3.5	Meet <input checked="" type="checkbox"/>
		Not meet <input type="checkbox"/>
		Not applicable <input type="checkbox"/>

- **EN 388:2016/A1:2018** Protective gloves against mechanical risks

Essential Health and Safety Requirements, according to Annex II of Regulation (EU) 2016/425	Clause(s) / sub-clause(s) of the standard EN 388:2016/A1:2018	Result
1.4 Manufacturer's instructions and information	7.8	Meet <input checked="" type="checkbox"/>
		Not meet <input type="checkbox"/>
		Not applicable <input type="checkbox"/>
2.12 PPE bearing one or more identification markings or indicators directly or indirectly relating to health and safety	7	Meet <input checked="" type="checkbox"/>
		Not meet <input type="checkbox"/>
		Not applicable <input type="checkbox"/>
3.1.1 Impact caused by falling or ejected objects and collisions of parts of the body with an obstacle	4.2.2	Meet <input type="checkbox"/>
		Not meet <input type="checkbox"/>
		Not applicable <input checked="" type="checkbox"/>
3.3 Protection against mechanical injuries	4.1	Meet <input checked="" type="checkbox"/>
		Not meet <input type="checkbox"/>
		Not applicable <input type="checkbox"/>

5. SIZES AND DIMENSIONS

- **EN 407:2020** Protective gloves and other hand protective equipment against thermal risks (heat and/or fire).

Requirement
After the evaluation of the size and dimensions according to point 4.4.1 of EN 407:2020, the PPE is determined to be:
Conforming <input checked="" type="checkbox"/>
Non-Conforming <input type="checkbox"/>

6. SUMMARY OF RESULTS

LEGEND RESULTS	
M	Meet
NM	Not meet
NA	Not applicable
NT	Not tested

- EN ISO 21420:2020 Protective gloves – General requirements and test methods

TEST	BE APLICATED	STANDARD	REQUERIMENTS	REPORT N°	RESULT
Determination of content in Chromium (VI) point 4.2	Each layer of material (Leather)	ISO 17075-1 o ISO 17075-2	EN ISO 21420:2020, point 4.2 ≤ 3mg/kg	NA	NA
Release of nickel point 4.2	All metallic materials in contact with the skin	EN 1811+A1:2015	EN ISO 21420:2020, point 4.2 < 0,5µg/cm ² per week	NA	NA
Determination of pH point 4.2	Arm protector Knitted material	Leather ISO 4045 Others ISO 3071	EN ISO 21420:2020, point 4.2 Between 3,5 and 9,5	AR-23-YL-109105-01	M
Determination of azo colorants which release carcinogenic amines point 4.2	Arm protector Knitted material	Textile EN 14362-1 Leather ISO 17234-1	EN ISO 21420:2020, point 4.2 Shall be not detectable		
Dimethylformamide (DMFa) point 4.2	PU	EN 16778	EN ISO 21420:2020, point 4.2 ≤ 1000 mg/kg (0,1% weight/weight)	NA	NA
Determination of Polycyclic aromatic hydrocarbons (PAHs) point 4.2	Rubber or plastic materials in contact with the skin	ISO / TS 16190	EN ISO 21420:2020, point 4.2 and table 1 ≤ 1 mg/kg (0,0001% by mass+ of this component)	NA	NA
Cleaning point 4.3	Arm protector	-	EN ISO 21420:2020, point 4.3 and 7.3.14	AR-23-YL-104927-01	5 wash cycles at 40°C (4N) and A dry (line dry) acc. to ISO 6330
Electrostatic properties point 4.4.1	Exterior fabric / assembly	EN 16350	EN ISO 21420:2020, point 4.4.1 Additional electrostatic properties determined by the test standards EN 1149-1 or EN 1149-3	NA	NA
Dexterity point 5.2	Glove	ISO 21420:2020, point 6.2	EN ISO 21420:2020, point 5.2 and table 2	NA	NA
Marking point 7.2.1.1 (d and f) and point 7.2.2 (e and g)	EN ISO 21420:2020, point 7.2.1.1 (d and f) and point 7.2.2 (e and g)			NA	M
Information supplied by the manufacturer point 7.3.5 and 7.3.7	EN ISO 21420:2020, point 7.3.5 and 7.3.7			NA	M

- EN 388:2016/A1:2018 Protective gloves against mechanical risks

TEST ⁽²⁾	BE APLICATED	STANDARD	REQUERIMENTS	REPORT Nº	RESULT												
General requirements, point 4.1	-	EN 420	EN 388:2016/A1:2018, point 4.1 shall first meet all the applicable requirements of EN 420	NA	M												
General requirements, point 4.1	Arm protector	EN 388	EN 388:2016/A1:2018, point 4.1 At least Level 1 of one of 6.1, 6.2, 6.4, 6.5 or Level A in 6.3 of this standard.	NA	M												
Abrasion resistance point 4.1	Arm protector	EN 388:2016/A1:2018, point 6.1	EN 388:2016/A1:2018, point 6.1 <table border="1"> <tr> <td>Level 1</td> <td>≥ 100 cycles</td> </tr> <tr> <td>Level 2</td> <td>≥ 500 cycles</td> </tr> <tr> <td>Level 3</td> <td>≥ 2000 cycles</td> </tr> <tr> <td>Level 4</td> <td>≥ 8000 cycles</td> </tr> </table>	Level 1	≥ 100 cycles	Level 2	≥ 500 cycles	Level 3	≥ 2000 cycles	Level 4	≥ 8000 cycles	NA	NA				
Level 1	≥ 100 cycles																
Level 2	≥ 500 cycles																
Level 3	≥ 2000 cycles																
Level 4	≥ 8000 cycles																
Blade cut resistance point 4.1	Arm protector	EN 388:2016/A1:2018, point 6.2	EN 388:2016/A1:2018, point 6.2 <table border="1"> <tr> <td>Level 1</td> <td>≥ 1,2</td> </tr> <tr> <td>Level 2</td> <td>≥ 2,5</td> </tr> <tr> <td>Level 3</td> <td>≥ 5,0</td> </tr> <tr> <td>Level 4</td> <td>≥ 10,0</td> </tr> <tr> <td>Level 5</td> <td>≥ 20,0</td> </tr> </table>	Level 1	≥ 1,2	Level 2	≥ 2,5	Level 3	≥ 5,0	Level 4	≥ 10,0	Level 5	≥ 20,0	AR-23-YL-104927-01	M Level 4		
Level 1	≥ 1,2																
Level 2	≥ 2,5																
Level 3	≥ 5,0																
Level 4	≥ 10,0																
Level 5	≥ 20,0																
Tear resistance point 4.1	Arm protector	EN 388:2016/A1:2018, point 6.4	EN 388:2016/A1:2018, point 6.4 <table border="1"> <tr> <td>Level 1</td> <td>≥ 10 N</td> </tr> <tr> <td>Level 2</td> <td>≥ 25 N</td> </tr> <tr> <td>Level 3</td> <td>≥ 50 N</td> </tr> <tr> <td>Level 4</td> <td>≥ 75 N</td> </tr> </table>	Level 1	≥ 10 N	Level 2	≥ 25 N	Level 3	≥ 50 N	Level 4	≥ 75 N	NA	NA				
Level 1	≥ 10 N																
Level 2	≥ 25 N																
Level 3	≥ 50 N																
Level 4	≥ 75 N																
Puncture resistance point 4.1	Arm protector	EN 388:2016/A1:2018, point 6.5	EN 388:2016/A1:2018, point 6.5 <table border="1"> <tr> <td>Level 1</td> <td>≥ 20 N</td> </tr> <tr> <td>Level 2</td> <td>≥ 60 N</td> </tr> <tr> <td>Level 3</td> <td>≥ 100 N</td> </tr> <tr> <td>Level 4</td> <td>≥ 150 N</td> </tr> </table>	Level 1	≥ 20 N	Level 2	≥ 60 N	Level 3	≥ 100 N	Level 4	≥ 150 N	NA	NA				
Level 1	≥ 20 N																
Level 2	≥ 60 N																
Level 3	≥ 100 N																
Level 4	≥ 150 N																
Cut resistance method TDM ⁽¹⁾ point 4.1	Arm protector	EN ISO 13997:1999 Table 2 and point 6.3.5 and clause 7	EN 388:2016/A1:2018, point 6.3 <table border="1"> <tr> <td>Level A</td> <td>≥ 2 N</td> </tr> <tr> <td>Level B</td> <td>≥ 5 N</td> </tr> <tr> <td>Level C</td> <td>≥ 10 N</td> </tr> <tr> <td>Level D</td> <td>≥ 15 N</td> </tr> <tr> <td>Level E</td> <td>≥ 22 N</td> </tr> <tr> <td>Level F</td> <td>≥ 30 N</td> </tr> </table>	Level A	≥ 2 N	Level B	≥ 5 N	Level C	≥ 10 N	Level D	≥ 15 N	Level E	≥ 22 N	Level F	≥ 30 N	AR-23-YL-104927-01	M Level D UoM ±4%
Level A	≥ 2 N																
Level B	≥ 5 N																
Level C	≥ 10 N																
Level D	≥ 15 N																
Level E	≥ 22 N																
Level F	≥ 30 N																
Impact protection ⁽³⁾ (optional) pont 4.2.2	Glove impact area	EN 13594:2015, point 6.9	EN 388:2016/A1:2018, point 4.2.2 Table 7 of the standard EN 13594:2015 minimum Level 1	NA	NA												
Marking point 7	EN 388:2016/A1:2018, point 7 in accordance with the applicable clauses of EN 420.			NA	M												
Information supplied by the manufacturer point 8	EN 388:2016/A1:2018, point 8 in accordance with the applicable clause of EN 420.			NA	M												

⁽¹⁾ It is performed if the blade blunts in the knife shear strength test.

⁽²⁾ If the manufacturer's instructions indicate that they can be washed, the tests should also be carried out after the indicated pretreatment.

⁽³⁾ Optional test.

7. CONCLUSION

Based on the results obtained in the exams, evaluations and revisions the following can be deduced:

The PPE type **ARM PROTECTOR** reference **44-7190**, classified as Category **II** Individual Protective Equipment and whose characteristics are stated in point 1 of this report, **COMPLIES** with the essential requirements established by Regulation (EU) 2016/425 of 9 March 2016 through the application of the standards and risks as stated in point 2 of this report.

28th of November 2023

Signature of the conformity evaluator: