

TESA-HITE 400 / 700

Precision in motion

The two TESA-HITE 400 and 700 height gauges are fitted with the patented, opto-electronic TESA's measuring system with incremental glass scale. Due to their robust and reliable construction, they are ideally suited for dimensional inspection on the shop floor.

Full autonomy is ensured through battery power. Each model allows height or step dimensions, diameters, centre-to-centre distances, groove width and the like to be accurately measured. Excellent price/performance ratio.

- Wide application range, two sizes available with measuring span of 415 mm / 16 in or 715 mm / 28 in, respectively.
- Integrated air-bearing for easy displacement across the granite plate.
- Electronics totally protected against oil and water splashing, dust particles (IP65).
- Control panel with numerical display to 0,0001 / 0,001 / 0,01 mm or 0.00001 / 0.0001 / 0.001 in.
- Dynamic probing of the workpiece with a constant measuring force.
- Easiness, high reliability when checking bores or shafts using TESA's unique device for automatic detection of the culmination point – patented.
- Acoustic signal to acknowledge value capture, also conveniently programmable.
- Ability to measure any deviation in parallelism.
- Possible use of a digital sensor for determining perpendicularity errors with stated angle of the linear regression line.
- Patented TESA's opto-electronic system. Long-lasting stability of the glass scale for unbroken high accuracy.
- Large LC display with symbols for the measuring functions.
- Zero-setting anywhere within the measuring range.
- PRESET function for entering any given value.
- Metric/inch conversion.
- RS 232 data output.
- SCS calibration certificate provided with each height gauge.



Factory standard



83 x 49 mm LC display.



7-decade plus minus sign. Also with graphical symbols for all active functions.



0,0001 / 0,001 / 0,01 mm or 0.00001 / 0.0001 / 0.001 in



12 mm



Metric/Inch conversion



Air-cushion for easy displacement



over the surface plate. Measuring span, application range and precision: see table on page N-8.



Nickel plated gauge base (chemical coating) with bottom face including 3 resting points, finely lapped.



Frontal, model 400 < 9 µm, model 700 < 13 µm



Incremental glass scale, opto-electronic



(12 ± 1,5) x 10⁻⁶ K⁻¹



Probing head mounted on a ball-bearing, hand wheel for head displacement, fine setting. Head drive carriage can be locked.



500 mm/s 20 in/s



1,5 ± 0,5 N (at switch point)



RS 232



Rechargeable batteries, 6V



~ 60 h



10°C to 40°C



-10°C to 60°C



80%, non-condensing



IP40, electronics to IP65 (IEC 60529)

TESA-HITE 400 / 700



00730043 TESA-HITE 400 height gauge
Measuring span 415 mm / 16 in
Application range 0 ÷ 570 mm / 0 ÷ 22 in

00730044 TESA-HITE 700 height gauge
Measuring span 715 mm / 28 in
Application range 0 ÷ 870 mm / 0 ÷ 34 in

Each height gauge is supplied with the following standard accessories:

00760143	1	Standard probe insert holder
00760227	1	Standard probe insert with shank and 5 mm dia. ball tip in tungsten carbide
00760219	1	Master piece for establishing the probe constant, nominal dimension to 6,350 mm / 0.2500 in
00760226	1	Electric pump for creating the air-cushion beneath the gauge base, already mounted
00760157	1	Rechargeable battery, 6 V
04761054	1	Mains adapter, 100 ÷ 240 Vac/50 ÷ 60 Hz
04761055	1	Cable EU for mains adapter
04761056	1	Cable US for mains adapter



See table opposite



EN 61326, Class B
(with disconnected charger)



Shipping packaging



Identification number












Declaration of conformity

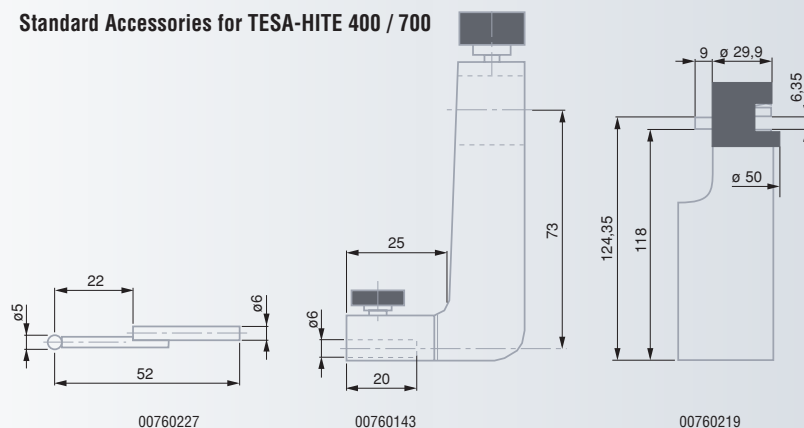


SCS calibration certificate

Technical data

		TESA-HITE 400	TESA-HITE 700
		415 16	715 28
	mm in		
 With standard accessory	mm in	0 ÷ 570 0 ÷ 22	0 ÷ 870 0 ÷ 34
 With probe insert holder No. 00760057	mm in	0 ÷ 625 0 ÷ 24	0 ÷ 925 0 ÷ 36
 With probe insert holder No. S07001622	mm in	0 ÷ 795 0 ÷ 31	0 ÷ 1095 0 ÷ 43
 With standard accessory	µm in	(2,5+4•L) µm (L in m) (0.0001+0.000004•L) in (L in in)	
 With standard accessory		on flat surfaces: 2δ = <2 µm / <0.0001 in into bores: 2δ = <3 µm / <0.00015 in	
 Frontal, mechanical	µm in	9 0.00035	13 0.0005
	kg	27	32

Standard Accessories for TESA-HITE 400 / 700

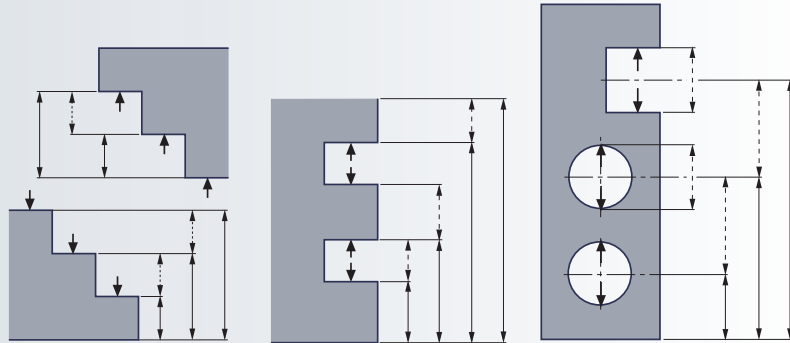


Standard Accessories for TESA-HITE 400 / 700

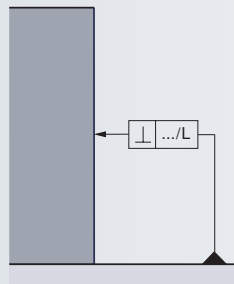


04760070	RS port. Used to connect a digital sensor for perpendicularity measurement
04761052	RS 232 connecting cable for PC and TESA PRINTER SPC
04761063	Connecting cable Sub-D 9pin and USB for PC
Additional accessories: see page N-27	

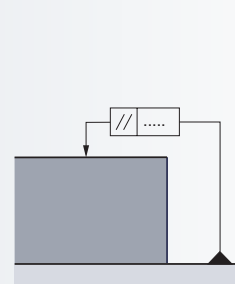
One-Dimensional Measurement



Perpendicularity Measurement



Parallelism Measurement



Configuration for Perpendicularity Measurement

