

Neuhöfer & Sohn theodolite

AUTHOR

TECHNICAL DATA

Dimensions:

height: 260 mm, width: 210 mm, length: 145 mm

OTHER

MIM 193/XI/22

KEYWORDS

geodezja, kartografia, budownictwo, drogownictwo, urządzenia pomiarowe

DESCRIPTION

A theodolite is the basic measurement instrument used in land surveying and construction. It enables measuring distances between points in the field, based on angles measured and trigonometric calculations performed. Devices used for measuring angles in the field had been known for centuries, but not very convenient in practical use. The design of the theodolite was perfected in the 16th century by the English mathematician, Leonard Digges, who enhanced the device with the possibility of rotation on two mutually perpendicular axes, which made measurements less laborious and faster. A modern theodolite, like the one presented here, consists of a base plate, limb (circle plate) and the alidade, i.e. the turning part, which includes the scope, among other parts. The theodolite presented here was made about 120 years ago in the Viennese establishment of Joseph and Carl Neuhöfer, specialising in production of different types of optical surveying instruments for clients in different countries. The company's products have become widely recognised on the international arena, as they were awarded the Gold Medal on the World Exhibition in Paris in 1900, among other distinctions. Nowadays, apart from traditional optical theodolites, electronic theodolites are used, which further simplify the operation of the device. References: C. Neuhöfer, Neuhöfer & Sohn of Vienna, translated by J. B. te Pas, "Bulletin of the Scientific Instrument Society" 1997, issue 52 (1997), pp. 31-32, <https://cdn.website-start.de/proxy/apps/ilai8i/uploads/gleichzwei/instances/83BA095F-F52A-41E5-A000-752EC15ABDB0/wcinstances/epaper/f390f418-fd31-482d-b173-cde29019c6ce/pdf/Neuh%C3%B6fer-&-Sohn.pdf>, accessed: 01.06.2021.



