

Evaluation report No.: IC2088869-2

Holder/ Manufacturer: PATACHO,S.L.
PL-IND. DE TEIXEIRO, CALLE ARANGA, PARCELA D-40-41 , 15310 TEIXEIRO, CURTIS, LA CORUÑA, SPAIN

Internal number / Certified by: 1025/EXC88

Country of origin: Pakistan

Type: AST-503
AST-503Y



(RED - with reinforcement)

AST-503



(RED - without reinforcement)



YELLOW - with reinforcement)

AST-503Y



(YELLOW - without reinforcement)

Sample description:

Welder's gloves with five separate fingers made out of cow split leather with or without reinforcement on palm and around the thumb in a form of a strip. Inside is a full cotton lining, welt on seams, stitched with Kevlar thread.
Available colors (cow split leather): red and yellow.

Type PPE:

Personal protective equipment (PPE) category II
Protective gloves for welders



Requirement:

- harmonized standard **HRN EN 12477:2001/A1:2005 (EN 12477:2001/A1:2005)**
- applicable essential health and safety requirements according to REGULATION (EU) 2016/425 of the European Parliament and of the Council of 9 March 2016 on personal protection equipment and repealing Council Directive 89/686/EEC

Requirement:		Result/Document/Remark	Fulfilling of the requirement / = not requirement + = fulfills - = doesn't fulfill																																											
3	Requirements																																													
3.1	General requirements																																													
	Protective gloves for welders shall comply with all the general requirements of EN 420 : 2003, except the lengths which are defined in 3.2.	The gloves meets requirements of EN 420.	+																																											
3.2	Sizes																																													
	When measured according to 6.2.3 and 6.2.4 of EN 420:2003 the sizes shall correspond to the requirements established in 5.1.2 of EN 420:2003 but the minimum length shall be in accordance with Table 1. Table 1	Test report No: 17-11-05866 (Euroinspekt Eurotextil d.o.o., Croatia) Measures for size 10: <ul style="list-style-type: none"> Glove length: 360 mm 	+																																											
	<table border="1"> <thead> <tr> <th>Hand size</th> <th>6</th> <th>7</th> <th>8</th> <th>9</th> <th>10</th> <th>11</th> </tr> </thead> <tbody> <tr> <td>Minimum length of glove (mm)</td> <td>300</td> <td>310</td> <td>320</td> <td>330</td> <td>340</td> <td>350</td> </tr> </tbody> </table>	Hand size	6	7	8	9	10	11	Minimum length of glove (mm)	300	310	320	330	340	350																															
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3.3	Specific requirements																																													
	Protective gloves for welders shall be tested and, according to the test results, be classified as type A and/or type B, according to Table 2. Table 2	Test report No: 17-11-05866 (Euroinspekt Eurotextil d.o.o., Croatia) <u>EN 420:</u> Dexterity – 2 <u>EN 388:</u> <u>Abrasion resistance</u> >10050(AST-503), >9241(AST-503Y) <ul style="list-style-type: none"> level 4 <u>Blade cut resistance</u> 2,95 (AST-503), 3,31 (AST-503Y) <ul style="list-style-type: none"> level 2 <u>Tear resistance</u> 117 N (AST-503), 126 N (AST-503Y) <ul style="list-style-type: none"> level 4 <u>Puncture resistance</u> 153 N (AST-503), 157 N (AST-503Y) <ul style="list-style-type: none"> level 4 Test report No: 17-11-05866 (Euroinspekt Eurotextil d.o.o., Croatia) <u>EN 407:</u> <u>Burning behaviour</u> <ul style="list-style-type: none"> level 4 Test report No: 60/01630 (BTTG, United Kingdom) <u>EN 407:</u> Contact heat resistance – 51 s <ul style="list-style-type: none"> level 1 Convective heat resistance – HTI ₂₄ – 16 s <ul style="list-style-type: none"> level 3 Resistance to small splashes of molten metal – Palm/back > 40 droplets <ul style="list-style-type: none"> level 4 	+																																											
	<table border="1"> <thead> <tr> <th rowspan="2">REQUIREMENTS</th> <th colspan="3">MINIMUM PERFORMANCE REQUIRED</th> </tr> <tr> <th>EN number</th> <th>Type A</th> <th>Type B</th> </tr> </thead> <tbody> <tr> <td>Abrasion resistance</td> <td>EN 388</td> <td>2 (500 cycles)</td> <td>1 (100 cycles)</td> </tr> <tr> <td>Blade cut resistance</td> <td>EN 388</td> <td>1 (index 1,2)</td> <td>1 (index 1,2)</td> </tr> <tr> <td>Tear resistance</td> <td>EN 388</td> <td>2 (25 N)</td> <td>1 (10 N)</td> </tr> <tr> <td>Puncture resistance</td> <td>EN 388</td> <td>2 (60 N)</td> <td>1 (20 N)</td> </tr> <tr> <td>Burning behaviour</td> <td>EN 407</td> <td>3</td> <td>2</td> </tr> <tr> <td>Contact heat resistance</td> <td>EN 407</td> <td>1 (contact temperature 100°C)</td> <td>1 (contact temperature 100°C)</td> </tr> <tr> <td>Convective heat resistance</td> <td>EN 407</td> <td>2 (HTI > 7)</td> <td>–</td> </tr> <tr> <td>Resistance to small splashes of molten metal</td> <td>EN 407</td> <td>3 (25 droplets)</td> <td>2 (15 droplets)</td> </tr> <tr> <td>Dexterity</td> <td>EN 420:2003</td> <td>1 (smallest diameter 11 mm)</td> <td>4 (smallest diameter 6,5 mm)</td> </tr> </tbody> </table> <p>After each thermal test, all inner materials shall be inspected to ensure that no melting has occurred. During the test for resistance to small splashes of molten metal, if drops adhere to the material, then the material shall not ignite.</p>	REQUIREMENTS	MINIMUM PERFORMANCE REQUIRED			EN number	Type A	Type B	Abrasion resistance	EN 388	2 (500 cycles)	1 (100 cycles)	Blade cut resistance	EN 388	1 (index 1,2)	1 (index 1,2)	Tear resistance	EN 388	2 (25 N)	1 (10 N)	Puncture resistance	EN 388	2 (60 N)	1 (20 N)	Burning behaviour	EN 407	3	2	Contact heat resistance	EN 407	1 (contact temperature 100°C)	1 (contact temperature 100°C)	Convective heat resistance	EN 407	2 (HTI > 7)	–	Resistance to small splashes of molten metal	EN 407	3 (25 droplets)	2 (15 droplets)	Dexterity	EN 420:2003	1 (smallest diameter 11 mm)	4 (smallest diameter 6,5 mm)		
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Requirement:		Result/Document/Remark	Fulfilling of the requirement / = not requirement + = fulfills - = doesn't fulfill
3.4	Optional requirements for gloves intended for arc welding in normal conditions of use		
	Gloves shall be designed without electrical conductive connection between their outside and inside parts, e.g. by metal parts as rivets. Conformity shall be checked by visual inspection. The electrical vertical resistance for gloves type A and B shall be > 10 ⁵ Ω. The testing shall be according to 5.10.	Not requirement. Glove doesn't contain metal parts.	/
4	Conditioning		
	Before testing, the test samples shall be conditioned as specified in the specific test method standard. For protective gloves with a multilayer construction, the test shall be carried out on all layers simultaneously, even if these, after removal of the test samples, are no longer connected to one another. If care instructions are provided, all the tests shall be performed on the gloves, before and after they have been subjected to the maximum recommended number of cleaning cycles. The lowest performance level obtained from either before or after the maximum number of cleaning cycles shall be provided in the marking and in the instructions for use.		
5	Test methods		
	If the glove areas to be submitted to the tests are made of different materials, all these materials shall be tested. The classification is based on the lowest performance level obtained.		
5.1	Abrasion resistance		
	The material for welders' protective gloves shall be tested according to 6.1 of EN 388 : 1994 on the palm of the glove, and on the back if it is made of different materials.	Tested. Test report No: 17-11-05866 (Euroinspekt Eurotextil d.o.o., Croatia)	+
5.2	Blade cut resistance		
	The material for welders' protective gloves shall be tested according to 6.2 of EN 388 : 1994 on the palm of the glove.	Tested. Test report No: 17-11-05866 (Euroinspekt Eurotextil d.o.o., Croatia)	+
5.3	Tear resistance		
	The material for welders' protective gloves shall be tested according to 6.3 of EN 388 : 1994 on the palm of the glove.	Tested. Test report No: 17-11-05866 (Euroinspekt Eurotextil d.o.o., Croatia)	+
5.4	Puncture resistance		
	The material for welders' protective gloves shall be tested according to 6.4 of EN 388: 1994 on the palm of the glove.	Tested. Test report No: 17-11-05866 (Euroinspekt Eurotextil d.o.o., Croatia)	+
5.5	Burning behavior		
	The glove shall be tested according to 6.3 of EN 407 : 1994.	Tested. Test report No: 17-11-05866 (Euroinspekt Eurotextil d.o.o., Croatia)	+

Requirement:		Result/Document/Remark	Fulfilling of the requirement / = not requirement + = fulfills - = doesn't fulfill
5.6	Contact heat resistance		
	<p>The material for welders' protective gloves shall be tested according to EN 702, on the palm of the glove, with a contact temperature of 100 °C.</p> <p>A sample with a diameter of 80 mm is taken from each palm area of three gloves.</p> <p>All the individual values tr shall comply with the minimum performance required in Table 2. The result shall be given as the arithmetic mean of the three values and rounded to the nearest whole second.</p>	<p>Tested. Test report No: 60/01630 (BTTG UK)</p>	+
5.7	Convective heat resistance		
	<p>The material for welders' protective gloves shall be tested according to EN 367, on the palm, on the back and on the cuff of the glove if they are made of different materials. For each material or each material assembly, three samples shall be tested. All the individual values shall comply with the minimum performance required in Table 2. The result shall be given as the arithmetic mean of the three values and rounded to the nearest whole second.</p>	<p>Tested. Test report No: 60/01630 (BTTG UK)</p>	+
5.8	Resistance to small splashes of molten metal		
	<p>The material for welders' protective gloves shall be tested according to EN 348, on the back and on the cuff of the glove, if these are made of different materials.</p> <p>A sample of 120 mm x 20 mm is taken from each back of four gloves.</p> <p>All the individual values shall comply with the minimum performance required in Table 2. The test result shall be given as the arithmetic mean of the four values and rounded to the nearest whole number of drops.</p>	<p>Tested. Test report No: 60/01630 (BTTG UK)</p>	+
5.9	Dexterity		
	<p>The glove shall be tested according to 6.3 of EN 420:2003.</p>	<p>Tested. Test report No: 17-11-05866 (Euroinspekt Eurotextil d.o.o., Croatia)</p>	+
5.10	Test for gloves intended for arc welding in normal conditions of use - Electrical vertical resistance		
	<p>The material for welders' protective gloves shall be conditioned for at least 24 h in an atmosphere having a temperature of (20 ± 2) °C and a relative humidity of (85 ± 3) %. Testing in accordance with EN 1149-2 shall be carried out under these conditions or within 5 min of removal from this atmosphere.</p> <p>The vertical electrical resistance of each differing part of the glove or gauntlet including the cuff shall be tested. If the external surface of the glove on its own exceeds the requirements, then only the differing external surfaces need to be tested. However, if the external surface does not pass but the combination of the external surface and the lining do meet the requirements, then each differing construction of the glove and cuff shall be tested.</p>	<p>Not requirement.</p>	/

Requirement:		Result/Document/Remark	Fulfilling of the requirement / = not requirement + = fulfills - = doesn't fulfill
6	Marking		
	<p>The marking shall comply with 7.1 and 7.2 of EN 420: 2003. In addition, each glove shall be marked with the number of the present standard, followed by letter A or B depending on whether it is a type A product or a type B product, plus the pictograms for thermal risks and mechanical risks.</p> <p>Each packaging enclosure that immediately contains the glove shall be marked with the pictogram for protective gloves against thermal risks plus the number of this standard and the type of the glove.</p> <p>On each packaging enclosure the manufacturer may also choose to affix the specific pictogram for protective gloves against mechanical risks.</p>	<p>12477:2001/A5:2005 (Type) A</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  EN 388:2016 4 2 4 4 X </div> <div style="text-align: center;">  EN 407:2004 4 1 3 X 4 X </div> </div>	+
7	Information supplied by the manufacturer		
	<p>Instructions for use shall comply with 7.1 and 7.3 of EN 420:2003. The manufacturer shall give some information on the recommended use of the glove.</p> <p>Type B gloves are recommended when high dexterity is required, as for TIG welding. Type A gloves are recommended for other welding processes.</p> <p>The manufacturer shall indicate that :</p> <ul style="list-style-type: none"> - There is no standardized test method at present for detecting U.V. penetration of materials for gloves but the current methods of construction of protective gloves for welders do not normally allow penetration of U.V. radiation. - When gloves are intended for arc welding: these gloves do not provide protection against electric shock caused by defective equipment or live working, and the electrical resistance is reduced if gloves are wet, dirty or soaked with sweat, this could increase the risk. 	<p>Instructions supplied by manufacturers is according to requirements of EN 420:2003.</p> <p>Gloves are type A as recommended for high risk welding.</p> <p>Manufacturer indicated both quotation in his instructions for users.</p>	+

Documentation used for conformity assessment:

- Test report No.: 17-11-05866, issued by Euroinspekt Eurotextil d.o.o., Croatia
- Test report No.: 60/01630, issued 10.10.2017. by BTTG, Manchester, United Kingdom
- Technical document of manufacturer: TECHNICAL DOCUMENTATION Protective gloves for welders – Type: AST-503, AST-503Y

RESULTS OF CONFORMITY ASSESSMENT:

The implemented procedure of conformity assessment examined type PPE which is representative of the intended production (production type) found to comply with the requirements of harmonized standards **HRN EN 12477:2001/A1:2005 (EN 12477:2001/A1:2005)** and the applicable essential health and safety requirements of Regulation (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686 / EEC and determining the levels and/or protection classes.

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Approved by:


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