

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

EU TYPE EXAMINATION No:		Io: APPLICATION DATE:	10/05/2023
UE-000	396/00	DATE OF ISSUE:	05/10/2023

APPLICANT: Weldas Europe B.V.

Blankenweg 18, 4612 RC Bergen op Zoom, The Netherlands

PPE TYPE: Golden brown clothing - sleeves

REFERENCE (PPE): 44-2321 and 44-2321XL

INDEX:

1. PPE identification

2. Certification scope

3. Documentation submitted

4. Relationship between this European Standard and Annex II of Regulation (EU) 2016/425 on PPE

5. Design evaluation

6. Comfort evaluation

7. Sizing evaluation

8. Summary of results

9. Conclusion

ANNEX.- EU Type-Examination Certificate



1. PPE IDENTIFICATION

1.1 Description and photograph

Sleeves made with split leather that covers the arm from the wrist to the upper part of the arm. They adjust over the wrist by means of elastic bands and in the upper part fastens by means of hook and loop closure. The variant 44-2321XL has more girth in the upper area of the sleeve.



1.2 Description of the components

PPE components according to the information supplied by the manufacturer:

- Split leather in brown colour, 100% split cow-hide.
- Hook and loop fastening.
- Elastic band.

1.3 Sizes

The size chart supplied by the manufacturer:

SIZE	Length (cm)	Wrist girth (cm)	Girth of upper area (cm)
44-2321	52	21-31	34-47
44-2321XL	52	21-31	45-60

1.4 Samples given for certification

On date 27th of March of 2023, one PPE of each type arrived at the laboratory. On date 27th of July of 2023, one piece of split leather arrived at the lab.



2. CERTIFICATION SCOPE

• EN ISO 13688:2013 and EN ISO 13688:2013/A1:2021 Protective clothing — General requirements.

This International Standard is only intended to be used in combination with other standards containing requirements for specific protective performance and not on stand- alone basis.

• EN ISO 11611:2015 Protective clothing for use in welding and allied processes

For the protection of the user body (except head, hands, and feet) against the following risks:

- Risk of burning due to contact with small splashes of molten metal.
- Risk of burning due to a short exposure to limited flame.
- Risk of burning due to radiant heat.
- Risk of short electric discharge.

3. DOCUMENTATION SUBMITTED

Technical documentation, including the next points:

- o Complete description of the PPE and of its intended use
- o Assessment of the risks against which the PPE is intended to protect
- o 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
- o Reference of the harmonized standards and/ or other technical specifications
- o 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 (Module 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 13688:2013 y EN ISO 13688:2013/A1:2021 Protective clothing – General requirements.

Essential Health and Safety Requirements, according to Annex II of Regulation (UE) 2016/425	Clause(s) / sub-clause(s) of the standard EN ISO 13688:2013/A1:2021	Result	
1.2.1 Absence of risk and other inherent nuisance factors		Meet	\boxtimes
	5.3	Not meet	
		Not applicable	
1.2.1.1 Suitable constituent materials		Meet	\boxtimes
	4.2	Not meet	
		Not applicable	
1.2.1.2 Satisfactory Surface condition of all PPE parts in		Meet	\boxtimes
contact with the user	4.4	Not meet	
		Not applicable	
1.4 Manufacturer's instructions and information		Meet	\boxtimes
	8	Not meet	
		Not applicable	
2.12 PPE bearing one or more identification markings or		Meet	\boxtimes
indicators directly or indirectly relating to health and safety	6; 7	Not meet	
		Not applicable	

• EN ISO 11611:2015 Protective clothing for use in welding and allied processes

Essential requirements of Annex II of the EU Directive 89/686/EEC ⁽¹⁾	Clause(s) / sub-clause(s) of the standard EN ISO 11611:2015	Result		
1.2.1. Absence of inherent risk and other nuisance factors		Meet	\boxtimes	
	4.1; 4.2; 4.3; 4.5; 4.6; 4.7; 6.6; 6.10 y 6.11	Not meet		
	0.11	Not applicable		
1.3.1 Adaptation of PPE to user morphology		Meet	\boxtimes	
	4.4	Not meet		
		Not applicable		
1.4 Manufacturer's instructions and information		Meet	\boxtimes	
	5.2; 8	Not meet		
		Not applicable		
2.4 PPE subject to ageing		Meet		
	5.3	Not meet		
		Not applicable	\boxtimes	
1.3.2 Lightness and strength		Meet	\boxtimes	
	6.2; 6.3; 6.4 y 6.5	Not meet		
		Not applicable		
3.6.1 PPE constituent materials and other components		Meet	\boxtimes	
	6.7; 6.8; 6.9	Not meet		
		Not applicable		
3.6.2 Complete PPE ready for use		Meet	\boxtimes	
	6.8; 6.9	Not meet		
		Not applicable		



1.1.2.2 Classes of protection appropriate to different levels		Meet	\boxtimes
of risk	6.1; 6.8 y 6.9	Not meet	
		Not applicable	
2.12 PPE bearing one or more identification markings or		Meet	\boxtimes
indicators direct	7	Not meet	
		Not applicable	

5. DESIGN EVALUATION

• **EN ISO 13688:2013** Protective clothing – General requirements.

Requirement	
After design evaluation according to point 4.3 of EN ISO 13	3688:2013, the PPE is determined to be:
Conforming	
9	
Non-conforming	

• EN ISO 11611:2015 Protective clothing for use in welding and allied processes

Requirement	
After design evaluation according to point 4 of EN ISO 116	11:2015, the PPE is determined to be:
Conforming	\boxtimes
Non-conforming	

6. COMFORT EVALUATION

• **EN ISO 13688:2013** Protective clothing – General requirements.

Requirement					
After the comfort evaluation according to point 4.4 of EN ISO 13688:2013, the PPE is determined to be:					
Conforming Non-conforming					



7. SIZING EVALUATION

• EN ISO 13688:2013 y EN ISO 13688:2013/A1:2021 Protective clothing – General requirements.

Requirement					
After evaluation of the sizing according to point 6 and Annex D of Standard EN ISO 13688:2013 and EN ISO 13688:2013/A1:2021, it is determined that the PPE is:					
Conforming	\boxtimes				
Non-conforming					

8. SUMMARY OF RESULTS

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



• ISO 13688:2013 and EN ISO 13688:2013/A1:2021 Protective clothing – General requirements.

Test	BE APLICATED	STANDARD	REQUERIMENTS	REPORT Nº	RESULT
Cr (VI) Innocuousness point 4.2	Each layer of material (Leather)	ISO 17075-1:2017 or ISO 17075-2:2017	EN ISO 13688:2013/A1:2021, point 4.2, a) Shall not exceed < 3mg/kg	AR-23-YL- 104442-01	М
Nickel Innocuousness point 4.2	All metallic materials which could come in contact with the skin	EN 1811:2011+A1:2015	EN ISO 13688:2013/A1:2021, point 4.2, b) Shall have a release of nickel of less than < 0,5μg/cm² per week.	NA	NA
pH Innocuousness point 4.2	Split leather	Leather ISO 4045:2018	EN ISO 13688:2013/A1:2021, point 4.2 c) Greater than 3 ,5 and less than 9,5	AR-23-YL- 107692-01	М
Azo colorants which release carcinogenic amines listed Innocuousness point 4.2	Split leather	ISO 14362-1:2017 and ISO 14362- 3:2017 ⁽¹⁾	EN ISO 13688:2013/A1:2021, point 4.2 Shall be no detectable	AR-23-YL- 104442-01	М
Confort point 4.4	Protective clothing	EN ISO 13688:2013, point 4.4 and EN 13921	EN ISO 13688:2013, point 4.4 and Annex C	Section 6 of this report	М
Dimensional change due to cleaning after pre- treatment point 5.3	Protective clothing o textile	Washed ISO 5077 Dry cleaned ISO 3175-1	EN ISO 13688:2013 + EN ISO 13688:2013/A1:2021, point 5.3 $\leq \pm 3\%$ (woven) or $\leq \pm 5\%$ (Knitted)	NA	NA
General size designation point 6	Protective clothing	ISO 8559-1:2017, EN ISO 13688:2013 + EN ISO 13688:2013/A1:2021, point 6 and Annex D	EN ISO 13688:2013 + EN ISO 13688:2013/A1:2021, point 6 and Table 1	Section 7 of this report	М
Marking point 7	EN ISO 13688:2013 + EN ISO 13688:2013/A1:2021, point 7 and Annex E			NA	М
Information supplied by the manufacturer point 8	EN ISO 13688:2013 + EN ISO 13688:2013/A1:2021, point 8			NA	М

 $^{^{(1)}}$ The Azo colorants are tested according to ISO 17234-2:2011 and ISO 17234-1:2020 when leather material.



• EN ISO 11611:2015 Protective clothing for use in welding and allied processes

TEST	BE APLICATED	STANDARD	REQUIREMENT	REPORT Nº	RESULT
General and design requirements point 4	-	EN ISO 11611:2015, point 4 and EN ISO 13688	EN ISO 11611:2015, point 4	Section 5 of this report	М
Pre-treatment (1) point 5.2	Materials / garment	-	EN ISO 11611:2015, point 5.2	NA	NA
Ageing ⁽¹⁾ point 5.3	Materials / garment	-	EN ISO 11611:2015, point 5.3	NA	NA
Classification point 6.1	Garment	EN ISO 11611:2015	EN ISO 11611:2015, point 6.1, Annex A Class 1 Class 2	NA	Class 2 A1 + A2
Tensile strength, after pre-treatment point 6.2	Leather	ISO 13934-1 (woven) ISO 3376 (leather)	EN ISO 11611:2015, point 6.2 ≥ 400N (woven) ≥ 80N (leather)	AR-23-YL- 107692-01	М
Tear strength, after pre- treatment point 6.3	Leather	ISO 13937-2 (woven) ISO 3377-1 (leather)	EN ISO 11611:2015, point 6.3 Class 1 ≥ 15N Class 2 ≥ 20N	AR-23-YL- 104442-01	М
Burst strength,	Knitted outer materials			NA	NA
after pre- treatment point 6.4	Structural seams in knitted materials	ISO 13938-1 or ISO 13938-2	EN ISO 11611:2015, point 6.4≥ 100 kPa (50cm²) ≥ 200 kPa (7,3cm²)	NA	NA
Seam strength, after pre- treatment point 6.5	Structural seams of outer materials	ISO 13935-2	EN ISO 11611:2015, point 6.5 ≥ 225 N	AR-23-YL- 104442-01	М
Dimensional change, after pre-treatment point 6.6	Garment or each fabric layer	ISO 5077, point 6.6	EN ISO 11611:2015, point 6.6 ≤±3% (woven) ≤±5% (knitted)	NA	NA
Limited flame spread of the new material (Procedure A) Outer face point 6.7.2	Leather		EN ISO 11611:2015, point 6.7.2 The flame does not reach the upper or either vertical edge No flaming or molten debris - No hole formation - Afterglow ≤ 2s - Afterflame ≤ 2s	AR-23-YL- 104442-01	M A1
Limited flame spread of the new material (Procedure B)	Leather	EN ISO 11611:2015, point 6.7.2, 6.7.3 and ISO 15025	EN ISO 11611:2015, point 6.7.3 The flame does not reach the upper or either vertical edge No flaming or molten debris - Afterglow ≤ 2s - Afterflame ≤ 2s	AR-23-YL- 104442-01	M A2
Limited flame spread as received (Procedure A) point 6.7.2	Seams		EN ISO 11611:2015, point 6.7.3 The flame does not reach the upper or either vertical edge No flaming or molten debris	AR-23-YL- 104442-01	M A1



TEST	BE APLICATED	STANDARD	REQUIREMENT	REPORT Nº	RESULT
Limited flame spread as received (Procedure B) ⁽¹⁾ point 6.7.3	Seams		- Afterglow ≤ 2s - Afterflame ≤ 2s Seams do not separate	AR-23-YL- 104442-01	M A2
Limited flame spread, as received (Procedure A) point 6.7.2	Hardware		EN ISO 11611:2015, point 6.7.2 The flame does not reach the upper or either vertical edge No flaming or molten debris - Afterglow ≤ 2s - Afterflame ≤ 2s Closure system open at least once	AR-23-YL- 104442-01	M A1
Small splashes of molten metal, as received point 6.8	Leather	ISO 9150	EN ISO 11611:2015, point 6.8 Class 1: ≥ 15 and < 25 drops Class 2: ≥ 25 drops	AR-23-YL- 104442-01	M Class 2
Heat transfer (radiation), as received point 6.9	Leather	ISO 6942 (Method B)	EN ISO 11611:2015, point 6.9 Class 1: 16 > RHTI 24 ≥ 7 Class 2: RHTI 24 ≥ 16	AR-23-YL- 104442-01	M Class 2
Electrical resistance, as received point 6.10	Leather and seams	EN 1149-2	EN ISO 11611:2015, point 6.10 $> 10^5 \Omega$	AR-23-YL- 104442-01	М
Fat content of leather point 6.11	Leather	ISO 4048:2008	EN ISO 11611:2015, point 6.11 ≤ 15%	AR-23-YL- 104442-01	М
Marking point 7	EN ISO 11611:2015, point 7 + EN ISO 13688, point 7			NA	М
Information supplied by the manufacturer point 8	EN ISO 11611:2015, point 8 + EN ISO 13688, point 8			NA	М



9. CONCLUSION

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

The PPE type Golden brown clothing – sleeves reference 44-2321 and 44-2321XL with Class 2 protection (A1 + A2), 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.

Elche, 5 th of October 2023
Signature of the conformity evaluator: