

AB Tip İnceleme Sertifikası EU Type-Examination Certificate

Belge No / Certificate No : 162-21-01-R01
**Belgelendirme Tarihi - Bir Sonraki Belge Tarihi /
Certification Date / Certificate Validity Date** : 12.03.2021-16.02.2026
Belge Geçerlilik Tarihi / Document Validity Period: 5 yıl / 5 years
**Firma Unvanı ve Adresi /
Company Name and Address** : ASTEK METAL MEDİKAL YAPI
TEKNOLOJİ SAN. TİC. LTD. ŞTİ.
Akçaburgaz Mah. 3032. Sk. No: 4/1
Esenyurt / İSTANBUL

Ürün Adı /Modeller / Product Name / Models : ARMED AR PRO 2
Direktifi / Directive : 2016/425 REGULATION
Modülü/Kategori / Module / Category : B MODÜLÜ/ KATEGORİ III
MODULE B / CATEGORY III
Test Rapor No/ları / Test Report No : MNA M-2020-00799, M-2021-00316

Ürün Tipi / Product Type:
- EN 149:2001+ A1:2009 Solunumla ilgili koruyucu cihazlar - Parçacıklara karşı koruma amaçlı filtreli yarım maskeler/ Respiratory protective devices - Filtering half masks to protect against particles

Ürünün Malzeme Bilgisi / Product Material Information: ARMED AR PRO 2 model ürünleri kumaş, elastik kayış, burun klipsi, filtre katmanı kullanılarak imal edilmiştir./ ARMED AR PRO 2 model products are manufactured using fabric, elastic strap, nose clip, filter layer.

Revizyon nedeni/ Reason for revision: Farklı renkte ürünler eklenmiştir./ Different color products have been added.

Volkan AKIN
12.03.2021
Karar Verici / Approver



Okan AKEL
12.03.2021
Şirket Müdürü / General manager







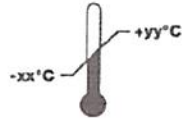

ATTACHMENTS (162-21-01-R01)

To certify the PPE product at Category III level, C2 or D module is accompanied by applying one of the conformity assessment methods along with the EU Type Examination (Module B).

Model : ARMED AR PRO 2

PPE SPECIFICATION	PERFORMANCE LEVELS
Classification	FFP2
Reusable / Single Shift Use	NR

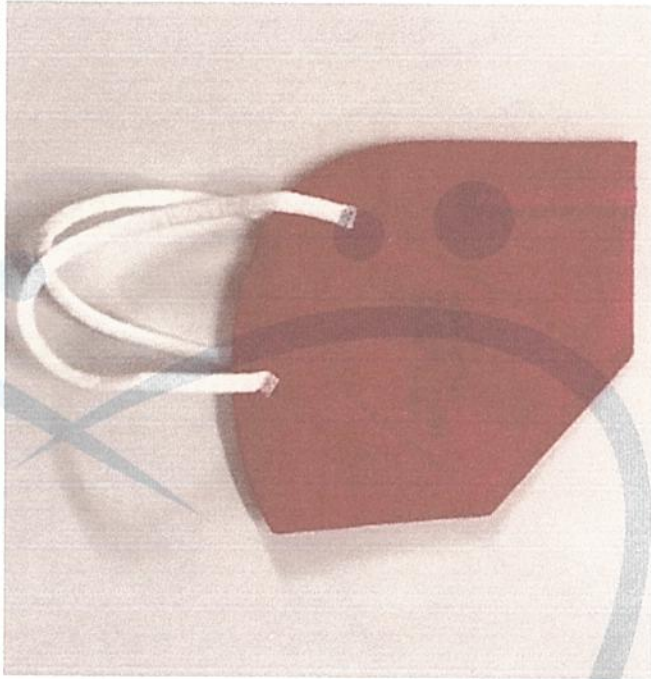
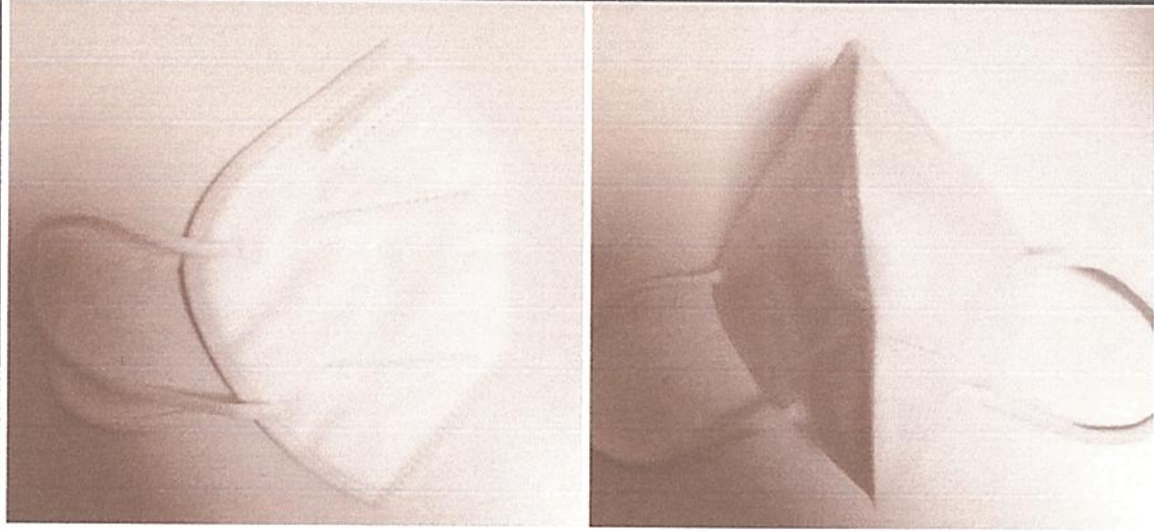
PPE produced as a single unit to fit an individual user, all the necessary instructions for manufacturing such PPE on the basis of the approved basic model:

MARKING	
MANUFACTURER: ASTEK METAL MEDİKAL YAPI TEKNOLOJİ SAN. TİC. LTD. ŞTİ.	
PPE TYPE :	
- EN 149:2001+ A1:2009 Respiratory protective devices - Filtering half masks to protect against particles	
MODEL: ARMED AR PRO 2	
PICTOGRAM AND PERFORMANCE LEVELS:	
EN 149:2001+ A1:2009 FFP2 NR	
 NB 2841	
 Year Month	 yyyy/mm
 -xx°C +yy°C	 < xx%
Or Condition of Storage	

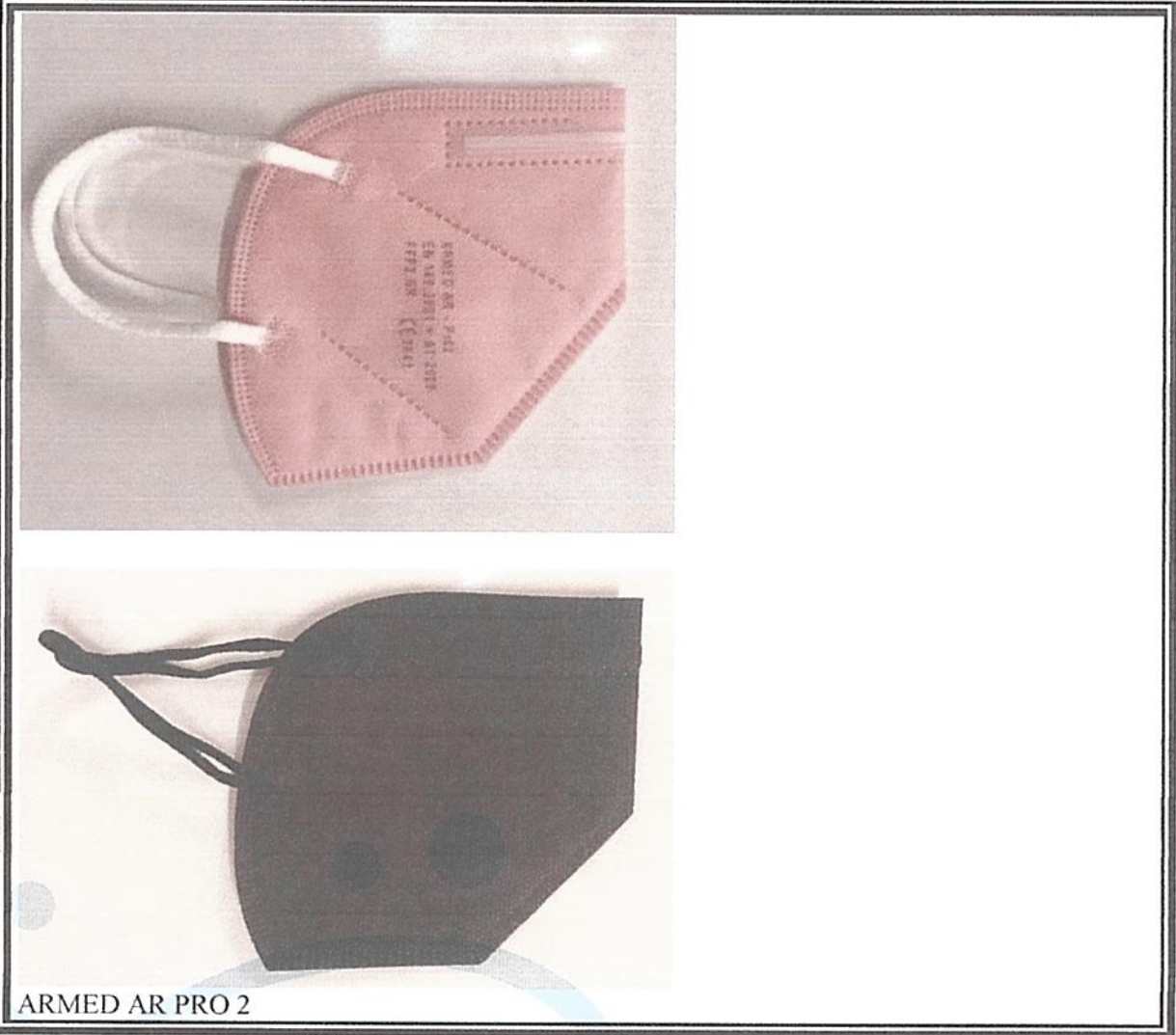
MNA LABORATORIES SAN. TIC. LTD. ŞTİ declares that the above-mentioned product meets the requirements of the directive according to the EU Directive 2016/425, the safety of the product is covered by the conditions and use specified in this certificate and in the technical file.

ATTACHMENTS (162-21-01-R01)

PRODUCT PICTURES



ATTACHMENTS (162-21-01-R01)



DOCUMENTS IN THE TECHNICAL FILE

- Basic Health Safety Requirements
- Risk Assessment
- Test Reports
- Technical Report

Report No : 162-21-01-R01

Report Date :12.03.2021

Application No : 162-21-01

1. COMPANY INFORMATION:

ASTEK METAL MEDİKAL YAPI TEKNOLOJİ SAN. TIC. LTD. ŐTİ.
Akçaburgaz Mah. 3032. Sk. No: 4/1 Esenyurt / İSTANBUL
Tel: +90 212 219 72 58

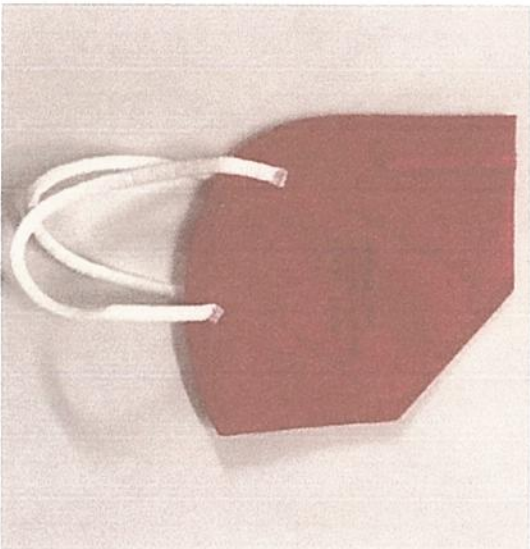
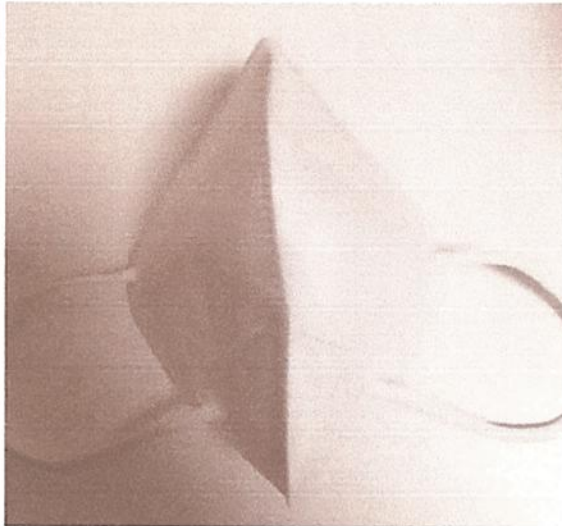
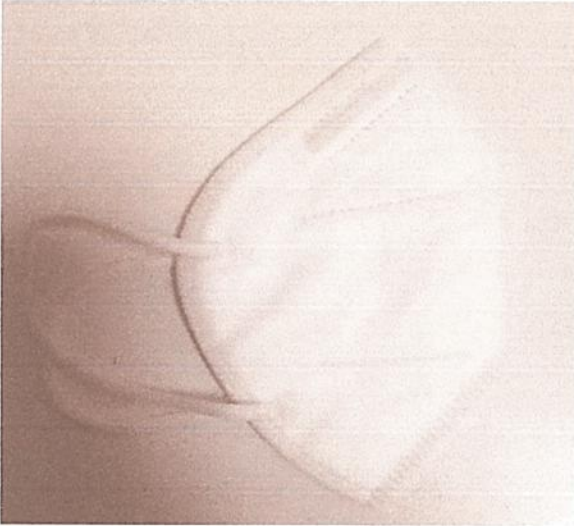
2. PPE INFORMATION:

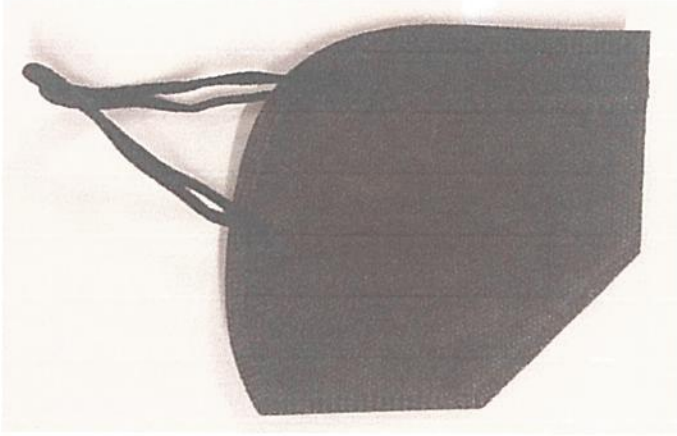
Disposable and non-sterile half mask made of particulate protection filter material.

3. PPE TYPE IDENTIFICATION

EN 149:2001+A1:2009 Respiratory protective devices – Filtering half masks to protect against particles - Requirements, testing, marking

4. PPE PICTURES





ARMED AR PRO 2

5. PPE DIMENSIONS:

ARMED AR PRO 2 model has been found to be produced using standart sizes.

6. PPE PRODUCT MATERIAL INFORMATION:

The product is made of elastic strap, nonwoven fabric on the outer and inner layers and filter material on the middle layer.

7. ESSENTIAL HEALTH AND SAFETY REQUIREMENTS

- A visual inspection was made according to EN 149:2001 +A1:2009 for ergonomics.
- Protection levels and degrees are defined by the manufacturer.
- Suitable construction materials were determined by visual inspection according to EN 149:2001 +A1:2009.

8. ANALYSIS AND EVALUATIONS:

EN 149:2001 +A1:2009

TESTS	PARAMETER	PERFORMANCE LEVELS			RESULTS	PERFORMANCE LEVELS	EVALUATION
		FFP1	FFP2	FFP3			
Part 7.3 Visual inspection	Shall also the marking and the information supplied by the manufacturer				Appropriate	-	PASS
Banned Azo Dyes	< 30 mg/kg				< 5 mg/kg	< 30 mg/kg	PASS
Part 7.4 Packaging	Particle filtering half mask shall be offered for sale packaged in such a way that they are protected against mechanical damage and contamination before use.				Appropriate	-	PASS
Part 7.5 Material	When conditioned in accordance 8.3.1 & 8.3.2 the particle filter half mask shall not collapse.				Appropriate	-	PASS
Part 7.6 Cleaning and disinfecting	After cleaning and disinfecting the re-usable particle filtering half mask shall satisfy the penetration requirement of the relevant class.				Not applicable	-	Not applicable

Part 7.7 Practical performance	No negative comments should be made by the test subject regarding any of the criteria evaluated.	Appropriate	-	PASS
Part 7.8 Finish of parts	Parts of the device likely to come into contact with the wearer shall have no sharp edge or burrs.	Appropriate	-	PASS

TESTS	PARAMETER	PERFORMANCE LEVELS			RESULTS	PERFORMANCE LEVELS	EVALUATION
		FFP1	FFP2	FFP3			
Part 7.9.1 Total inward leakage	At least 46 out of the 50 individual exercise result	<25	<11	<5	See the table below	FFP2	PASS
	At least 8 out of the 10 individual wearer arithmetic means	<22	<8	<2	See the table below	FFP2	PASS

Total Inward Leakage (%)

	Exercise 1	Exercise 2	Exercise 3	Exercise 4	Exercise 5	Average
Subject 1 (As recieved)	8.1	7.3	7.9	6.6	7.9	7.6
Subject 2 (As recieved)	7.5	7.2	7.8	7.5	7.3	7.5
Subject 3 (As recieved)	8.3	7.9	8.3	5.2	7.0	7.3
Subject 4 (As recieved)	6.7	7.7	7.5	8.1	6.3	7.3
Subject 5 (As recieved)	8.1	7.5	7.7	7.4	6.7	7.5
Subject 6 (After temperature conditioning)	7.7	7.1	8.4	7.6	7.4	7.6
Subject 7 (After temperature conditioning)	7.6	7.8	7.5	7.8	7.5	7.6
Subject 8 (After temperature conditioning)	7.6	7.5	7.8	7.0	7.4	7.5
Subject 9 (After temperature conditioning)	7.7	7.5	7.8	8.5	7.6	7.8
Subject 10 (After temperature conditioning)	8.5	7.0	6.4	7.5	7.1	7.3

Subject facial dimensions

Subject	Face Length (mm)	Face Width (mm)	Face Depth (mm)	Mouth Width (mm)
1	133	132	132	65
2	125	144	116	67
3	126	135	124	75
4	123	133	134	74
5	117	135	122	73
6	122	142	133	66
7	113	132	114	75
8	135	123	123	65
9	122	135	133	74
10	135	142	125	83

TESTS	PARAMETER	PERFORMANCE LEVELS			RESULTS	PERFORMANCE LEVELS	EVALUATION
		FFP1	FFP2	FFP3			
Part 7.9.2 Penetration of filter material	Sodium chloride, 95 L/min %, max	% 20	% 6	% 1	See the table below	FFP2	PASS
	Paraffin oil, 95 L/min %, max	% 20	% 6	% 1	See the table below	FFP2	PASS

Penetration of filter material	Sodium Chloride (%)	Paraffin Oil (%)
As recieved	3.5	3.3
As recieved	2.2	2.4
As recieved	2.7	3.2
After the simulated wearing treatment	2.4	3.1
After the simulated wearing treatment	2.6	2.6
After the simulated wearing treatment	2.1	3.8
Mechanical strength and temperature conditioning	4.6	4.8
Mechanical strength and temperature conditioning	4.4	4.3
Mechanical strength and temperature conditioning	4.3	4.7

TESTS	PARAMETER	PERFORMANCE LEVELS			RESULTS	PERFORMANCE LEVELS	EVALUATION
		FFP1	FFP2	FFP3			
Part 7.10 Compatibility with skin	Materials shall not be known to be likely to cause irritation or any other adverse effect to health				Appropriate	-	PASS
Part 7.11 Flammibility	Mask shall not burn or not to continue to burn for more than 5 s				Flame not seen	-	PASS
Part 7.12 Carbondioxide content of the inhalation air	Shall not exceed an average of % 1				0,84 0,87 0,82	-	PASS
Part 7.13 Head harness	It can be donned and removed easily				Appropriate	-	PASS
Part 7.14 Field of vision	The field of vision shall acceptable in practical performance test.				Appropriate	-	PASS
Part 7.15 Exhalation valve(s)	It shall withstand axially a tensile force of 10 N apply for 10 s. If fitted, shall continue to operate correctly after a continuous exhalation flow of 300 L/min over a period of 30 s.				Not applicable	-	Not applicable

TESTS	PARAMETER	PERFORMANCE LEVELS			RESULTS	PERFORMANCE LEVELS	EVALUATION
		FFP1	FFP2	FFP3			
Part 7.16 Breathing Resistance	Inhalation 30L/min	0,6 mbar	0,7 mbar	1,0 mbar	See the table below	FFP2	PASS
	Inhalation 95L/min	2,1 mbar	2,4 mbar	3,0 mbar	See the table below	FFP2	PASS
	Exhalation 160L/min	3,0 mbar	3,0 mbar	3,0 mbar	See the table below	FFP2	PASS

Breathing Resistance (mbar)	Inhalation 30L/min	Inhalation 95L/min
As recieved	0,4	1,5
As recieved	0,4	1,5
As recieved	0,3	1,5
After temperature conditioning	0,3	1,6
After temperature conditioning	0,4	1,5
After temperature conditioning	0,3	1,6
After the simulated wearing treatment	0,3	1,5
After the simulated wearing treatment	0,4	1,6
After the simulated wearing treatment	0,4	1,6

Breathing Resistance 160L/min (mbar)	Facing directly ahead	Facing vertically upwards	Facing vertically downwards	Lying on the left side	Lying on the right side
As recieved	2,7	2,6	2,7	2,7	2,6
As recieved	2,6	2,7	2,6	2,7	2,6
As recieved	2,7	2,6	2,6	2,7	2,6
After temperature conditioning	2,6	2,7	2,7	2,6	2,6
After temperature conditioning	2,7	2,6	2,7	2,6	2,6
After temperature conditioning	2,7	2,7	2,6	2,7	2,6
After the simulated wearing treatment	2,7	2,6	2,7	2,6	2,7
After the simulated wearing treatment	2,6	2,7	2,6	2,7	2,6
After the simulated wearing treatment	2,7	2,6	2,7	2,7	2,7

TESTS	PARAMETER	PERFORMANCE LEVELS			RESULTS	PERFORMANCE LEVELS	EVALUATION
		FFP1	FFP2	FFP3			
Part 7.17 Clogging	After clogging the inhalation resistances shall not exceed. (valved)	4 mbar	5 mbar	7 mbar	Not applicable	-	Not applicable
	The exhalation resistance shall not exceed 3 mbar at 160 L/ min continuous flow. (valved)				Not applicable	-	Not applicable
	After clogging the inhalation and exhalation resistances shall not exceed. (valveless)	3 mbar	4 mbar	5 mbar	Not applicable	-	Not applicable
Part 7.18 Demountable part	All demountable parts (if fitted) shall be readily connected and secured were possible by hand.				Not applicable	-	Not applicable

9. DECISION PROPOSAL

Analysis and examinations ARMED AR PRO 2 model coded personal protective equipment; Respiratory Protective Devices EN 149:2001 +A1:2009- Filtered Half Masks for Protection Against Particles - Properties, Experiments and Marking standards are evaluated. It is recommended to be certified at the performance levels specified as a result of technical evaluations.

10. ATTACHMENTS

- Basic Health Safety Requirements
- Risk Assessment
- Test Reports
- User Instruction

Reason for revision : Different color products have been added.

CONTROLLER : VOLKAN AKIN

SING :

DATE : 12.03.2021





EU DECLARATION OF CONFORMITY

MANUFACTURER

ASTEK METAL MEDİKAL YAPI TEKNOLOJİ
SANAYİ TİCARET LİMİTED ŞİRKETİ
Akburgaz Mah 3032.Sok.No:4/1 Esenyurt İstanbul

PRODUCT DESCRIPTION

Brand Name: ARMED
Model :AR-PR02
Classification : FFP2 NR

Particle Filtering Half Face Mask in Category TTI product acceding to(EU) 2016/425 it is approved that the product meets the requirements of the Regulation

The Manufacturer declares on his sole responsibility that the product above is, under conditions of normal use and conditions defirmi by the Manufacturer, safe and meets all the necessary legal conditions and requirements. The product is a personel protective equipment that is intended for single use and solely in accordance with Manufacturer's instructions.

The conformity is ensured with the following mechanism:

- Complies with EU 2016/425 Person.Protective Equipment Regulation establishing technical requirements for Category III products,
- Complies with Essential Health and safety Requirements of Technical harmonized standard EN 149:2001+A1:2009
- All required test referred in above standards are conducted,
- Complies with other relevant harmonized legislation and community standarts
- For the assessment of conformity the EU Type Examination certificate (Serial No:162-21-01) is issued, after all technical evaluations for conformity to the regulation and harmonized standards. Issue date: 16.02.2021 from MNA LABORATORIES IND.TRADE.CO.LTD, as Notified Body number 2841.
- The product is under surveillance of same Notified Body.nb 2841 according to the Annex III (Module B) of the PPE Regulation (EU) 2016/425, for quality assurance.

MARKING,LABELLING

Marking, labelling and user information are prepared in accordance with EU 2016/425 Personel Protective Equipment Regulation and harmonized product standards given above.

MEASURE TO ENSURE CONFORMITY

The Manufacturer declares that he has taken all necessary measures to ensure the conformity of products placed on the uo uk.with technical documentation and technical requirements for this type of product.

PLACE: Istanbul/Esenyurt

DATE: 03.03.2021

AUTHORIZED: Cihat Yıldız (General Manager)

COMPANY NAME : ASTEK METAL MEDİKAL
YAPI TEKNOLOJİ SANAYİ TİCARET LİMİTED ŞİRKETİ

ASTEK METAL MEDİKAL YAPI TEKNOLOJİ
SANAYİ TİCARET LİMİTED ŞİRKETİ
Akçaburgaz Mah. 3032. Sok. No:4/1 Esenyurt/İST.
Tel: 0212 219 72 58 E-mail: info@astekmedikal.com
Tic.Sic.No:22810955 E-Registry V.D: 091 106 0876
Mersis No: 00911000000000000001