



NIOSH Reference: TN-21451

National Institute for Occupational
Safety and Health (NIOSH)
National Personal Protective
Technology Laboratory (NPPTL)
626 Cochran Mill Road
Pittsburgh, PA 15236-0070
Phone: 412-386-4000
Fax: 412-386-4051

April 25, 2018

Mr. Patrick Latona, Engineering Manager
Edelhoff Technologies USA LLC
9361 Winkler Drive, Suite A
Houston, TX 77017

Dear Mr. Latona:

Each year the National Institute for Occupational Safety and Health (NIOSH) conducts product audits of NIOSH-certified respirators purchased from the open market, or obtained directly from the manufacturer. Selected NIOSH certification tests are performed on these samples to determine if they continue to meet the applicable requirements of Title 42, *Code of Federal Regulations*, Part 84 (42 CFR 84).

In FY-2017, the Edelhoff Technologies USA LLC model ET Commander supplied air respirator helmet, approval number TC-13F-0800, was selected for product audit under task number TN-21451. The samples tested, were obtained from Edelhoff Technologies USA LLC and passed our audit tests.

A copy of the NIOSH test report and test data sheet are enclosed.

If you have any questions, please contact me at 412-386-5209 or at esx2@cdc.gov.

Sincerely yours,

A handwritten signature in blue ink that reads "Jeremy J. Brannen".

Jeremy J. Brannen
Quality Assurance Specialist
Policy and Standards Development Branch
National Personal Protective Technology Laboratory



Form date 8/15

Date: 4/23/2018

NPPTL-SAR (Supplied Air Respirator) Fee Invoice

Manufacturer	Edelhoff Technologies USA LLC			
Task Number:	TN-21451			
Test Number¹	Tests Required	No. Tests Performed	Fee/Test	Total
0105A Air Flow Determination, Demand/PD, C and CE SAR	1	1	\$300.00	\$300.00
0106 Inhalation Air Flow Resistance, PD, C and CE SAR	1	1	\$150.00	\$150.00
0111 Sound Level in Hood or Helmet, C and CE SAR	1	1	\$450.00	\$450.00
Total Testing and Associated Fees				\$900.00

	Number of Approvals	Cost / Approval	Approval Fee
NIOSH/NPPTL Admin Fee Approval	0	\$100.00	\$0.00
NIOSH/NPPTL Admin Fee Approval Modification	0	\$50.00	\$0.00
New Site Qualification Fee, cost per new site	0	\$400.00	\$0.00
Additional Applicable Costs: ²			\$0.00
Total Administration Fees			\$0.00

TOTAL ALL FEES	\$900.00
-----------------------	-----------------

¹Multiple configurations may require multiple tests

² For new manufacturers, change this heading to "Initial Site Qualification Assessment" and the fees are \$2500 for domestic and \$7500 for foreign visits.

Remarks: TC-13F-0800 Product Audit

Examiner Pat Wiltanger

Date: 4/23/2018

Team Leader Kim Gavel

Date: 4/23/2018

Branch Chief 

Date: 4/23/18



National Institute for Occupational Safety and Health
National Personal Protective Technology Laboratory
Evaluation and Testing Branch

TEST REPORT

Task Number: TN-21451

Manufacturer: Edeloff Technologies USA LLC

Prepared by: Eric J Welsh

Date: March 8, 2018

Tests Conducted by: Eric J Welsh

Respirator Tested: 200-000/201-043/200-053/201-045/100-110/202-100/202-008-01/203-003

Background Information

Respirator tested as per test request.

Tests Assigned

<u>Test Description</u>	<u>STP Number</u>
A. Determination of Airflow - Demand and Pressure-Demand	RCT-ASR-STP-0105.1
B. Determination of Inhalation Airflow Resistance- Pressure-Demand	RCT-ASR-STP-0106
C. Determination of Air Velocity and Noise Levels	RCT-ASR-STP-0111

Overall Results

The respirator system tested did meet the requirements of all the above procedures.

Statement of Disclaimer

The results of this testing relate only to the items listed above that were tested by this laboratory.

3/8/2018

X Jeremy J. Brannen

Laboratory Manager

Signed by: Jeremy J. Brannen -S



Task Number: TN- 21451

Reference #: 42 CFR, Part 84,
Subpart J, Section
84.157(a)(b)

Test Name: Airflow Resistance, Pressure-
Demand Class, Type C and CE,
Supplied-Air Respirators

STP #: 106

Manufacturer: Edelhoff Technologies USA LLC

Respirator Type: cboTestNumberysnTest
CompletedTest
ResultTestName
133-1Breathing
Resistance Test -
Exhalation

Test Data

Event	Inhalation Resistance (in H2O)	Static Resistance (in H2O)	Result
1. Primary	1.5	1.7	Pass
2. Primary	1.5	1.7	Pass
3. Secondary	1	1.3	Pass
4. Secondary	1	1.3	Pass

Final Result: PASS

*(a) The static pressure in the facepiece shall not exceed 38 mm (1.5 in) of H2O col. Ht. (b) The pressure in the facepiece shall not fall below atmospheric at inhalation airflows less than 115 lpm (4 cfm).

Comments:

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

Signature:

Date: Mar 8 2018 12:00AM

National Institute for Occupational Safety and Health

Respirator Branch

Test Data Sheet



Task Number: TN- 21451

Reference #: 42 CFR, Part 84, Subpart J, Section 84.150, Table 8

Test Name: Airflow - Demand and Pressure-Demand, Type C and CE, Supplied-Air Respirators

STP #: 105.1

Manufacturer: Edelhoff Technologies USA LLC

Gauge Serial #: 000287

Respirator Type: Open-Circuit, Pressure-Demand, Escape SCBA and Type C, SAR (without valve)

Recorder Serial #: 000078

Transducer Serial #: 000124

Mask Type: Tight Fit - Full Facepiece

Mass Flow Meter Serial #:

Test Data

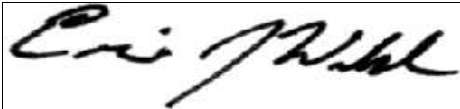
Event	Hose Length	# of Conn.	Pressure	Inhalation Resistance	Static Pressure	Airflow (lpm)	Result
1. Primary	300	0	120	1.5	1.7	> 115	Pass
2. Primary	300	0	125	1.5	1.7	> 115	Pass
3. Secondary	300	0	120	1.0	1.3	> 115	Pass
4. Secondary	300	0	125	1.0	1.3	> 115	Pass

Final Result: PASS

*The air-supply hose, detachable couplings, and demand valve of the demand class or pressure-demand valve of the pressure-demand class for Type C supplied-air respirators, demand and pressure-demand classes, shall be capable of delivering respirable air at a rate of not less than 115 liters (4 cubic feet) per minute to the respiratory-inlet covering at an inhalation resistance not exceeding 50 millimeters (2 inches) of water column height measured in the respiratory-inlet covering with any combination of air-supply pressure and length of hose within the applicant's specified range of pressure and length of hose. The air-flow rate and resistance to inhalation shall be measured while the demand or pressure-demand valve is actuated 24 times per minute by a source of intermittent suction. The maximum rate of flow to the respiratory- inlet covering shall not exceed 425 liters (15 cubic feet) per minute under the specified operating conditions.

Comments:

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

Signature: 

Date: Mar 8 2018 12:00AM



Task Number: TN- 21451
 Reference #: 42 CFR, Part 84, Subpart J, Section 84.140
 Test Name: Sound Level Determination, Type C and CE, Supplied-Air Respirators
 STP #: 111.1
 Manufacturer: Edelhoff Technologies USA LLC
 Gauge Serial #: 000287
 Respirator Type: Open-Circuit, Pressure-Demand, Escape SCBA and Type C, SAR
 Indicator #: 000098/000099
 Valve: Monitor #:
 Hose Length: 300
 Pressure: 125
 Unit: 1

Test Data

ID Number	Subject	Trial 1 (dBA)		Trial 2 (dBA)		Average (dBA)		Max Allowable	Result
		L. Ear	R. Ear	L. Ear	R. Ear	L. Ear	R. Ear		
1	Manikin	73.9	72.6	71.9	77.4	73	75.3	85	PASS
								80	
								80	
								80	

Final Result: PASS

*Noise levels generated by the respirator will be measured inside the hood or helmet at maximum airflow obtainable within pressure and hose length requirements and shall not exceed 80 dBA.

Comments:

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

Signature:

Date: 3/8/2018