Tungsten Alloy Radiation Housing

What Is Tungsten Alloy Housing Shielding?

With rapid development of medical science, more and more radiation instruments are used in our lives.
Medical instruments and nuclear power stations have become widespread and are now affecting all our lives. It is essential that people paid more attention to radiation and even more important for the institutions to protect public from the radiation exposure and to make sure to protect every radiation source of X-ray radiation, gamma radiation (energetic electromagnetic radiation), radiation of alpha particles (helium atoms) beta particles (electrons) and cosmic radiation, etc.

In order to protect patients and personnel from harmful effects of ionizing radiation, such as breast cancer, skin cancer, etc an excellent radiation-absorbing medium is badly needed. Tungsten alloy housing shielding is the material to be used for radiation shielding.

Tungsten alloy radiation shieldingagainst X-rays and gamma radiation. The very high density of tungsten alloy housing shielding (more than 60% denser than lead) allows a reduction in the physical size of shielding components, without compromising their rigidity or the effectiveness of the tungsten alloy radiation shielding characteristics.

Why Use Tungsten Alloy Radiation Shielding?

Compared to traditional radiation shielding materials such as lead and boron carbide, tungsten alloy radiation shielding provide excellent density with small capacity. At the same weights tungsten alloy radiation shielding with high density alloy can provide the same energy absorption as lead using 1/3 less material. When the weight is certain, more density, and the thickness would be thinner. Tungsten alloy housing shielding could be made with thinner thickness but high absorption of radiation in high density. That is why tungsten alloy material is suitable for tungsten alloy radiation shielding and tungsten alloy housing shielding. During design of shielding, tungsten alloy radiation shielding is calculated according to requirements of shield to abate the multiple shielding materials' thickness.

Formula: K = e0.693 d / 1/2
K: Shield weakened multiple
1/2: The shielding material of the half-value layer values
d: Shielding thickness, with the half-value layer thickness of their units, you need to half-value layer thickness of the quality of translation into the thickness of the material, divided by the density of the material can be obtained.

Followings Are Pictures of Tungsten Alloy Radiation Shieldings

Tungsten Alloy Radiation Shielding-01

Tungsten Alloy Radiation Shielding-02

Our clients across the world are taking advantage of tungsten alloy housing shielding properties. If you need to protect yourself, your patients or your equipment from the harmful effects of excess radiation, you have come to the right place! Our products are available as finished machined parts or as short rod, round bar, and rectangular blocks. With almost everyone using the mobile phone right now, tungsten alloy radiation shielding from mobile phones becomes a notable problem. Electromagnetic radiation is present in mobiles because they use radio frequency (RF) waves to make and receive calls. The doses are considered very small, as the emissions are low power (short range). Nevertheless, there are ways in which you can reduce exposure to these waves. Experts are currently developing ways to avoid mobile radiation and tungsten alloy radiation shielding is very promising material in this field. Tungsten alloy housing shielding is designed for managing large quantities of high-energy radio nuclides. A convenient lever allows quick adjustment of window to optimal angle for any user and procedures. A special plate with a hex-shaped recess is mounted on the base to facilitate one-handed loading and unloading of dose pigs incorporating hex-shaped bott