

ZEISS

West Germany

Th 2 **Second-reading Theodolite**

**Th 2 –
For high-precision
angle measurements**

High Precision

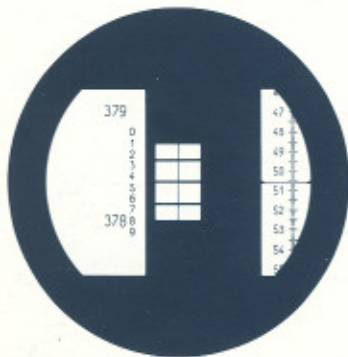
Measurement with an accuracy of seconds for traversing, triangulations up to second order, establishing astronomical positions and optical tooling applications.

High Reliability

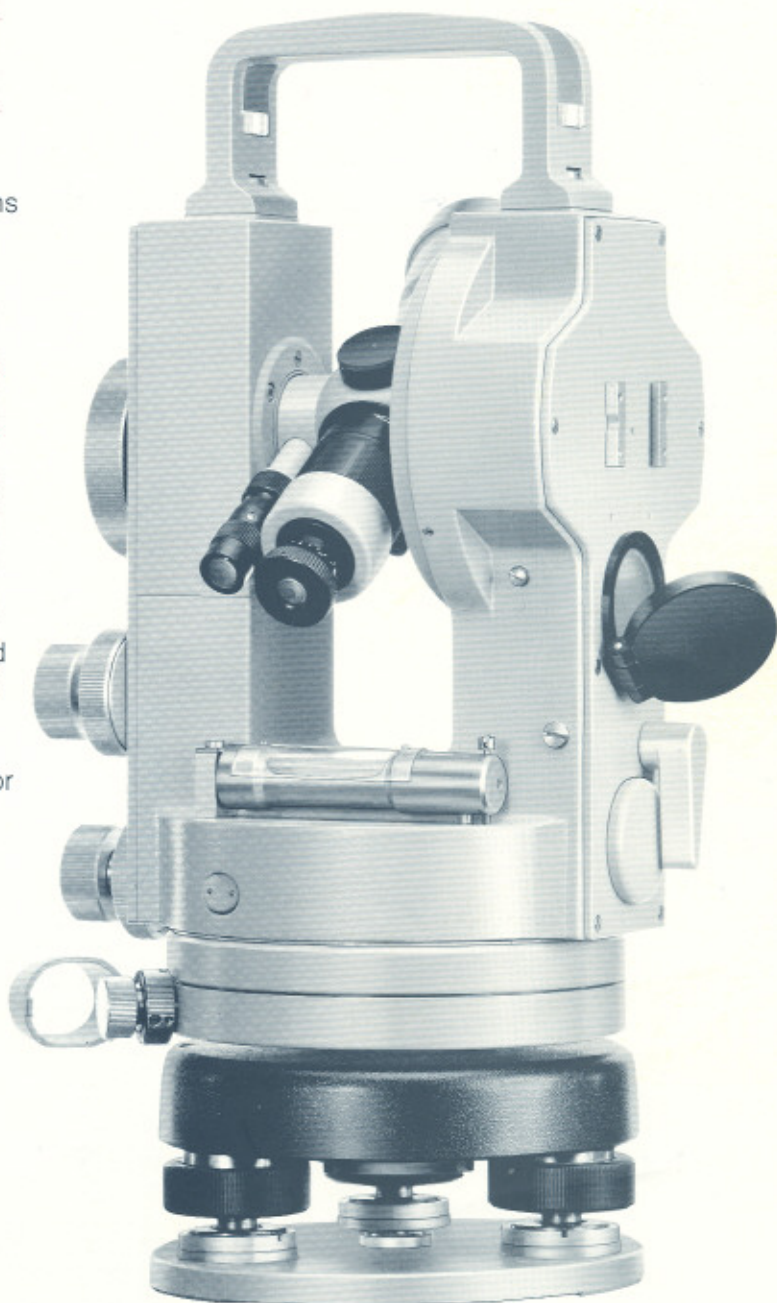
Automatic vertical circle indexing for precise measurement of zenith angles.
Protection against reading errors by extensive digitization of circle readings.

Easy Operation

Coaxial arrangement of clamps and tangent screws. Reading images of horizontal and vertical circles in different colors.
Combined coarse – fine focusing for full utilization of high image quality.



Microscope reading:
378.8506 grads
Approx. 1/3 actual size



Technical Data

Telescope type	anallactic, apochromatic with flat-field eyepiece, erect image
Magnification	30×
Aperture	40 mm
Length of telescope	155 mm
Field of view	24 m at 1000 m
Shortest focusing distance	1.6 m
Stadia constant	100.0
Addition constant negligible beyond	2.5 m
Diameter of Hz-circle	100 mm
Diameter of V-circle	85 mm
Direct reading of micrometer to	0.1 mgrad or 1"
Magnification of Hz-microscope	36×
Magnification of V-microscope	42×
Sensitivity of circular level	10' per 2 mm
Sensitivity of plate level	20" per 2 mm
Working range of vertical index compensator	±2'
Repetition accuracy	±0.2"
Available zenith angles without accessories	45° to 140°
Constrained centering	Zeiss center spigot (DIN 18719)
Focusing range of optical plummet	0.55 m to ∞
Magnification of optical plummet	2×
Weight of instrument	5.2 kg
Weight of case	4.8 kg
Nominal accuracy	±1" or ±0.25 mgrad

Ordering Data

Cat. No.		Weight kg
7024 13	Th 2 Second-reading theodolite, in case with 360° division, including tribach	9.5
7024 12	with 400 grad division, including tribach	9.5
7072 23	S23 tripod with protective cap	7.0

Subject to modifications in the interest of technical progress.

<http://swisstek.com>



Urs A. Reinhardt

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Surveying Instruments

Optical Tooling Theodolites

Repaired-Serviced

Bought-Sold-Traded

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