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Visual measuring device for rifle shooters with or without visual impairment

Description

Visual measuring device for rifle shooters with or without visual impairment. The present invention relates to a device for evaluating the visual conditions of a rifle shooter in real shooting conditions, even at the shooting range itself. The device has a front face, which includes a central opening (1) with brackets (3) to hold lenses and / or color filters, a scale in degrees (2) from 0 to 180°, a level (5) and two occluders (4) located on both sides of the central opening; and a rear face that includes elements of attachment of the device to the diopter of the carbine. The invention also relates to a system incorporating test lenses and color filters.

How does it work?

The visual measuring device for rifle shooters with or without visual impairment is useful for measuring the ametropia and color defect of any human being in the dominant eye or with which it shoots at the target. To verify this, 2 shooters of the Spanish Olympic shooting team were selected in several sessions of measurement and test of runs, in the shooting gallery of the High-Performance Center where they train and where the optometrist optician moved with the device described in example 1 and with a set of test lenses and colored filters.

The comfort in the change of lenses according to the perception in the improvement of visual acuity and sharpness of the tunnel of the weapon, which serves to aim at the target, and the combination of filters of different wavelengths to avoid the loss of contrast of the center of the target, provided an important speed in the shooters. The device described in example 1 allowed, in live, to ensure the improvement and the possibility of continuing training at the highest possible level, using the visual measurement device and leaving the new compensation conditions (combination of sphere, cylinder and filters) the necessary time in the weapon without having to wait for the arrival of a definitive lens prescribed in a traditional way.

Advantages

Measurement of refraction and filters in the shooter's own carbine. Get the lens with all the characteristics of refraction in situ on the carbine where the final lens will go

Where has it been developed?

In the Faculty of Optics and Optometry of the Complutense University of Madrid.

And moreover

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