Seitz + Kerler GmbH + Co. KG

SEILO radiation protection lead glass

SEILO radiation protection lead glass offers a high-quality and transparent shield against X-rays in medicine, research and technology. The high lead content ensures optimum protection against ionizing radiation that occurs when operating apparatus having a tube voltage of 100 – 200 kilovolt (kV).

SEILO radiation protection lead glass is a heavy-flint glass whose protective effect is based on a great heavy metal oxide content of 70 percent by weight.
The lead oxide content alone amounts to 65 %. Thus, a density of 5,05 g/cm^3 can be achieved, which allows relatively low glass thicknesses.

SEILO radiation protection lead glass is marked with undeletable safety information or other permitted data and meets the requirements of the following national standards and statutory safety regulations:

DIN 6841 *IEC 61331-2*

Setpoint thicknesses in mm	Minimum lead equivalent for RD 50 for tube voltages in kV			Approximate Dimensions in mm	Approximate weight (kg) per 1000 cm^2
	80 kV	110 kV	200 kV		
5,0 - 6,5	1,6	1,6	1,4	1.700 x 1.000	33
7,0 - 8,5	2,2	2,2	2,0	2.100 x 1.050	43
8,5 - 10,0	2,7	2,7	2,5	2.100 x 1.050	51
10,0 - 11,5	3,2	3,2	2,9	2.000 x 1.000	59
11,5 - 13,0	3,6	3,7	3,3	2.000 x 1.000	66
16,0 - 18,0	5,1	5,1	4,7	1.500 x 800	91
20,0 - 22,0	6,3	6,4	5,9	1.500 x 800	112

The protective effect of a radiation protection glass against X-rays is specified by the lead equivalent. **SEILO radiation protection lead glass** features a lead equivalent of 32 % of the glass thickness at a tube voltage of 110 kV.
A **SEILO radiation protection lead glass** of a thickness of 10 mm and a lead equivalent of 32 % provides the protective effect of a 3.2 mm thick solid lead wall.
The protection guaranteed by **SEILO radiation protection lead glass** is specified by the lead equivalent in mm. The lead equivalent, which differs according to the different thicknesses of **SEILO radiation protection lead glass**, varies with the tube voltage (see table).