



Protecting the hearing of your workforce is essential



Introducing Qeos® Customised Hearing Protection

Adaptable hearing protection with uniform or classic attenuation
Digital 3D manufacturing, for utmost precision and comfort
Cost effective, guaranteed for 6 years

Qeos® from Cotral Lab: comfortable Customised Hearing Protection that is adaptable to your business needs.

With Qeos® Customised Hearing Protection, you can choose between the XT filter system, also known as the “classic” filter with High Frequency Attenuation (HFA), and the OS “uniform response” filter for improved communication.

Manufactured using advanced 3D modelling, Qeos® Customised Hearing Protection offers the latest technology and proven high performance.

7 Benefits You

- **Comfort:** Qeos® Customised Hearing Protectors are custom-made from a mould of each individual's ears and 3D-manufactured to be worn 100% of the time in any work environment.
- **Communication:** our selection of filters allows for optimal communication in your noisy work environment.
- **Convenience:** easy to insert and remove, simple to carry and store, interchangeable handles and cords, storage case, compatible with other PPE.
- **Compliance:** compliant with AS/NZS 1270:2002, as well as ANSI (USA) and CE certified.
- **Cleaning:** easy to clean and maintain, using our environmentally friendly hygiene kits.
- **“Effi-6” guarantee:** your hearing protection devices are guaranteed for 6 years, and you are guaranteed of their efficiency! For 6 years, maintenance and modifications are free.
- **Savings:** No more need to replace protection devices as a precaution! With the “Effi-6” guarantee, you make considerable savings!

Qeos® Original Sound



Uniform response filter

Handle fitted with cord

- > Biocompatible materials
- > Fitted with detectable bead
- > Handle with or without cord

Qeos® XT



Handle fitted without cord

“Classic” filter
(enhanced attenuation for high frequencies)

- > **High visibility:** vibrant blue
- > **Ultra precise** digital manufacturing, 100 micron accuracy, versus 500 when handcrafted (one hair's width compared to 5 when handmade)



To find the nearest Cotral authorised dealer, please go to our website www.cotral.com

AS/NZS

Qeos[®], adaptable customised protection



Uniform response filters are now also available for the food processing industry!



SATISFACTION GUARANTEE

We provide exceptional service and premium products. That's why we happily offer you a 6-year comfort guarantee, a 6-year product warranty and 6-year performance warranty !

COMFORT

With Qeos[®], Cotral Lab offers a custom-made hearing protection solution that is manufactured in 3D using impressions taken from your ears.

Thanks to our highly accurate manufacturing process within 100 microns of precision (one hair's width), your Qeos[®] Customised Hearing Protectors (CHPs) are perfectly tailored to your individual ear.

Supplied with ergonomic handles that you can use with or without a cord, you can wear them all day in complete comfort.

PROVEN PERFORMANCE

Cotral Lab has been Europe's leading provider of Customised Hearing Protection since 1992. More than 1,3 million employees worldwide wear Customised Hearing Protectors from Cotral Lab. Qeos[®] CHPs are the latest generation of hearing protection devices from Cotral Lab.

Look beyond precautionary measures, demand efficient protection! With Qeos[®] and its Effi-6 guarantee, your employees will be perfectly protected if they wear their protection devices 100% of the time when exposed to noise. As proof of this, all of the protection devices considered to be defective by a CAPA test will be replaced for free over a period of 6 years.



COMMUNICATION FOR EVERYONE!

Qeos[®] provides a choice of two filter systems:

OS filter with uniform response attenuation, ideal for people who have to communicate in a noisy environment or people already suffering from hearing loss, or:

XT filter with classic attenuation at enhanced levels for high frequencies and sound levels.

If the need arises, the Qeos[®] system enables you to exchange one type of filter for the other, without having to purchase new Customised Hearing Protectors.

COST EFFECTIVE

Let us show you just how cost-effective our Customised Hearing Protectors are for your organisation - on average twice as economical as using disposable earplugs at a rate of 2 pairs per day.

Check the **performance** of your protectors with **CAPA[®]**



CAPA

CAPA[®] is developed by HearingProTech[®] and is the **only universal fitting test that is evaluated and approved by the INRS (French National Institute of Scientific Research)**. It is designed to meet international standards, particularly with regards to the maximum levels of exposure when wearing personal hearing protection. It measures the **actual attenuation of inner-ear hearing protection**.

Want to know more about CAPA[®]?

Find more information on CAPA[®] at: en.capa.cotral.com

**CAPA testing is a chargeable service*



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AS/NZS



Qeos® Original Sound (OS)

Customised protection with uniform response

3 interchangeable filters (Class 2 to 4)

Protection with proven performance

		Frequencies in Hz						
		125	250	500	1000	2000	4000	8000
OS 16	Average attenuation (dB)	20,5	16,3	16,7	15,2	19,8	19,3	23,5
	Standard deviation (dB)	5,2	4,2	3,8	2,9	4,3	4,0	4,3
	APV (dB)	15,3	12,1	12,9	12,3	15,4	15,3	19,3
		Class 2*					SLC ₈₀ (dB)	15
OS 23	Average attenuation (dB)	26,5	23,0	25,2	24,4	23,2	22,6	21,3
	Standard deviation (dB)	5,7	4,9	4,6	3,1	3,9	3,8	4,6
	APV (dB)	20,8	18	20,6	21,4	19,3	18,8	16,7
		Class 3*					SLC ₈₀ (dB)	20
OS 26	Average attenuation (dB)	30,5	25,4	28,8	29,5	31,9	23,4	35,3
	Standard deviation (dB)	5,1	3,5	4,2	3,0	4,3	4,0	5,5
	APV (dB)	25,4	22,0	24,6	26,6	27,7	19,4	29,9
		Class 4*					SLC ₈₀ (dB)	24

* HEARING PROTECTOR CLASSIFICATION

Hearing protector class X tested to AS/NZS 1270. When selected, used and maintained as specified in AS/NZS 1269, this protector may be used in noise up to Y dB(A) assuming an 85 dB(A) criterion. A lower criterion may require a higher protector class :

Class (X)	SLC ₈₀ range	L _{Aeq,8h} dB(A) (Y)
1	10 to 13	Less than 90
2	14 to 17	90 to less than 95
3	18 to 21	95 to less than 100
4	22 to 25	100 to less than 105
5	26 or greater	105 to less than 110

Why Qeos®?

Qeos® OS is Cotral Lab's solution to the requirements of **users, experts and noise professionals** who seek to raise protection usage rates to **100%** of time exposed to noise, while enabling communication.

ADAPTABLE

Choose modifiable protection that can be adapted to your requirements and your budget:

- > **choice of handles**, with or without a cord
- > **ability to increase or decrease** the attenuation level by exchanging the filters

Why choose the Filter Box?

The Qeos® system allows you to fit noise exposed workers with OS filters at the time of purchase or at a later date without having to purchase new protectors.

Do you look after hearing safety for a large number of employees?

With a Filter Box, you can take care of filter changes **quickly** and **with full autonomy**.

Your staff changed position and you need to modify the acoustic attenuation of your protectors?

Send us an email and we will advise if a change of filter is required and which filter to use.



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AS/NZS



*** HFA: High Frequency Attenuation**
 These filters have an enhanced level of attenuation for high frequencies.



Qeos® XT

Customised protection with HFA* (classic) attenuation
 4 interchangeable filters (Class 4 to 5)
 Protection with proven performance

		Frequencies in Hz						
		125	250	500	1000	2000	4000	8000
XT 26	Average attenuation (dB)	15,5	14,7	19,3	25,4	35,1	37,8	38,2
	Standard deviation (dB)	5,6	3,5	4,4	5,5	4,9	5,5	5,9
	APV (dB)	9,9	11,1	14,9	19,9	30,2	32,3	32,4
		Class 4*					SLC ₈₀ (dB)	22
XT 24	Average attenuation (dB)	14,0	13,8	19,2	26,4	34,5	38,2	39,3
	Standard deviation (dB)	5,0	3,6	3,9	3,7	4,5	4,7	6,5
	APV (dB)	9,0	10,2	15,3	22,7	30,0	33,5	32,8
		Class 4*					SLC ₈₀ (dB)	23
XT 28	Average attenuation (dB)	18,4	18,2	22,4	27,8	35,8	37,2	38,4
	Standard deviation (dB)	5,6	5,1	5,5	5,6	4,7	5,9	6,8
	APV (dB)	12,8	13,1	16,9	22,2	31,1	31,4	31,6
		Class 4*					SLC ₈₀ (dB)	24
XT 33	Average attenuation (dB)	24,5	21,9	25,2	29,4	37,0	39,2	39,0
	Standard deviation (dB)	4,5	3,9	5,1	4,5	4,5	4,9	6,1
	APV (dB)	20,0	17,9	20,1	24,8	32,5	34,3	32,9
		Class 5*					SLC ₈₀ (dB)	27

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Class (X)	SLC ₈₀ range	L _{Aeq,8h} dB(A) (Y)
1	10 to 13	Less than 90
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3	18 to 21	95 to less than 100
4	22 to 25	100 to less than 105
5	26 or greater	105 to less than 110

Filter Box Packages



Contact us without delay!

You can find further information about the Filter Boxes at en.filter-box.cotral.com

Filter Box OS	Filter Box XT
<ul style="list-style-type: none"> ▶ 1 fitting tool ▶ 3 OS filter models (OS16 - OS23 - OS26) ▶ 3 pairs of filters per model (a total of 9 pairs) ▶ 1 user guide 	<ul style="list-style-type: none"> ▶ 1 fitting tool ▶ 4 XT filter models (XT24 - XT26 - XT28 - XT33) ▶ 6 pairs of filters per model (a total of 24 pairs) ▶ 1 user guide



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