



NIOSH Reference: TN-18877

Mfr. Reference: AOK07

National Institute for Occupational Safety and Health (NIOSH)  
National Personal Protective Technology Laboratory (NPPTL)  
P.O. Box 18070  
Pittsburgh, PA 15236-0070  
Phone: 412-386-4000  
Fax: 412-386-4051  
March 21, 2013

Mr. Jerry Teng, President  
AOK Tooling Limited  
No.3 of Longtian 3 Road, Longtian Village  
Kengzi Town, Longgang District  
Shenzhen  
China

Dear Mr. Teng:

The National Institute for Occupational Safety and Health (NIOSH) has reviewed your request accepted January 3, 2013. This request was for an approval of the part number 20100032-002 filtering facepiece air purifying respirator for protections against particulates at a N95 filter efficiency level, reference assembly matrix 20100032-002Assembly\_Matrix\_AMf.xlsx. In addition, the AOK Tooling Limited Quality Manual, (Reference Number FS-QM-2009, revision number D/7, with a validation date of Nov 30<sup>th</sup> 2011), was submitted for review.

This request is granted. Approvals are granted only for documentation written in the English language. It is the manufacturer's responsibility to correctly translate materials desired in languages other than English. The approval number TC-84A-6269 has been assigned. This respirator is approved for protections against particulates at a N95 filter efficiency level.

NIOSH has also reviewed the quality manual presented and finds that this manual meets or exceeds the minimum technical requirements for quality assurance plans as outlined in Title 42, *Code of Federal Regulations (CFR)*, Part 84.41(a) and, on the basis of this review, this quality manual is accepted.

The CD enclosed with this letter contains the final respirator approval label. The abbreviated label has been accepted as submitted. The cautions and limitations which apply to this approval are on the approval label. Only those assemblies affected by this request, or where new approval numbers are assigned, apply to this approval action. Production approval labels cannot include information on unapproved configurations.

The approved assembly consists of the parts as listed on the approval label and the assembly matrix. Parts are to be marked with the numbers indicated on the approval label in a legible and permanent manner (marking cannot be removed without evidence of its previous presence).

This certificate of approval is not an endorsement of the respirator by NIOSH, and such endorsement shall not be stated or implied in advertisements or other publicity. However, you may publicize the fact that the respirator has met the requirements of Title 42, *Code of Federal Regulations*, Part 84 (42 CFR 84).

No changes may be made to any respirators and accompanying documentation without prior written approval of NIOSH. Requests for changes must be submitted to NIOSH and a modification of this approval must be granted before changes are made.

A copy of the quality manual will be retained by NIOSH and incorporated into our files. Any future changes to this accepted quality document must be submitted to NIOSH for a modification of this accepted quality system.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'Jeffrey Peterson', with a long horizontal flourish extending to the right.

Jeffrey Peterson

Acting Chief, Technology Evaluation Branch  
National Personal Protective Technology Laboratory

Enclosures



**TEST REPORT**

**Task Number:** TN-18877

**Manufacturer:** AOK Tooling Limited

**Prepared by:** Jeremy Brannen

**Tests Conducted by:** Jeremy Brannen

**Date:** February 13, 2013

**Respirator Tested:** 20100032-002

**Background Information**

In an application accepted January 3, 2013 AOK Tooling requested an approval of the part number 20100032-002 filtering facepiece air purifying respirator for protections against particulates at a N95 filter efficiency level, reference assembly matrix 20100032-002Assembly\_Matrix\_AMf.xlsx. In addition, the AOK Tooling Limited Quality Manual, (Reference Number FS-QM-2009, revision number D/7, with a validation date of Nov 30<sup>th</sup> 2011), was submitted for review.

**Tests Assigned**

<u>Test Description</u>	<u>STP Number</u>	<u>Reference</u>
A. Exhalation Resistance Test	RCT-APR-STP-0003	84.180
B. Inhalation Resistance Test	TEB-APR-STP-0007	84.180
C. Sodium Chloride (NACL) N95 Test	TEB-APR-STP-0059	84.181

**Overall Results**

The items tested passed laboratory testing.

**Individual Test Results**

See the attached test data sheets.

National Institute for Occupational Safety and Health  
Respirator Branch  
Test Data Sheet



**Task Number:** TN-18877  
**Test:** Exhalation Resistance Test  
**Manufacturer:** AOK Tooling Limited

**Reference No.:** CFR 84.180  
**STP No.:** 3

**Filter Type:** Filter Only

**Item Tested:** 20100032-002

Sample	Maximum Allowable Resistance (MM of H <sub>2</sub> O)	Actual Resistance (MM of H <sub>2</sub> O)	Result
	Exhalation	Exhalation	
1	25	14.7	PASS
2	25	14.7	PASS
3	25	14.7	PASS

**Overall Result:** PASS

**Comments:**

Was all equipment verified to be in calibration throughout all testing?  Yes  No

**Signature:**

Engineering Technician

**Date:** 2/13/2013

National Institute for Occupational Safety and Health  
Respirator Branch  
Test Data Sheet



**Task Number:** TN-18877  
**Test:** Inhalation Resistance Test  
**Manufacturer:** AOK Tooling Limited  
**Item Tested:** 20100032-002

**Reference No.:** CFR 84.180  
**STP No.:** 7

**Filter Type:** Filter Only

Sample	Maximum Allowable Resistance (MM of H <sub>2</sub> O)	Actual Resistance (MM of H <sub>2</sub> O)	Result
	Inhalation	Inhalation	
1	35	15.5	PASS
2	35	15.2	PASS
3	35	16.0	PASS

**Overall Result:** PASS

**Signature:**

Engineering Technician

**Date:** 2/13/2013

**Task Number:** TN-18877  
**Test:** Inhalation Resistance Test  
**Manufacturer:** AOK Tooling Limited  
**Item Tested:** 20100032-002

**Reference No.:** CFR 84.180  
**STP No.:** 7

**Comments:**

**Was all equipment verified to be in calibration throughout all testing?**

**Yes**     **No**

**Signature:**



**Engineering Technician**

**Date:** 2/13/2013

National Institute for Occupational Safety and Health  
 Respirator Branch  
 Test Data Sheet



Task Number: TN-18877 Reference No.: CFR 84.181  
 Test: Sodium Chloride (NaCl) - N95 STP No.: 59  
 Manufacturer: AOK Tooling Limited  
 Item Tested: 20100032-002

Filter	Flow Rate	Initial Filter Resistance	Maximum Allowable Percent Leakage	Initial Percent Leakage	Maximum Percent Leakage	Result
1	85	18.6	5.00	1.120	1.120	PASS
2	85	19.3	5.00	1.750	1.750	PASS
3	85	18.5	5.00	1.170	1.170	PASS
4	85	18.6	5.00	1.810	1.810	PASS
5	85	18.2	5.00	1.470	1.470	PASS
6	85	17.6	5.00	1.650	1.650	PASS
7	85	17.6	5.00	1.230	1.230	PASS
8	85	20.0	5.00	1.280	1.280	PASS
9	85	17.8	5.00	2.090	2.090	PASS
10	85	18.5	5.00	0.988	0.988	PASS
11	85	17.6	5.00	1.890	1.890	PASS
12	85	18.6	5.00	0.740	0.774	PASS
13	85	17.5	5.00	1.500	1.500	PASS
14	85	17.0	5.00	1.220	1.220	PASS
15	85	19.9	5.00	1.370	1.370	PASS
16	85	19.6	5.00	2.210	2.210	PASS
17	85	18.4	5.00	2.220	2.220	PASS
18	85	18.7	5.00	1.750	1.750	PASS
19	85	18.7	5.00	1.630	1.630	PASS
20	85	19.0	5.00	1.420	1.660	PASS

**Overall Result: PASS**

Signature:   
 Engineering Technician

Date: 2/13/2013

**Task Number:** TN-18877

**Reference No.:** CFR 84.181

**Test:** Sodium Chloride (NaCl) - N95

**STP No.:** 59

**Manufacturer:** AOK Tooling Limited

**Item Tested:** 20100032-002

**Comments:**

**Was all equipment verified to be in calibration throughout all testing?**

Yes  No

**Signature:**



**Engineering Technician**

**Date:** 2/13/2013

## Harvey, Karen (CDC/NIOSH/NPPTL)

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**From:** Peterson, Jeff (CDC/NIOSH/NPPTL)  
**Sent:** Friday, March 22, 2013 3:26 PM  
**To:** Harvey, Karen (CDC/NIOSH/NPPTL); Zubasic, Dawn (CDC/NIOSH/NPPTL)  
**Cc:** Pouchot, Thomas D. (CDC/NIOSH/NPPTL); Stein, Robert (CDC/NIOSH/NPPTL)  
**Subject:** FW: TN18877AOKnew.doc, TN18877 Approval Letter  
**Attachments:** TN18877AOKnew.doc; 18877ApprovalConcurrence.xls; 18877rep.doc

Please finalize for signature

-----Original Message-----

**From:** Stein, Robert (CDC/NIOSH/NPPTL)  
**Sent:** Friday, March 22, 2013 10:57 AM  
**To:** Peterson, Jeff (CDC/NIOSH/NPPTL)  
**Cc:** Harvey, Karen (CDC/NIOSH/NPPTL); Zubasic, Dawn (CDC/NIOSH/NPPTL); Pouchot, Thomas D. (CDC/NIOSH/NPPTL)  
**Subject:** FW: TN18877AOKnew.doc, TN18877 Approval Letter

Jeff:

I concur with the draft letter as prepared by Tom.  
Bob

-----Original Message-----

**From:** Pouchot, Thomas D. (CDC/NIOSH/NPPTL)  
**Sent:** Tuesday, March 19, 2013 8:13 AM  
**To:** Stein, Robert (CDC/NIOSH/NPPTL)  
**Subject:** TN18877AOKnew.doc, TN18877 Approval Letter

Bob,

Attached are the approval letter, test report and concurrence sheet for TN18877 (AOK). The file will be in your office shortly.

Please review and concur as appropriate.

Any issues, please contact me.

Tom Pouchot  
Ext 4036

The message is ready to be sent with the following file or link attachments:

TN18877AOKnew.doc  
18877ApprovalConcurrence.xls  
18877rep.doc

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.

Approval - Concurrence

**Concurrence - Process in order shown, sending the project to the next person on the list.**

TN18877(AOK)

**Author** - be sure to complete the checklist to include all relevant information for the Program Assistant.

Author Date sent to peer review and MSHA (if applicable)  
T Pouchot 3/19/2013

MSHA representative Date sent to Secretary- N/A

Certification Team Leader Date sent to Branch Chief (cc: Secretary)  
RRS for J. Peterson 3/22/2013

Branch Chief Date sent to Secretary  
JAP 3/22/2013

Secretary Date Ready for Signature  
KH 3/25/2013

Secretary	Date Mailed	CD? Y/N	PDF? Y/N
KH	3/25/2013	Y	N