

Tungram frosted lightbulb with switch and packaging

AUTHOR

TIME AND PLACE OF CREATION

Time:

1930 - 1940

Place:

, Hungary

TECHNICAL DATA

Dimensions:

height: 123 mm

OTHER

MIM 1890/IV/101

KEYWORDS

oświetlenie, elektrotechnika

DESCRIPTION

The lightbulb has replaced candles, kerosene lamps and gas lamps, which were once the main sources of light in households, industry, and public places. It also contributed to the popularisation of electricity. Every lightbulb has a base connected to a source of electricity, a glass bulb, which sometimes, as is the case in the presented example, also fulfils the function of diffuser of light, and a filament that glows as electricity passes through it. In some cases, lightbulbs have their own switch incorporated. A tungsten filament was used in a lightbulb for the first time by Aleksander Nikolayevich Lodygin in 1890. The choice of tungsten as a material was determined by the most important physical characteristic of this element, i.e., its high melting point (at 3422 °C). The durability of the lightbulb is closely related to its light output, which in turn is the result of the working temperature the filament reaches as it emits light. The greater the light output of the lightbulb, the higher the temperature of its filament and the shorter its life. The item presented here was made



at the Hungarian Tungsram factory, which made light bulbs and electron lamps. The company was established by the Hungarian entrepreneur Béla Egger in 1896. Its name is an interesting combination of fragments of the English and German name of tungsten, i.e.: tungsten, wolfram. In the period of the Second Polish Republic, Zjednoczone Fabryki Żarówek Tungsram, a branch of the Hungarian factory, operated in Poland. Interesting fact: A dark or silvery tint that sometimes arises on the inside surface of old type lightbulbs that have been used for a long time is a deposit of tungsten released from the filament as it shines. Lightbulbs with a burnt filament often have their bulbs covered with enough tungsten to make them opaque. References: The History of Tungsram 1896-1945, Budapest 1990, book available at: <http://mek.oszk.hu/08800/08856/08856.pdf> (Accessed: 9.05.2021).