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# 叫

管信息。

备案、许可、监 信息公示系统' 了解更多登记、 扫描二维码登录 '国家企业信用

广西安然医疗器械有限公司

注 串

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伍佰万圆整

鳭 H 悪 殿 长期

一类、二类、三类医疗器械生产及销售,劳保用品设计、生产、销售,食品、厨具卫具及日用杂品、化工产品(危险化学品除外)、卫生用品、家用电器、仪器仪表、橡胶制品、农副产品、服装服饰、日用品、针纺织品、文具用品、五金产品、办公设备、农产品、建筑材料销售,货物或技术进出口(国家禁止或涉及行政审批许可的除 (依法须经批准的项目, 经相关部门批准后方 市

可开展经营活动。) 外),道路货物运输. 经

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有限责任公司(自然人投资或控股)

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2020年02月21日

名

称

法定代表人

李文凯

严 柳州市柳南区银祥路1号3号厂房3-1

顺 沾 性 美

2020 中 国 Ш

http://www.gsxt.gov.cn

市场主体应当于每年 1月1日 至 6月30日通过 国家企业信用信息公示系统报送公示年度报告



**⇔** 1/4 称:广西安然医疗器械有限公司

许可证编号:桂食药监械生产许20200024号

社会信用代码: 91450204MA5PAB206F

日常监督管理机构:

1 Ħ 负 责 人:李文凯 \*

定代表人:李文凯

投诉举报电话: 12315

日常监督管理人员:周德源; 谭伟伟

所:柳州市柳南区银祥路1号3号厂房3-1

发证 典 关:广西壮族自治 治区药品监督管理局

# K 当 址:柳州市柳南区银祥路1号3号厂房3-1

英 人:韦广辉

料

2020年 04 月01 Ш



有效期至 2021 年 03 月 31 **H** 









中国认可 国际互认 检测 TESTING CNAS L0608

# 检验报告

**TEST REPORT** 

# 天纺标检测认证股份有限公司

TianFangBiao Standardization Certification & Testing Co., Ltd





# 检验报告











|                         |                                       |  |  |   |   | Page 1 01 5    |
|-------------------------|---------------------------------------|--|--|---|---|----------------|
|                         |                                       | Guangxi Anran  | Medical Equipme  | ent Co., Ltd.   | Contact                                   |                |
|                         | Applicant                             |  | Workshop, No. 1, Y<br>ct, Liuzhou City   | inxiang Road,   | Tel. —                                    |                |
| Client                  | Manufacturer                          |  |  |   |   |                |
| covided by              | TTT                                   | Sample Name Protective Mask KN95 Sample Count 46Piece(s)   |  |   | Trademark                                 | TS             |
| Information Provided by | Information of<br>Submitted<br>Sample |  |  |   | Colour                                    | *              |
|                         | Bumpro                                | Quality Grade  |  |   | SafetyCategory                            |                |
|                         |                                       | Style No. or<br>Order No.  | AN RAN 9501A   |   |   |                |
| 1                       | Test Part<br>Description              | 1# White Mask  |  |   |   |                |
|                         | Test Type                             | Commission Test  | Date of<br>Submission  | 2020-05-19  | Date of Checking                          | 2020-05-26     |
| Te                      | est Standards                         |  | spiratory protec<br>Non-powered air-   |   | t<br>ticle respirator                     |                |
|                         | Conclusion                            | Test results and   | compliance refe  | er to next page Stamp of Inspec   | · 元                                       | <b>股</b> 岛武器公公 |
|                         | Non-standard                          |  | 190  |   | 1A. You L.                                |                |
|                         | Check Methods                         |  | The same of the sa |   | 位则专                                       | <b>用</b> 章 /   |
| Uncer                   | rtainty of Result                     |  |  |   |   |                |
|                         | Remarks                               | As per client's required to test judged according CNAS (L0608) authorithe test items R Space, Appearance unauthorized by CMA (200215340010 | only initial fit to the standard orizes the test espiratory Resist Inspection, View CNAS (L0608).  | Iltration effic<br>GB 2626-2006.<br>item Filtration<br>stance, Flammabin<br>v and Head Harr | on Efficiency,<br>ility, Dead<br>ness are | Face side up   |

Approver

Checker

Editor







# 检验报告







CTTT-WT20012106-01

Page 2 of 5

| TEST Items   | Description   | Unit | Standard<br>Requirement  | Results  | Conclu<br>sions | Test Method/<br>Remarks |
|--------------|---|------|--|--|-----------------|-------------------------|
| 1#           |   |      |  |  |                 |                         |
| Respiratory  | Total<br>Expiratory<br>Resistance                   | Pa   | Samples with Pretreatment: 1: 75 2: 70   |  | — Pass          | GB 2626-2006            |
| Resistance   | Total<br>Inspiratory<br>Resistance                  | Pa   | ≤350   | Samples Without Pretreatment: 1: 94 2: 85 Samples With Pretreatment: 1: 86 2: 84 | rass            | GB 2020 2000            |
| Flammability |   |      | Each part exposed to the flame shall not burn after it is removed from the flame;if it burns, the afterflame time shall not exceed 5s. | No continue burning  | Pass            | GB 2626-2006            |
| Dead Space   | CO <sub>2</sub> Volume<br>Fraction in<br>Inhalation | %    | ≤1   | 0.8  | Pass            | GB 2626-2006            |





# 检验报告





CNAS L0608

| Test Items                         | Description  | Unit | Standard<br>Requirement           | Results   | Conclu<br>sions | Test Method/<br>Remarks |
|------------------------------------|--|------|-----------------------------------|---|-----------------|-------------------------|
| Filtration<br>Efficiency<br>(KN95) | NaCl Particle  | %    | ≥95, 0                            | Initial Filtration     Efficiency:     Samples Without     Pretreatment:         1: 99.01         2: 99.01         3: 98.93         4: 98.99         5: 98.93         6: 98.95         7: 99.01         8: 99.13         9: 99.06         10: 98.98         Samples With     Pretreatment:         1: 99.80         2: 99.81         3: 99.81         4: 99.71         5: 99.74 | Pass            | GB 2626-2006            |
|                                    | Surface of The Sample  |      | As per<br>standard<br>requirement | +   |                 |                         |
|                                    | Component Material and Construction                            |      | As per<br>standard<br>requirement | +3  |                 |                         |
| Appearance                         | Head Harness   |      | As per<br>standard<br>requirement | +   | Pass            |                         |
| Inspection                         | The components after the temperature and humidity pretreatment | TS   | As per<br>standard<br>requirement | +   | rass            | GB 2626-2006            |
|                                    | Label and the information provided by manufacturer             | ===  | As per<br>standard<br>requirement | +   |                 |                         |
| View                               | View Below   | 0    | ≥60                               | 62  | Pass            | GB/T 2891-199           |





# 检验报告





中国认可 国际互认 TESTING CNAS L0608

| Daga | 1 | of | 5 |
|------|---|----|---|

| Test Items   | Description             | Unit | Standard<br>Requirement   | Results | Conclu<br>sions | Test Method/<br>Remarks |
|--------------|-------------------------|------|---|---------|-----------------|-------------------------|
| Head Harness | Disposable<br>Facepiece |      | Each head harness, buckle and other adjustment components of the mask should not have slippage or breaking for 10s under 10N loading. |         | Pass            | GB 2626-2006            |

<sup>+</sup> Meet the standard requirements, X Not Meet the standard requirements.

Blank Part Below



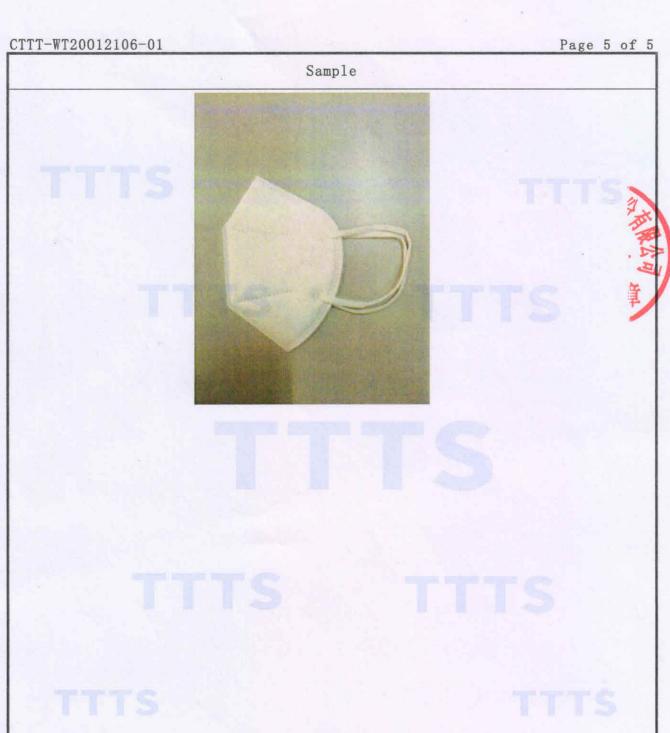


# 检验报告









#### Fiscal Year 2020

This certifies that:

GUANGXI ANRAN MEDICAL EQUIPMENT CO.,LTD PLANT 3-1.NO.3 AND NO.1 YINXIANG ROAD,LIUNAN DISTRICT, LIUZHOU CITY, GUANGXI 545001, CHINA

Was registered with US Food and Drug Administration, Center for devices and Radiological Health, pursuit to the Code of Federal Regulations 21 CFR 807.

Registration of FEI Number: 3016665963 Owner/Operator Number: 10064406

| Listing<br>Number | Premarket<br>Submission<br>Number/Type | Submission Device Class  |     | Activities   |
|-------------------|--|--|-----|--------------|
| D379015           | Exempt                                 | ACCESSORY,<br>SURGICAL<br>APPAREL  | LYU | Manufacturer |
| D384876           | Enforcement Discretion                 | Face mask (except N95 respirator) for general Public / healthcare personnel per IIE guidance | QKR | Manufacturer |

# FDA Owner/OPERATOR NUMBER QUERY and Registration Number URL: <a href="https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfRL/rl.cfm">https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfRL/rl.cfm</a>

Pursuant to 21 CFR 807.39, "Registration of a device establishment or assignment of a registration number does not in any way denote approval of the establishment or its products. Any representation that creates an impression of official approval because of registration or possession of a registration number is misleading and constitutes misbranding". The U.S. Food and Drug Administration does not issue a certificate of registration, This file is used as FDA company information display only.

Issued: March 26, 2020

Expiration Date: Dec 31, 2020

Address: Food and Drug Administration 10903 New Hampshire Ave Silver Spring, MD 20993-0002 Contact Number: 1-888-INFO-FDA (1-888-463-6332) https://www.fda.gov



Help (./help/index.html)

DRLM Home (mainMenu.htm) > Change Registration Information for a Facility

**✓** Facility

**✔** Products Listing

#### **Update Registration Successful**

Facility: GUANGXI ANRAN MEDICAL EQUIPMENT CO.,LTD, liuzhou city, Guangxi, CHINA

Registration/FEI Number: 3016665963/3016665963

The Owner/Operator Number for this Registration is: 10064406.

#### **Facility Information**

**Registration Number:** 

3016665963

**Initial Importer:** 

**Facility Name:** 

GUANGXI ANRAN MEDICAL EQUIPMENT CO.,LTD

Address:

plant 3-1.NO.3 and NO.1 yinxiang road, liunan district, liuzhou city, Guangxi, 545001, CHINA

**DUNS Number:** 

**Foreign Trade Zone:** 

**Facility URL:** 

Other Business Trade Name(s):

#### **Owner/Operator Information**

**Owner/Operator Number:** 

10064406

**Contact Name:** 

Jie Tan

Company:

GUANGXI ANRAN MEDICAL EQUIPMENT CO.,LTD

Address: plant 3-1.NO.3 and NO.1 yinxiang road, liunan district

liuzhou city, GUANGXI, 545001, CHINA

Telephone:

86 - 0772 - 2800650

Fax:

E-mail: guangxianran@nmpa-cn.com

#### **DUNS Number:**

#### **Official Correspondent Information**

**Contact Name:** 

Jie Tan

Company:

GUANGXI ANRAN MEDICAL EQUIPMENT CO.,LTD

Address: plant 3-1.NO.3 and NO.1 yinxiang road, liunan district

liuzhou city, GUANGXI, 545001, CHINA

**Telephone:** 

86 - 0772 - 2800650

Fax:

E-mail: guangxianran@nmpa-cn.com

**DUNS Number:** 

#### **United States Agent Information**

**Contact Name:** 

Jack Zhang

**Contact Title:** 

Mr

**Business Name:** 

Address: 1942 Broadway St., STE 314C

Boulder, Colorado, 80302, UNITED STATES

Phone:

720 - 7791888

Fax:

**DUNS Number:** 

E-mail: us.fw@fda-registered.com

#### **Device Listings**

| Listing<br>Number | Premarket<br>Submission<br>Number/Type | Product<br>Code(s) | Device Name(s)   | Activities   | Importers |
|-------------------|--|--------------------|--|--------------|-----------|
| D384876           | Enforcement<br>Discretion              | QKR                | Face mask (except N95 respirator) for general public/healthcare personnel per IIE guidance | Manufacturer |           |
| D379015           | Exempt                                 | MSH                | Respirator, surgical   | Manufacturer |           |

Date of Initial Registration: 2020-03-25 11:21:31.0



#### **Australian Government**

#### **Department of Health**

Therapeutic Goods Administration

## **Australian Register of Therapeutic Goods Certificate**

Issued to

#### Thirty Four Degrees South Import Agencies Pty Ltd

for approval to supply

# Thirty Four Degrees South Import Agencies Pty Ltd - Public N95 respirator

ARTG Identifier 334935

ARTG Start date 23/04/2020

Product Category Medical Device Included Class 1

**GMDN** 57793

GMDN Term Public N95 respirator

Intended Purpose A disposable, single use mask to cover nose and mouth to help protect

medical personnel from airborne pathogens while they are in contact

with or near patients.

| Manufacturer Details                      | Address   | Certificate number(s) |
|---|---|-----------------------|
| Guangxi Anran Medical Equipment Co<br>Ltd | Plant 3-1 No 3 and No 1<br>Yinxiang Road Liunan District<br>Liuzhou City, Guangxi,<br>545001<br>China |                       |

#### **ARTG Standard Conditions**

The above Medical Device Included Class 1 has been entered on the Register subject to the following conditions:

- · The inclusion of the kind of device in the ARTG is subject to compliance with all conditions placed or imposed on the ARTG entry. Refer Part 4-5, Division 2 (Conditions) of the Therapeutic Goods Act 1989 and Part 5, Division 5.2 (Conditions) of the Therapeutic Goods (Medical Devices) Regulations 2002 for relevant information.
  - Breaching conditions of the inclusion related to the device of the kind may lead to suspension or cancellation of the ARTG entry; may be a criminal offence; and civil penalties may apply.

#### **Products Covered by This Entry**

#### 1. Public N95 respirator

#### **Product Specific Conditions**

No specific conditions have been recorded against this entry.

Therapeutic Goods Administration PO Box 100, Woden ACT 2606 Australia

Phone: 1800 020 653 Email: info@tga.gov.au ARTG Identifier: 334935 ARTG Start Date: 23/04/2020



#### **Australian Government**

#### **Department of Health**

#### Therapeutic Goods Administration

Record Summary 334935 Thirty Four Degrees South Import Agencies Pty Ltd - Public N95 respirator

**Sponsor** Thirty Four Degrees South Import Agencies Pty Ltd

Therapeutic Type Medical Device
Product Category Included Class 1
ARTG Start date 23/04/2020

Postal Address 221/180 Campbell Parade, Bondi, NSW, 2026

Australia

Billing Address 221/180 Campbell Parade, Bondi, NSW, 2026

Australia

#### Conditions

- The inclusion of the kind of device in the ARTG is subject to compliance with all conditions placed or imposed on the ARTG entry. Refer Part 4-5, Division 2 (Conditions) of the Therapeutic Goods (Medical Devices) Regulations 2002 for relevant information.

- Breaching conditions of the inclusion related to the device of the kind may lead to suspension or cancellation of the ARTG entry; may be a criminal offence; and civil penalties may apply.

#### Manufacturers

Name Address Certificate number(s)

Guangxi Anran Medical Equipment Co Ltd Plant 3-1 No 3 and No 1

Equipment Co Ltd Yinxiang Road Liunan District Liuzhou City, Guangxi, 545001
China

#### **Products**

#### 1. Public N95 respirator

Product Type Single Device Product Status Current

Effective date 23/04/2020

GMDN 57793 Public N95 respirator Functional description Not included on record

Intended purpose A disposable, single use mask to cover nose and mouth to help protect medical personnel from airborne

pathogens while they are in contact with or near patients.

Variant information

**Device Information** 



#### Rapport - Alternative Test Protocol voor type FFP2/FFP3 maskers in kader van COVID-19

Test van Type FFP2 mondmaskers volgens het ATP ontwikkeld door Groep IDEWE in samenwerking met de FOD economie

#### **Erkend voor ATP door FOD Economie**

Uitvoerder: Mensura Consult

Gaucheretstraat 88 / 90

1030 Brussel

KBO: 873.758.677

#### Specificaties testapparatuur

TSI Portacount 8038 met N95 module en TSI Particle Generator 8026

#### Randvoorwaarden

De maskers werden onderworpen aan het Alternatieve Test Protocol (ATP) - dd. 09/06/2020

Dit testprotocol is een korte procedure die een snelle beoordeling van maskers toelaat om maskers vrij te geven of af te keuren als FFP2 in functie van de huidige tekorten aan FFP2 maskers in het kader van de COVID-19 crisis. De ATP geeft een indicatie over de mate waarin het masker geacht mag worden te voldoen aan de EN-149 of gelijklopende buitenlandse normen. Het masker kan afgekeurd worden of vrijgegeven worden al dan niet met bijkomende gebruiksvoorwaarden (zie conclusies testfases)

De test werd door **Mensura Consult** met de nodige zorg uitgevoerd conform het door FOD Economie opgestelde ATP protocol.

Het resultaat blijft indicatief, de omstandigheden waarin de maskers zullen gebruikt worden blijft de verantwoordelijkheid van de opdrachtgver van deze test.

#### **Ondertekening**

Ir. Karine Eerdekens Lead Transformation Officer

Directeur Risicobeheersing – Directeur Gestion des Risques

Mensura EDPB/SEPP

KBO: BE 0873.758.677

#### Aanvragei

Belangrijk - Invullen aub

#### Identificatie - Aanvrager

o Straat HUANG TRADING BVBA

o Postcode 2100 Gemeente Deurne

o Uw Externe Dienst voor Preventie en Bescherming - klik keuze aan

o KBO / BTW nr BE0632542740

#### Contactpersoon - Aanvrager

o Naam: HUANG BAO BEI

o E-mail: huangtradingco@gmail.com / info@nvpconsult.be

o Telnr of gsmnr : 0485 62 78 19

#### Contactpersoon - Verzending ATP rapport

o Naam: HUANG BAO BEI

o E-mail: huangtradingco@gmail.com / info@nvpconsult.be

o Telnr of gsmnr : 0485 62 78 19

#### Facturatiegegevens

o Naam: HUANG TRADING BVBA
o IBAN nr. BE44 3631 4867 2445

o BIC BBRUBEBB

#### Een duidelijke omschrijving van te testen masker

#### Commerciële benaming - Masker Type 1

o Merk CHOUPETTE

o Model Protective mask KN95

o Type KN95

o EAN nummer (indien aanwezig):

Gegevens van de fabrikant Guangxi Anran Medical Equipment CO, LTD

#### **Eindresultaat**

FFP2 TAPE NOSE volgens ATP



#### Rapport ATP voor type FFP2 maskers

#### Identificatie - Aanvrager

Naam **HUANG TRADING BVBA** 

Contactpersoon **HUANG BAO BEI** 

Uw ref masker HT 1

#### Omschrijving van te testen masker

Gegevens van de fabrikant

CHOUPETTE o Merk

Protective mask KN95 o Model

KN95 o Type o EAN nummer (indien aanwezig):

Resultaat test FFP2 TAPE NOSE volgens ATP

Toestel gebruikt voor ATP test

8038201620

8038201529

8038201629

Locatie: Antwerpen Toestel - Serienr.

Limburg Toestel - Serienr. Toestel - Serienr. Brussel

11/06/2020 Datum test Antwerpen DEK TSI PortacCount 8038 met N95 module en Particle Generator 8026

Guangxi Anran Medical Equipment CO, LTD

Certificaat

Certificaat Certificaat

#### Foto's Masker & Verpakking

Locatie

Zaal



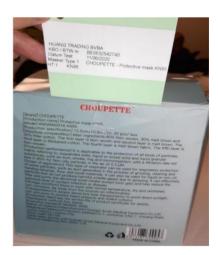
CHOUPETTE"

KN95MASK























#### Volgens ATP - Protocol versie 09/06/2020

#### TESTFASE A - Deeltjespenetratietest van het filtrerend membraan van het masker

Masker

#### Fase A2 - bepaling nominale filterpenetratie NFPn%

module N95 ingeschakeld

#### Masker 1

#### Testgegevens



NFPn%

MDB Tester: Testpersoon: GS

#### Masker 2

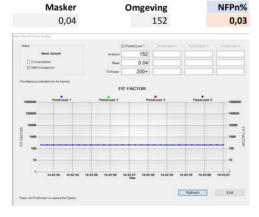
#### Testgegevens



MDB Tester: MB Testpersoon:

#### Masker 3

#### Testgegevens



Masker

MB Tester: Testpersoon: MDB

#### Toelichting over mogelijke resultaten NFPn %

3 maskers : NFPn% > 0,5% 3 maskers : NFPn% < 0,05 % In alle andere gevallen

STOP - Niet geslaagd voor ATP

Testfase B1 - 6 maskers testen - globale fitfactor k 30 test

NFPn%

Testfase B1 - 6 maskers testen - globale fitfactor k30/k50



| TESTFASE B - Beoordeling van de inwaartse     | e iek op basis v | an vereen | voudigae rittesten                                  | module N95 inge  |
|---|------------------|-----------|---|------------------|
| Globale fitfactor k 30 - masker 1 - 2 - 3     |                  |           |   |                  |
| Testfase B1 - 3 maskers - fittest bij normaa  | l dragen         |           | Testfase B2 - 3 maskers - fittest Tape Nose         |                  |
| Testpersoon                                   | GS               |           |   |                  |
| Masker 1                                      |                  |           | Masker 1  |                  |
| Stap 1: Normaal in- en uitademen              |                  | 2         | Stap 1: Normaal in- en uitademen                    | 117              |
| Stap 2: Links en rechts draaien hoofd         |                  | 2         | Stap 2: Links en rechts draaien hoofd               | 92               |
| Stap 3: Tekst lezen Stap 4: Vooroverbuigen    |                  | 4 2       | Stap 3: Tekst lezen Stap 4: Vooroverbuigen          | 146              |
| Globale fitfactor k                           |                  | 2         | Globale fitfactor k                                 | 138<br>119       |
| Taskususasu                                   | MAD              |           |   |                  |
| Testpersoon                                   | МВ               |           |   |                  |
| Masker 2                                      |                  |           | Masker 2  |                  |
| Stap 1: Normaal in- en uitademen              |                  | 2         | Stap 1: Normaal in- en uitademen                    | 200              |
| Stap 2: Links en rechts draaien hoofd         |                  | 2         | Stap 2: Links en rechts draaien hoofd               | 200              |
| Stap 3: Tekst lezen                           |                  | 4         | Stap 3: Tekst lezen                                 | 200              |
| Stap 4: Vooroverbuigen Globale fitfactor k    |                  | 2         | Stap 4: Vooroverbuigen Globale fitfactor k          | 46<br><b>109</b> |
| Globale Iltractor K                           |                  | 2         | Globale Ittlactor k                                 | 105              |
| Testpersoon                                   | MDB              |           |   |                  |
| Masker 3                                      |                  |           | Masker 3  |                  |
| Stap 1: Normaal in- en uitademen              |                  | 4         | Stap 1: Normaal in- en uitademen                    | 91               |
| Stap 2: Links en rechts draaien hoofd         |                  | 5         | Stap 2: Links en rechts draaien hoofd               | 69               |
| Stap 3: Tekst lezen                           |                  | 9         | Stap 3: Tekst lezen                                 | 194              |
| Stap 4: Vooroverbuigen Globale fitfactor k    |                  | 3<br>4    | Stap 4: Vooroverbuigen Globale fitfactor k          | 60<br><b>85</b>  |
|   | 66               | -         | diobale infactor k                                  | 63               |
| Testpersoon                                   | GS               |           |   |                  |
| Masker 4                                      |                  |           | Masker 4  |                  |
| Stap 1: Normaal in- en uitademen              |                  | 1         | Stap 1: Normaal in- en uitademen                    | 43               |
| Stap 2: Links en rechts draaien hoofd         |                  | 1         | Stap 2: Links en rechts draaien hoofd               | 37               |
| Stap 3: Tekst lezen                           |                  | 3         | Stap 3: Tekst lezen                                 | 62               |
| Stap 4: Vooroverbuigen<br>Globale fitfactor k |                  | 1         | Stap 4: Vooroverbuigen  OVERALL Globale fitfactor k | 48<br>46         |
|   |                  |           |   |                  |
| Testpersoon                                   | MB               |           |   |                  |
| Masker 5                                      |                  |           | Masker 5  |                  |
| Stap 1: Normaal in- en uitademen              |                  | 2         | Stap 1: Normaal in- en uitademen                    | 200              |
| Stap 2: Links en rechts draaien hoofd         |                  | 3         | Stap 2: Links en rechts draaien hoofd               | 200              |
| Stap 3: Tekst lezen                           |                  | 4         | Stap 3: Tekst lezen                                 | 200              |
| Stap 4: Vooroverbuigen Globale fitfactor k    |                  | 3         | Stap 4: Vooroverbuigen Globale fitfactor k          | 200              |
|   |                  | 3         | Эюране пиастог к                                    | 200              |
| Testpersoon                                   | MDB              |           |   |                  |
| Masker 6                                      |                  |           | Masker 6  |                  |

| Stap 1:               | Normaal in- en uitademen      | 6 |
|-----------------------|-------------------------------|---|
| Stap 2:               | Links en rechts draaien hoofd | 5 |
| Stap 3:               | Tekst lezen                   | 6 |
| Stap 4:               | Vooroverbuigen                | 4 |
| Globale fitfactor k 5 |                               |   |

Testfase B1 - masker 1 tot 6 : minstens 5 maskers k ≥ 30 ? Neen: Testfase B2 - 3 extra maskers fittest Tape Nose

32 Stap 1: Normaal in- en uitademen Stap 2: Links en rechts draaien hoofd 50 Stap 3: Tekst lezen 92 Stap 4: Vooroverbuigen 15 Globale fitfactor k

Testfase B2 - masker 1 tot 6 : minstens 5 maskers  $k \ge 30$ ? Ja: masker Tape Nose volgens ATP - score 2

#### Synthese

|                | Testfase A - A2 | Testfase B1 - Normaal |          | Testfase B2 - Tape Nose |          |                     |
|----------------|-----------------|-----------------------|----------|-------------------------|----------|---------------------|
| ATP resultaat  | (N95 aan)       | (N95 aan)             |          | (N95 aan)               |          |                     |
|                | NFPn%           | Globale fitfactor k   | Score B1 | Globale fitfactor k     | Score B2 | Prioriteitenscore R |
| Masker 1 - tp1 | 0,03            | 2                     | 0        | 119                     | 2        | 2                   |
| Masker 2 - tp2 | 0,03            | 2                     | 0        | 109                     | 2        | 2                   |
| Masker 3 - tp3 | 0,03            | 4                     | 0        | 85                      | 2        | 2                   |
| Masker 4 - tp1 |                 | 1                     | 0        | 46                      | 2        | 2                   |
| Masker 5 - tp2 |                 | 3                     | 0        | 200                     | 2        | 2                   |
| Masker 6 - tp3 |                 | 5                     | 0        | 31                      | 2        | 2                   |
| valuatie       |                 |                       |          |                         |          | 2,0                 |

| Berekening Prioriteitenscore R - gemiddelde van 6 scores |                  |  |  |  |
|--|------------------|--|--|--|
| R - 1 tot 1,4  | FFP2 volgens ATP |  |  |  |
| R - 1,5 tot 2,2  | FFP2 Tape Nose   |  |  |  |
| R - 2,3 tot 3  | FFP2 Tape All    |  |  |  |

#### **Eindresultaat Masker**

#### **FFP2 TAPE NOSE volgens ATP**

Er kan aan de hand van de documentatie niet worden aangetoond dat de maskers conform zijn, maar het resultaat van de test volgens het ATP is positief.

De pasvorm (fit) van de maskers is echter niet goed genoeg ter hoogte van de neusbrug:

De maskers moeten tijdens het gebruik worden afgeplakt ter hoogte van de neusbrug.

De maskers worden vrijgegeven als FFP- maskers.

Op de verpakking wordt volgende waarschuwing aangebracht:



#### Aanbevelingen voor het gebruik van maskers

#### Bij de keuze van FFP2-maskers geldt steeds volgende hiërarchie:

- 1° keuze: maskers met een volledige attestering volgens EN149
- 2° keuze: maskers uit de categorie "FFP2 geslaagd volgens ATP"
- 3° keuze: maskers uit de categorie "FFP2 Tape nose volgens ATP"

De beste beschikbare keuze wordt ook steeds voorbehouden voor risicoafdelingen mbt COVID-19.

Maskers die ingedeeld werden in de categorie "FFP2 tape all volgens ATP" zijn maskers die goed filtermateriaal hebben, maar die omwille van de

Voor het masker wordt bijkomend een **prioriteitenscore** berekend die toelaat om binnen de betreffende indelingscategorie een optimale keuze R is een getal dat tussen 1 en 3 ligt.

#### Keuzes binnen de categorie-indeling op basis van prioriteitenscore:

FFP2 volgens ATP – R van 1 tot 1,4 – kies masker met de score dichtste bij 1

FFP2 tape nose -R van 1,5 tot 2,2 - kies masker met score dichtste bij 1,5

#### Archief



#### Legende

#### Testfase A: Deeltjespenetratiestest van het filterend membraan van het masker

Fase A2: Inschatting van de nominale filterpenetratie (NFPg%) op basis van filterpenetratie van deeltjes tussen 20 en 60 nm (NFPn%). Dit gebeurt met behulp van een Portacount voorzien van een deeltjesteller met een N95 module op 3 maskers die volledig afgesloten worden op het gezicht van een testpersoon (meting bij N95 module ingeschakeld).

Fase A1: Bepaling van de maximale penetratie (%) volgens normen EN 13274-7 / EN 149 §8.11 op 3 maskers.

#### Testfase B: Beoordeling van de inwaardse lek op basis van vereenvoudigde Fittesten

6 Maskers worden getest (3 verschillende testpersonen aan 2 maskers per persoon)

Fase B1 - Fittest bij normaal dragen masker

Fase B2 - Fittest Tape Nose

#### NFPn%

Nominale filterpenetratie, dit betekent dat we de kwaliteit van het filtermateriaal gaan bekijken voor de deeltjes met een grootte van 0.02µm tot 0.06µm

#### NFPg%

Globale filterpenetratie, dit betekent dat we de kwaliteit van het filtermateriaal gaan bekijken voor verschillende groottes van deeltjes, **niet enkel** die van 0.02µm tot 0.06µm

#### N95-aan vs. N95-uit

Deze is een module op ons toestel die ons toelaat om te gaan kijken specifiek naar de deeltjes met eerder vermeldde grootte van 0.02µm tot 0.06µm. Als deze module aan staat kijken we enkel naar deeltjes met deze grootte. Staat de module uit, kijken we naar een breder spectrum van deeltjesgroottes.

#### 丹麦GTS测试CE报告(非油性)





Guangxi Anran Medical equipment Co., Ltd. Room 3-1, No 3, Workshop, No 1, yinxiang Road, Liunan District, Liuzhou city, Guangxi Province, China

Brøndby, 29 June 2020 120-26884 Page 1 of 5 rafb/szp

## **Test Report**

Guangxi Anran Medical Equipment Co., Ltd.

Rasmus Forsberg

Digitally signed by Rasmus Forsberg rafb@force.dk Specialist

Sarah Pedersen

Digitally signed by Sarah Pedersen szp@force.dk Project Manager

The report is only valid with two digital signatures from FORCE Technology. The original version of the report is archived in FORCE Technology's database and is sent in electronic duplicate to the customer. The stored version of the report at FORCE Technology prevails as documentation for its contents and validity.

Extracts from the Report may only be reproduced with a written permission from FORCE Technology. The test results only relate to the items tested.

The "General Conditions" on the last page are an integral part of our services.



Task: 120-26884 Page: 2 of 5 Date: 29.06.2020

rafb/szp



# **Test report**

**Object:** Test of mask AN RAN 9501A

Samples received: 11.05.2020

**Sampling by:** Guangxi Anran Medical Equipment Co., Ltd.

Method: RFU 02.075 version 2

**Test date:** 20.05.2020-26.06.2020

**Results:** 

#### § 8.2 Visual inspection

The mask was of uniform light white material and without valve. The mask had white straps that fit around the ears and was marked "KN95"

#### § 8.4 Practical performance

Practical performance was performed by one test subject in accordance with the specifications in RFU 02.075 version 2.

|                             | Comments   |
|-----------------------------|--|
| a) Head harness comfort     | Comfortable fit and soft elastics  |
| b) Security of fastenings   | Ok but had to tie a knot as the straps did not have any means of adjust- |
|                             | ment   |
| c) Field of vision          | Ok   |
| d) Maintenance of face seal | Ok   |
| e) Other comments           |  |

Table 1: Practical performance.

#### § 8.7 Carbon dioxide content of the inhalation air

Three test fits of the mask were measured. The average was 0,39%. The requirement in EN 149 is <1,0%.

#### § 8.9 Breathing Resistance

The requirements of EN 149:2001 + A1:2009 is listed in the table below.

| Sample       | Result (mbar) | Requirements (mbar) | Parameter               |
|--------------|---------------|---------------------|-------------------------|
| AN RAN 9501A | 0,40          | <0,7                | (Inhalation, 30 l/min)  |
|              | 1,37          | <2,4                | (Inhalation, 95 l/min)  |
|              | 2,23          | <3,0                | (Exhalation, 160 l/min) |

Table 2: Breathing resistance

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#### § 8.11 Penetration of filter material

The requirements of EN 149:2001 + A1:2009 is listed in the table below. All results are an average of 3 masks.

| Sample       | Result (%) | Requirements (%) | Aerosol                   |
|--------------|------------|------------------|---------------------------|
| AN RAN 9501A | 1,61       | <6               | Sodium chloride, 95 l/min |

Table 3.1: Penetration of filter material: Initial penetration

| Sample       | Result (%) | Requirements (%) | Aerosol                   |
|--------------|------------|------------------|---------------------------|
| AN RAN 9501A | 2,11       | <6               | Sodium chloride, 95 l/min |

Table 3.2: Penetration of filter material: Maximum penetration during exposure

#### **Conclusion:**

The mask complies with the requirements of RFU 02.075 version 2 for the tests performed in this report.

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#### Image 1:



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Image 2:



#### Test, calibration and product approval



#### 1. PREAMBLE

- 1.1 FORCE Technology ("FORCE") registration no. 55117314 is a GTS institute (in Danish: "Godkendt Teknologisk Servicevirksomhed"). FORCE is an approved technological service institution, organised and existing under the laws of Denmark with its registered office at Park Allé 345, 2605 Brøndby, Denmark.
- 1.2 In these Terms and Conditions ("Conditions"), Customer means the counterparty to the Agreement.
- 1.3 These Conditions constitute an integral part of the Agreement concluded between FORCE and the Customer ("the Parties"), including any quotations from FORCE and/or purchase orders from the Customer.
- 1.4 Any deviation from or amendments to individual provisions of FORCE's Conditions have no effect unless expressly agreed upon in writing, signed by an authorized representative of each Party and provided the deviation/amendment is clearly specified.
- 1.5 The Customer's prospective general terms and conditions is not accepted by FORCE irrespective whether the Customer sends such general terms and conditions to FORCE after having received FORCE's Conditions and irrespective of such general terms and conditions have been expressly rejected by FORCE. In the event of a conflict between the Agreement, these Conditions and/or the specifications, drawings, illustrations and photos the documents prevail in the above-mentioned order.

#### 2. AGREEMENT

- 2.1 Prior to commencing Services (as defined below) and/or deliveries ("Report"), an agreement shall be concluded in writing between the Parties stating as a minimum the type of work, scope, time schedule, pricing (including whether fixed or time spent) and payment terms.
- 2.2 Quotations given by FORCE are valid for 30 days unless otherwise agreed in writing.
- 2.3 Test, calibration and/or product approval, including calibration of product and technical approval constitutes a test, measurement, and/or control of a condition, at any given time within specified standards, framework or by agreement ("Services"). Consultancy services are not part of the scope, unless otherwise stated in the agreement between FORCE and the Customer cf. 3.1.
- FORCE is only liable towards the Customer for test, calibration or product approval performed, unless otherwise directly agreed with FORCE.
- 2.5 All tests are performed according to existing or agreed standards.

#### 3. CONSULTANCY SERVICE

3.1 In the event that Service by FORCE includes consultancy service, the scope and content of such consultancy service must be specifically agreed between the Parties in writing.

#### 4. FORCE MAJEURE

- Any delay or failure of FORCE to perform its obligations 4.1 according to the Agreement will be excused if and to the extent that it was caused by an event or occurrence beyond FORCE's reasonable control and without its fault or negligence ("Force Majeure"). Force Majeure includes, but is not limited to, acts of God, actions by any government authority (whether valid or invalid), fires, floods, windstorms, explosions, riots, natural disasters, wars, sabotage, acts of terrorism, or court injunction or order, labour problems of FORCE, or its critical subcontractors, such as, lockouts, strikes, and slowdowns. Further, Force Majeure shall include epidemics, quarantines, isolations and denied access by national authorities to the site of the Customer or work site due to health risks, including restrictions in flights and/or other kind of transportation for the same reason.
- 4.2 Should a Force Majeure event continue for more than three (3) months, either Party shall have the right to terminate any relevant orders. In case the Customer terminates the Agreement or any order due to Force Majeure, the Customer must pay any outstanding fees or costs including pro rata payment of work performed until the date of notice of termination including unavoidable termination costs of sub-suppliers.

#### 5. WORK ENVIRONMENT AND SAFETY

- 5.1 The Customer shall ensure safe working conditions and proper instruction to FORCE's personnel when or if entering and working on a site designated by the Customer.
- 5.2 FORCE's personnel shall have the right without incurring any liability on FORCE or itself to terminate work for the Customer at any time if the FORCE personnel, at their discretion, find that the performance of work at site pose a risk to the FORCE personnel's safety and health or in any other way prevents the safe performance of the work.

#### 6. PRICE

- 6.1 FORCE reserves the right to modify hourly rates as of January 1<sup>st</sup> each year. Furthermore, modification of hourly rates can be made with thirty (30) days' notice.
- 6.2 Materials spent, purchased resources and services for the work are calculated at the agreed rates, or in case of no agreement on this, at FORCE's cost price, with a handling fee of ten percent (10 %).
- 6.3 FORCE notifies the Customer as soon as it is established that an estimated price of the agreed work materially is higher than the given estimated price, and quotes at

#### Test, calibration and product approval



the same time the new price. The Customer is not notified if an estimate increases to less than ten thousand (10,000) DKK or less than twenty percent (20%) of the most recent estimated price.

6.4 All prices are exclusive of VAT and other taxes.

#### 7. PAYMENT TERMS

- 7.1 The Customer shall comply with the payment obligations set out in the Agreement.
- 7.2 In the absence of payment obligations in the Agreement:
  - a) The Customer shall submit payment to FORCE within thirty (30) days from the date of invoice.
  - b) Payment shall be made to the bank account specified by FORCE.
  - c) The Customer shall pay all amounts due under the Agreement in full and without any setoff, counterclaim, deduction or withholding, except if said setoff, counterclaim etc. is required by law and the Customer has documented such request.
  - d) If a payment is delayed, the Customer shall pay to FORCE an interest rate of one percent (1 %) per month for the duration of the delay.
- 7.3 If the Customer does not comply with the payment obligations set out in the Agreement or hereunder, FORCE may suspend its performance until the Customer complies with the payment obligations.
- 7.4 Nothing under this Clause 7 will limit any other right or remedy available to FORCE.
- 7.5 FORCE reserves the right to set-off against any payments due under the Agreement and/or any other agreement with the Customer.

#### 8. INVOICING

- 8.1 Unless otherwise agreed upon in writing or stipulated in FORCE's quotation, the Customer may be invoiced, upon acceptance of an order, an advance payment of twenty five percent (25 %) of the fixed or estimated price, however, at least five thousand (5,000) DKK if the price exceeds five thousand (5,000) DKK.
- 8.2 Ongoing Services including expenses will be invoiced continuously.
- 8.3 For Services with a fixed price with a duration exceeding thirty (30) days, FORCE may continuously charge on account payments based on FORCE's estimate on pro rata completion.
- 8.4 Final invoicing will take place at completion of the work.

#### 9. ITEMS TO TEST

- 9.1 In connection with performance of certain tests it may be necessary to modify the test subject. The test subject may be damaged during testing. FORCE does not undertake that any subject tested can be used for its purpose after the testing.
- 9.2 After the Service is completed FORCE will return the test subject received from the Customer unless otherwise agreed in writing.

- 9.3 The shipment return is EXW (INCOTERMS 2020). If the Customer does not facilitate the return of the test subject within thirty (30) days after written notice from FORCE, FORCE is permitted to dispose of the Customers test subject. Any expenses related thereto will be invoiced to the Customer.
- 9.4 In connection with authority approval of products it can be a requirement for FORCE to store the test subject and any test documentation in a certain period.

#### 10. WARRANTIES

- 10.1 FORCE undertakes to remedy defects in the Service due to the fault of FORCE.
- 10.2 The Customer has a standard duty to investigate the work at delivery according to agreement. FORCE's liability for errors and deficiencies shall be limited to errors and deficiencies present on delivery and which become known within twenty-four (24) months from delivery.
- In the event of a claim, the Customer must immediately provide FORCE with a written notice detailing the deficiency or error. Upon receipt of a claim for which FORCE is liable, FORCE will as the only remedy perform a new test, calibration or product approval as relevant, including, if applicable, adjusting the Report.
- FORCE's period of liability for replaced or repaired Service is identical with the period of liability for the original delivered work, which means the new period of liability starts at the same point in time as for the original delivered work.

#### 11. LIABILITY

- 11.1 FORCE shall not be liable for any costs, loss or damage unless it can be documented and has occurred due to negligence of FORCE in connection with the performance of the Service or deliveries under the Agreement.
- 11.2 FORCE shall not be liable for loss of operation, loss of time, loss of profits or similar indirect or consequential losses, including any indirect losses which may be remunerated to third parties.
- 11.3 FORCE performs the requested Service and presents Reports and guidance on the basis of knowledge and engineering available to FORCE at the time of completing the Service.
- 11.4 FORCE is not liable for damages, costs or loss that may occur in connection with any use of data and results outside of the agreed Service and outside the purpose for which FORCE's Service or Report is issued.
- 11.5 FORCE is not liable in relation to statements nor estimates, where it is apparent that such are based on discretionary assessments, unless it can be proven that this assessment was clearly incomplete based on the common knowledge or techniques within the industry at the time of completing the Service.
- 11.6 FORCE is not liable for any loss or damage incurred if the loss or damage is caused by properties or content

#### Test, calibration and product approval



of a product or use of a product that has either not been tested nor investigated and described in the Report, or which deviates from FORCE's description in the Report of a product feature or of a possible use of the product.

- 11.7 FORCE is not liable for any damages incurred, so long as a harmful product or product type has not been actually tested, calibrated or product approved by FORCE, unless the Customer demonstrates a basis for liability and that the damaging product is identical to one that FORCE has specifically tested, calibrated or product approved.
- 11.8 Notwithstanding any other provisions of the Agreement or related documents, FORCE's total liability, for whatever reason, both in contract and tort, is maximized to the minimum amount of either; the total payment from Customer to FORCE under the specific purchase order under this Agreement or 5,000,000 (five million) DKK. The limitation of liability includes amounts that may be remunerated to third parties.
- 11.9 In the event of a third-party claim, which FORCE is not liable for under these Conditions, the Customer shall indemnify and hold harmless FORCE for all costs, including legal costs and compensations.

#### 12. MARKETING AND REFERENCE

- 12.1 In case the Customer wishes to use results from the Service for marketing purposes all references to Services, shall be made to the complete documentation (Report) or product type from FORCE in adherence to applicable law. Any wording in such marketing material is the sole responsibility of the Customer
- 12.2 In the event that the Service is ceased or suspended by the Customer in accordance with clause 16.1, the Customer may only use FORCE's name and logo in connection with the Service or its result after written agreement.

#### 13. INTELLECTUAL PROPERTY

- 13.1 Subject to clause 12 the Customer has full title to Reports, when delivered to the Customer. FORCE's Reports may only be published in their entirety, and with source credits. Use of extracts and in citations is only allowed with written consent.
- 13.2 FORCE maintains all rights to know-how, technology, methods, trade secrets, design, source code, Software, interfaces, images, graphics, documentation, tools, processes, patents and other intellectual property rights, and reserves the right to all developments, improvements or modifications thereof, including those used or incurred in connection with the performance of the work (collectively "FORCE Rights").
- 13.3 FORCE retains all rights to data generated by FORCE based on the FORCE Rights regardless of how such

arise, and any statistics, information, and other analysis derived from such. FORCE shall have royalty free, perpetual, right to use and further improve or develop for any of its products or services or FORCE Rights including machine learning of any data that may belong to the Customer (and of which inferred statistics, information and other analysis) arising from access to or use of the FORCE Rights by, or on behalf of, the Customer, regardless of how such have occurred, while respecting confidentiality, cf. clause 14.

13.4 The Customer must respect the obligations of FORCE under the Danish Employee's Inventions Act.

#### 14. INFORMATION AND CONFIDENTIALITY

- 14.1 FORCE treats Customer information, the performance of Services, and other details in relation to the customer relationship confidentially. However, FORCE may use the Customer's name and the overall scope of the Service for reference unless the Customer relationship itself is subject to a separate confidentiality agreement.
- 14.2 FORCE being a GTS institute, means that FORCE is subject to Ministerial supervision, which includes user surveys of Danish Customers, and in this regard, FORCE shall provide Customer's company name, VAT number and address unless the Customer relationship itself is subject to a separate confidentiality agreement.

# 15. CUSTOMERS CANCELLATION OR POSTPONEMENT OF THE WORK BEFORE START

- 15.1 The Customer can cancel or postpone the work until thirty (30) days before the agreed start of the Service.
- 15.2 If the Service is cancelled or postponed thirty (30) days or less before the agreed start, the Customer will be invoiced a cancellation- or postponement fee of twenty percent (20 %) of the price for the work or the estimated price of the work, however not less than five thousand (5,000) DKK and maximum one hundred thousand (100.000) DKK. This will also apply if the Customer is responsible for delays in the work.

#### 16. THE RIGHT OF THE CUSTOMER TO STOP THE WORK

- 16.1 Should the Customer wish to cease the Service, the Customer must pay for Services already performed, with the addition of the costs incurred by FORCE for staff, equipment etc. as a consequence of the Service being ceased.
- 16.2 Notwithstanding the above, the Customer's total payment shall never exceed the agreed or estimated price for the Service, and never be less than twenty percent (20 %) of the estimated or fixed price, however, no less than five thousand (5,000) DKK.
- 16.3 After the Service has ceased the Customer will receive any preliminary results of the Service in the form available at the cessation time.
- 16.4 If the Service is stopped at the request of the Customer,(i) FORCE's liability for errors and deficiencies in performed work will lapse and, (ii) any subsequent use

#### Test, calibration and product approval



of the results received is the sole responsibility of the Customer.

#### 17. TERMINATION

- 17.1 The Agreement may be terminated by either Party with thirty (30) days written notice, however, the Customer must pay any outstanding fees or costs including pro rata payment of work performed until the date of notice of termination including unavoidable termination costs of sub-suppliers.
- 17.2 In case of material breach of the Agreement and/or these Conditions FORCE may terminate without notice. Any breach of clauses 18 and 19 is a considered a material breach.

#### 18. BUSINESS ETHICS AND CODE OF CONDUCT

18.1 FORCE's Code of Conduct applies to FORCE and any performance by the Parties under this Agreement.

#### 19. SANCTIONS AND EXPORT CONTROL

- 19.1 Customer represents and warrants that it is not subject to any sanctions, including but not limited to sanctions issued by the United States Department of Treasury Office of Foreign Assets Controls (OFAC), the European Union, or any other applicable sanctions rules ("Sanctions") that would prevent FORCE from transacting business with the Customer, and agrees that it shall comply with such Sanctions.
- 19.2 In the event that the Customer, or its affiliates, is or becomes subject to Sanctions at any point in time, FORCE shall have the right to amend the Agreement, withhold any deliverables and payments, and reject payments in order to comply with the applicable Sanctions.
- 19.3 If, as a part of the Service performed under the Agreement, the Customer shall deliver or disclose to FORCE any technologies, products, test objects or elements that are covered by any global export control programmes such as the European Union

Regulation (EC) No 428/2009 or similar, the Customer represents and warrants that the delivery and redelivery of the product, test object, or Report has received relevant export control approval from the applicable authorities. Failure to ensure that items and other elements that are covered by export control regulations have received adequate approvals will cause Customer to be liable and Customer shall indemnify FORCE for any losses, damages or costs in respect of such non-compliance.

#### 20. GOVERNING LAW AND DISPUTES

- 20.1 The Agreement, including these Conditions are governed by Danish law, without giving effect to its provision or rules regarding conflicts of law.
- 20.2 Any dispute arising between the Parties including disputes arising out of the performance of the Service or the interpretation of the Agreement and/or these Conditions shall, if such dispute cannot be solved amicably between the Parties within reasonable time, be settled by the Danish Arbitration Institute in accordance with the rules of arbitration procedure adopted by The Danish Institute of Arbitration and in force at the time when such proceedings are commenced. The process shall be subject to strict confidentiality.

#### 21. ACCREDITED SERVICES

- 21.1 Accredited services are performed subject to applicable regulations on accreditation, as amended from time to time, and in accordance with and limited in scope to the relevant standards.
- 21.2 FORCE is subject to the supervision of the accreditation authority, which has a duty of confidentiality. The Customer agrees that FORCE, for accredited services, provides the accreditation authority access to the Customer's information for the execution of review and audits.

English Version 4/2020



3219724 - Test Report.

# Test Report 3219724.

Guangxi Anran Medical Equipment Co., Ltd.



### Introduction.

This report has been prepared by Ben Hobbs and relates to the activity detailed below:

| Job/Registration  | Details   | Client Details   |
|---|---|--|
| Job number: Job type: Start Date: Test type: Sample ID: Registration: Scheme: Protocol: Scheme Manager: | 3219724 Testing Samples Submitted 06/06/2020 Type 10190166 CE 730096 Negative pressure RPE PP123 Nathan Shipley | Guangxi Anran Medical Equipment Co., Ltd. Room 3-1, No. 3, Workshop No. 1, Yinxiang Road Liunan District Liuzhou City Guangxi 545000 China |

The report has been approved for issue by T Wicksey - Senior Test Engineer

| Approved For Issue |                         |
|--------------------|-------------------------|
| 20/2               |                         |
|                    | Issue Date: 6 July 2020 |

# Objectives.

This is an independent test evaluation to only certain clauses or sub-clauses of the agreed specification in accordance with the following test programme:

BSI COVID-19 filtering face piece technical specification, for COVID-19 masks for use by healthcare workers

# Product Scope.

COVID-19 masks for use by healthcare workers

## Report Summary.

The samples were received on 3 June 2020 and the testing was started on 6 June 2020.

The samples submitted complied with the requirements of the test work conducted.



# Test Samples.

| Sample ID | ER Number | Description         |
|-----------|-----------|---------------------|
| 1 to 19   | 10190166  | Model: AN RAN 9501A |

# Description of Test Samples.

| 9 | _ | 100 |  | I D | 25 | 22 | 100 | 1 | 6 |  |
|---|---|-----|--|-----|----|----|-----|---|---|--|
|   |   |     |  |     |    |    |     |   |   |  |

COVID-19 masks for use by healthcare workers:

Model: AN RAN 9501A



# Test Requirements.

# **Testing in accordance with BSI COVID-19 filtering face piece technical specification** Technical testing specification for COVID-19 masks for use by healthcare workers

| EN 149:2001+A1:2009   | EN 149:2001+A1:2009                           | Requirement   | Assessment |
|---|---|---|------------|
| Performance requirement   | Test method clause                            | Kequirement   | Assessment |
| 7.7 Practical performance The particle filtering half mask shall undergo practical performance tests under realistic conditions. These general tests serve the purpose of checking the equipment for imperfections that cannot be determined by the tests described elsewhere in this standard. Where practical performance tests show the apparatus has imperfections related to wearer's acceptance, the test house shall provide full details of those parts of the practical performance tests which revealed these imperfections.  2 test subjects, masks tested 'As | Testing shall be done in accordance with 8.4. | During the tests the particle filtering half mask shall be subjectively assessed by the wearer and after the test, comments on the following shall be recorded:  a) head harness comfort; b) security of fastenings; c) field of vision; d) any other comments reported by the wearer on request. | Pass       |
| received' 7.9 Leakage 7.9.1 Total inward leakage 5 test subjects, masks tested 'As received'  | Testing shall be done in accordance with 8.5. | All samples must achieve All individual exercise results tests shall be not greater than 11 % (for FFP2) and, in addition, all arithmetic means for the total inward leakage shall be not greater than 8 % (for FFP2)   | Pass       |
| 7.9 Leakage 7.9.2 Penetration of filter material 3 test samples masks tested 'As received', for NaCl (Sodium Chloride) and PO (Paraffin oil), 3min test   | Testing shall be done in accordance with 8.11 | 6% for both PO and NaCl   | Pass       |
| 7.12 Carbon dioxide content of<br>the inhalation air<br>3 test samples, masks tested 'As<br>received'   | Testing shall be done in accordance with 8.7. | The carbon dioxide content of the inhalation air (dead space) shall not exceed an average of 1,0 % (by volume).   | Pass       |
| <b>7.16 Breathing resistance</b> 3 test samples, masks tested 'As received'   | Testing shall be done in accordance with 8.9  | The breathing resistances shall meet the requirements of; 30l/min – 0.7mbar (inhale) 95l/min – 2.4mbar (inhale) 160l/min – 3.0mbar (exhale)   | Pass       |
| Appendix A - Test Panel Data  | l.  |   |            |
| Product Photographs   |   |   |            |





# Glossary of Terms.

Pass: Complies. Tested by BSI engineers at BSI laboratories

Pass 1: Complies. Witnessed by BSI engineers in manufacturers laboratory.

Pass 2: Complies. Tests carried out by third party lab; results accepted by BSI.

Pass\*: Report resulted in uncertainty and states that Compliance is more probable than non-compliance.

Fail: Non-compliance. Product does not meet the requirements of this clause.

Fail\*: Report resulted in uncertainty and states that Non-compliance is more probable than compliance.

N/T: Not Tested N/A: Not Applicable AR: As Received

TC: Temperature Conditioned

SW: Simulated Wear FT: Flow Tested

MS: Mechanical strength

MMDF: Manufactures Minimum Design Flow MMDC: Manufactures Minimum Design Condition

#### Conditions of Issue.

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#### Test Results.

#### Testing in accordance with BSI COVID-19 filtering face piece technical specification

BS EN 149:2001 +A1:2009 Technical testing specification for COVID-19 masks for use by healthcare workers

| 5 LIV 1 15.200 | 2 IN 113.2001 PAI.2003 Teatifical testing specification for COVID 13 masks for use by ficaliticate workers   |            |  |  |  |  |  |  |
|----------------|--|------------|--|--|--|--|--|--|
| CLAUSE         | REQUIREMENTS   | ASSESSMENT |  |  |  |  |  |  |
| 7.7            | Practical performance  |            |  |  |  |  |  |  |
|                | The particle filtering half mask shall undergo practical performance tests under realistic conditions. These general tests serve the purpose of checking the equipment for imperfections that cannot be determined by the tests described elsewhere in this standard.                          |            |  |  |  |  |  |  |
|                | Where practical performance tests show the apparatus has imperfections related to wearer's acceptance, the test house shall provide full details of those parts of the practical performance tests which revealed these imperfections.   |            |  |  |  |  |  |  |
|                | Test in accordance with clause 8.4 of the standard.  | Pass       |  |  |  |  |  |  |
|                | Testing in accordance with BSI COVID-19 filtering face piece technical specification, for masks for use by healthcare workers  During the tests the particle filtering half mask shall be subjectively assessed by the wearer and after the test, comments on the following shall be recorded: |            |  |  |  |  |  |  |

#### Table A: Practical performance

| Test      |        |                      |     |    |                    |            |
|-----------|--------|----------------------|-----|----|--------------------|------------|
| candidate | Sample | Head harness comfort | Fig |    | Any other comments | Assessment |
| MM2       | 1 AR   | OK                   | OK  | OK | None               | Pass       |
| JW1       | 2 AR   | OK                   | ОК  | ОК | None               | Pass       |

a) head harness comfort; b) security of fastenings; c) field of vision; d) any other

#### 7.9 Leakage

#### 7.9.1 Total inward leakage

The laboratory tests shall indicate that the particle filtering half mask can be used by the wearer to protect with high probability against the potential hazard to be expected.

The total inward leakage consists of three components: face seal leakage, exhalation valve leakage (if exhalation valve fitted) and filter penetration.

Test in accordance with clause 8.5 of the standard.

comments reported by the wearer on request.

Pass

# Testing in accordance with BSI COVID-19 filtering face piece technical specification, for masks for use by healthcare workers

5 test subjects, masks tested 'As received'. All individual exercise results tests shall be not greater than 11 % (for FFP2) and, in addition, all arithmetic means for the total inward leakage shall be not greater than 8 % (for FFP2).

Table B: Clause 7.9.1 - Total inward leakage

| Test      | Sample | Pre test  | Α       | В                              | С                              | D                   | Е       |         |            |
|-----------|--------|-----------|---------|--------------------------------|--------------------------------|---------------------|---------|---------|------------|
| candidate | Sample | condition | Walking | Walking with head side to side | Walking with<br>head up & down | Walking and talking | Walking | Average | Assessment |
| JW1       | 3      | AR        | 1.6120  | 2.1789                         | 1.2090                         | 1.3280              | 3.2189  | 1.9094  | Pass       |
| RF1       | 4      | AR        | 2.1172  | 3.1556                         | 6.5921                         | 1.7040              | 2.8246  | 3.2787  | Pass       |
| BH2       | 5      | AR        | 0.2503  | 0.6014                         | 3.3718                         | 4.0296              | 9.1903  | 3.4887  | Pass       |
| LM2       | 6      | AR        | 0.1036  | 0.2034                         | 2.5496                         | 0.2689              | 0.1635  | 0.6578  | Pass       |
| MM2       | 7      | AR        | 0.2202  | 0.4215                         | 0.6548                         | 0.7861              | 0.8227  | 0.5811  | Pass       |



# Test Results. (Continued)

| CLAUSE | REQUIREMENTS |  | <b>ASSESSMENT</b> |
|--------|--------------|--|-------------------|
|--------|--------------|--|-------------------|

7.9.2 Penetration of filter material

# Testing in accordance with BSI COVID-19 filtering face piece technical specification, for masks for use by healthcare workers

3 test samples masks tested 'As received', for NaCl (Sodium Chloride) and PO (Paraffin oil), 3 min test. Testing shall be done in accordance with 8.11. 6% limit for both PO and NaCl

**Table C:** Clause 8.11 - Sodium Chloride penetration test

| Sample | Pre-test condition | Floor through filter (I/asia) | Penetration (%) |        |  |
|--------|--------------------|-------------------------------|-----------------|--------|--|
| number |                    | Flow through filter (I/min)   | Limit           | Actual |  |
| 8      | AR                 | 95                            |                 | 0.1023 |  |
| 9      | AR                 |                               | < 6             | 0.0771 |  |
| 10     | AR                 |                               |                 | 0.0955 |  |

Table D: Clause 8.11 - Paraffin oil penetration test

| Sample | Pre-test condition | Flow through filter (I/min) | Penetration (%) |        |  |
|--------|--------------------|-----------------------------|-----------------|--------|--|
| number |                    | Flow through filter (I/min) | Limit           | Actual |  |
| 11     | AR                 | 95                          |                 | 0.3180 |  |
| 12     | AR                 |                             | < 6             | 0.9170 |  |
| 13     | AR                 |                             |                 | 0.3245 |  |

#### 7.12 Carbon dioxide content of inhalation air

The carbon dioxide content of the inhalation air (dead space) shall not exceed an average of 1.0% (by volume).

Test in accordance with clause 8.7 of the standard.

Table E: Clause 8.7 - Carbon Dioxide content of the inhalation air

| Cample | Due heat association | Dead space CO <sub>2</sub> (%) |          |  |
|--------|----------------------|--------------------------------|----------|--|
| Sample | Pre-test condition   | Limit                          | Measured |  |
| 14     | AR                   |                                | 0.50     |  |
| 15     | AR                   | < 1.0                          | 0.55     |  |
| 16     | AR                   |                                | 0.55     |  |

Pass

Pass



# Test Results. (Continued)

| CLAUSE | REQUIREMENTS | A | SSESSMENT |
|--------|--------------|---|-----------|
|--------|--------------|---|-----------|

#### 7.16 Breathing resistance

# Testing in accordance with BSI COVID-19 filtering face piece technical specification, for masks for use by healthcare workers

3 test samples masks tested 'As received'. Test in accordance with clause 8.9 of the standard.

**Pass** 

The breathing resistances shall meet the requirements of FFP2; 30l/min – 0.7mbar (inhale), 95l/min – 2.4mbar (inhale), 160l/min – 3.0mbar (exhale)

**Table F:** Clause 8.9 – Breathing resistance. Inhalation resistance at a continuous flow

|        | The state of the s |                            |                              |          |  |  |  |
|--------|--|----------------------------|------------------------------|----------|--|--|--|
| Cample | Pre-test condition   | Continuous flow<br>(I/min) | Inhalation resistance (mbar) |          |  |  |  |
| Sample |  |                            | Limit                        | Measured |  |  |  |
| 17     | AR   |                            |                              | 0.33     |  |  |  |
| 18     | AR   | 30                         | < 0.7                        | 0.28     |  |  |  |
| 19     | AR   |                            |                              | 0.28     |  |  |  |
| 17     | AR   | 95                         |                              | 0.96     |  |  |  |
| 18     | AR   |                            | < 2.4                        | 0.91     |  |  |  |
| 19     | AR   |                            |                              | 0.92     |  |  |  |

**Table G:** Clause 8.9 – Breathing resistance. Exhalation resistance at a continuous flow,

measured in five orientations with the worst case reported

|  | Cample | Pre-test condition | Continuous flow<br>(I/min) | Exhalation resistance (mbar) |          |  |
|--|--------|--------------------|----------------------------|------------------------------|----------|--|
|  | Sample |                    |                            | Limit                        | Measured |  |
|  | 17     | AR                 | 160                        | < 3.0                        | 1.52     |  |
|  | 18     | AR                 |                            |                              | 1.45     |  |
|  | 19     | AR                 |                            |                              | 1.46     |  |



# Appendix A. – Test Panel Data

| Test      | Facial Dimensions (mm) |               |            |                |                    | Cov  |
|-----------|------------------------|---------------|------------|----------------|--------------------|------|
| Candidate | Length of face         | Width of face | Face depth | Width of mouth | Head Circumference | Sex  |
| MM2       | 119                    | 150           | 115        | 53             | 595                | Male |
| JW1       | 116                    | 126           | 122        | 48             | 570                | Male |
| RF1       | 104                    | 122           | 121        | 55             | 549                | Male |
| BH2       | 124                    | 148           | 120        | 51             | 595                | Male |
| LM2       | 110                    | 148           | 125        | 47             | 567                | Male |

Note: All candidates were clean shaven

# Product photographs.





Front view Side View



Inside View

\*\*\*End of Report\*\*\*