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FitCheck Solo

FitCheck Solo has been verified through independent studies to provide test results that are representative of ANSI S12.6-2016, which is the 'gold standard' for hearing protector attenuation measurements.

FitCheck Solo features:
Uses your PC 24-bit sound card, common on most PC's. A USB 24-bit sound card is also an option.

Tests can be performed from up to 7 frequencies and these results are used to generate the Personal Attenuation Rating (PAR) as defined by ANSI S12.71-2018. The PAR should be used to determine is a specific hearing protector is sufficient for an employee's noise exposure.

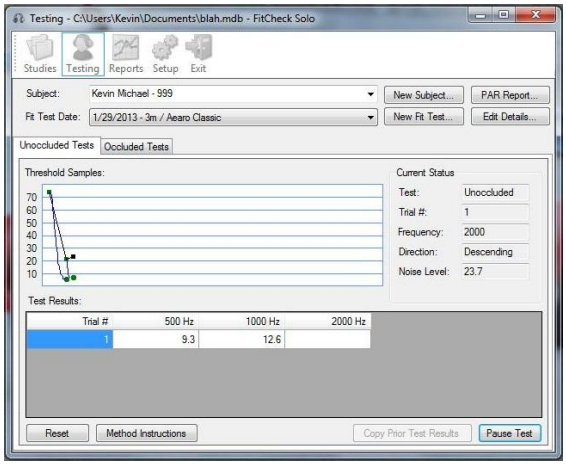
FitCheck Solo meets the requirements set forth in ANSI S12.71-2018.

Uses FitCheck headphones with 3.5 mm plug to fit directly into PC sound cards.

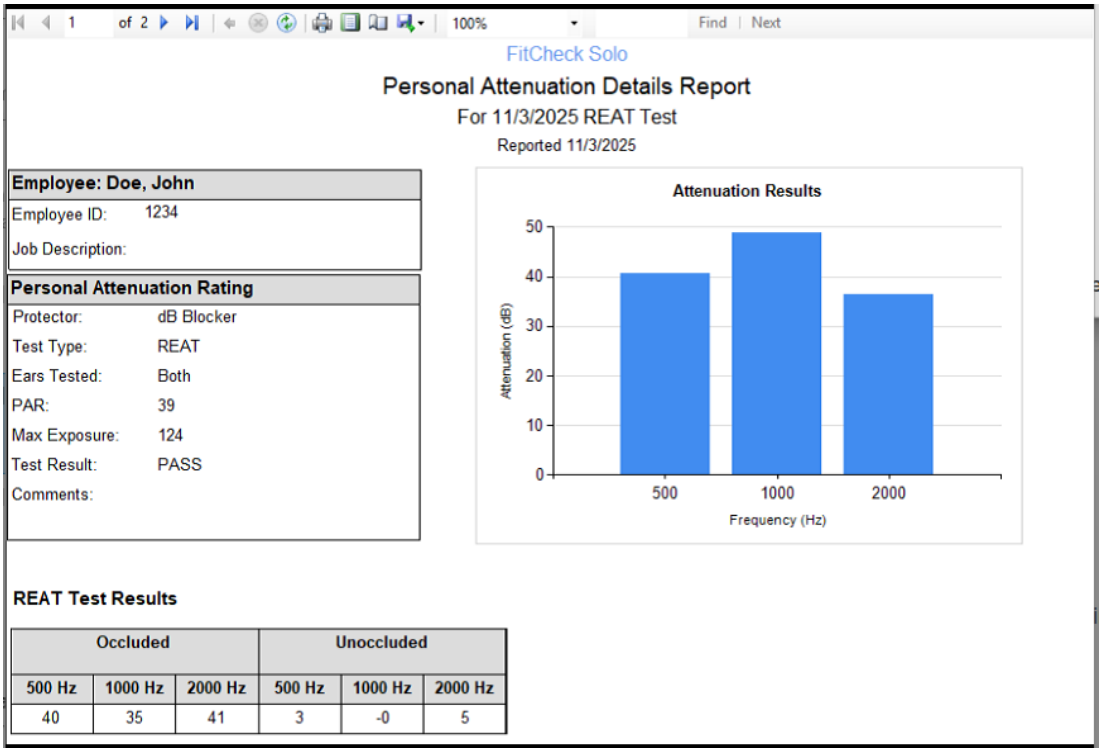
FtiCheck Solo is based on National Institute for Occupational Safety and Health (NIOSH) HPD WellFit program. FitCheck Solo was customized by Michael & Associates for industrial application.

Win 10/11 compatible.

Can be used to test any type of insert hearing protector. Convenient file storage options and reporting capabilities.



Examples of FitCheck Solo Reports



1 of 2 100% Find | Next

FitCheck Solo

Personal Attenuation Details Report

For 11/3/2025 REAT Test

Reported 11/3/2025

Employee: Doe, John

Employee ID: 1234

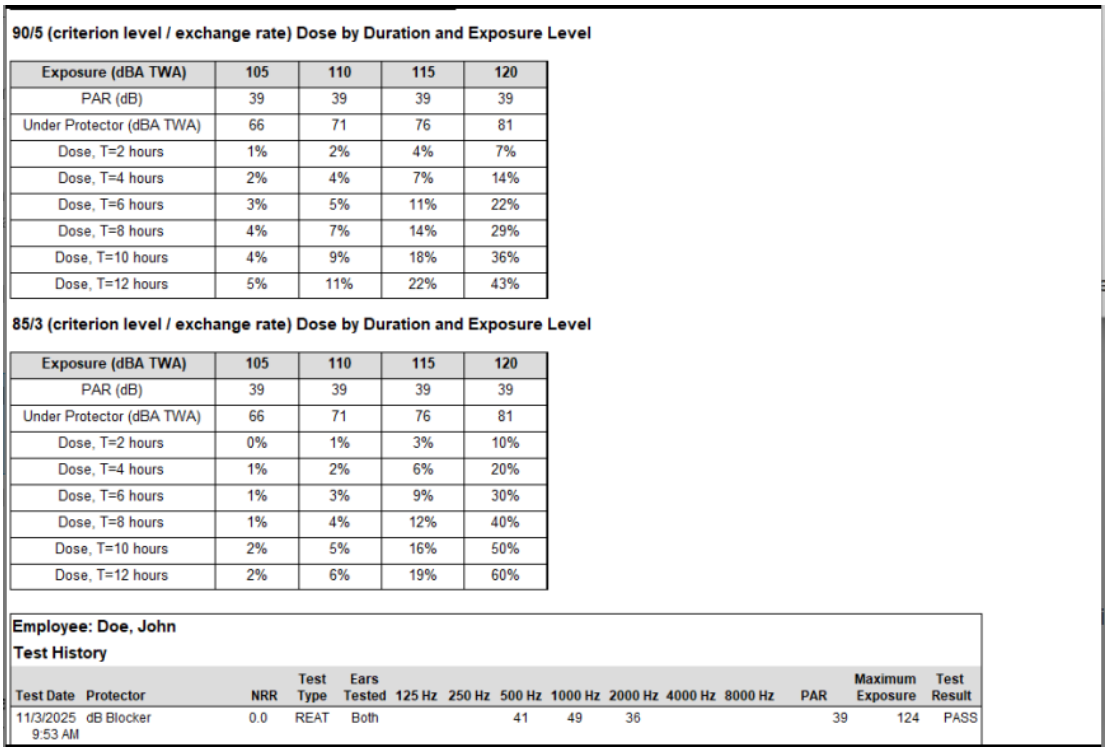
Job Description:

Personal Attenuation Rating

Protector:	dB Blocker
Test Type:	REAT
Ears Tested:	Both
PAR:	39
Max Exposure:	124
Test Result:	PASS
Comments:	

REAT Test Results

Occluded			Unoccluded		
500 Hz	1000 Hz	2000 Hz	500 Hz	1000 Hz	2000 Hz
40	35	41	3	-0	5



90/5 (criterion level / exchange rate) Dose by Duration and Exposure Level

Exposure (dBA TWA)	105	110	115	120
PAR (dB)	39	39	39	39
Under Protector (dBA TWA)	66	71	76	81
Dose, T=2 hours	1%	2%	4%	7%
Dose, T=4 hours	2%	4%	7%	14%
Dose, T=6 hours	3%	5%	11%	22%
Dose, T=8 hours	4%	7%	14%	29%
Dose, T=10 hours	4%	9%	18%	36%
Dose, T=12 hours	5%	11%	22%	43%

85/3 (criterion level / exchange rate) Dose by Duration and Exposure Level

Exposure (dBA TWA)	105	110	115	120
PAR (dB)	39	39	39	39
Under Protector (dBA TWA)	66	71	76	81
Dose, T=2 hours	0%	1%	3%	10%
Dose, T=4 hours	1%	2%	6%	20%
Dose, T=6 hours	1%	3%	9%	30%
Dose, T=8 hours	1%	4%	12%	40%
Dose, T=10 hours	2%	5%	16%	50%
Dose, T=12 hours	2%	6%	19%	60%

Employee: Doe, John

Test History

Test Date	Protector	NRR	Test Type	Ears Tested	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	PAR	Maximum Exposure	Test Result
11/3/2025 9:53 AM	dB Blocker	0.0	REAT	Both			41	49	36			39	124	PASS

FitCheck Solo Earmuff / Helmet attenuation testing

The FitCheck Solo earmuff / helmet Field-Microphone in Real Ear (F-MIRE) measurement system is now available. A Bluetooth external speaker is used to provide test stimulus. Microphones mounted on earclips are used for the measurements. Very thin wires run under the earmuff / helmet ear cushions and do not affect attenuation measurements. Test duration is short – less than one minute. This system also meets the requirements set forth in ANSI S12.71-2018.

F-MIRE testing

F-MIRE microphones

FitCheck Solo

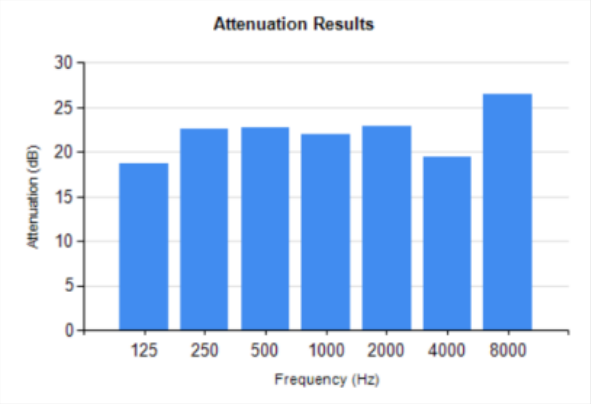
Personal Attenuation Details Report

For 9/23/2025 F-MIRE Test

Reported 11/10/2025

Employee: Doe, John	
Employee ID:	
Job Description:	

Personal Attenuation Rating	
Protector:	
Test Type:	F-MIRE
Ears Tested:	Both
PAR:	22
Max Exposure:	107
Test Result:	PASS
Comments:	



85/3 (criterion level / exchange rate) Dose by Duration and Exposure Level

Exposure (dBA TWA)	105	110	115	120
PAR (dB)	22	22	22	22
Under Protector (dBA TWA)	83	88	93	98
Dose, T=2 hours	16%	50%	*159%*	*504%*
Dose, T=4 hours	31%	100%	*317%*	*1,008%*
Dose, T=6 hours	47%	*150%*	*476%*	*1,512%*
Dose, T=8 hours	63%	*200%*	*635%*	*2,016%*
Dose, T=10 hours	79%	*250%*	*794%*	*2,520%*
Dose, T=12 hours	94%	*300%*	*952%*	*3,024%*

Employee: Doe, John

Test History

Test Date	Protector	NRR	Test Type	Ears Tested	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	PAR	Maximum Exposure	Test Result
9/23/2025 10:23 AM		0.0	F-MIRE	Both	19	23	24	23	23	23	30	22	107	PASS
9/23/2025 9:18 AM		0.0	F-MIRE	Both	17	21	23	23	26	23	31	23	108	PASS

F-MIRE reports

Contact Toni Sutton at Haven Technologies for further information.
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