

## ADVANCED METROLOGY PRODUCTS 2012

### TESA-HITE

#### Electronic Height Gages

Over 25 years of technology and innovation have produced the TESA-HITE family of height gages, offering exceptional features at an affordable price. The newest addition to the TESA-HITE family, the TESA-HITE Plus m, offers increased accuracy, a built in air cushion, and a new ergonomically designed control panel providing geometric functions for 1D and 2D measurement.

All TESA-HITE height gages offer a generous 400mm and 700mm measuring span and their electronics are completely protected against liquid and dust penetration. Automatic diameter measurements can be taken using TESA's patented system for determining the culmination point and TESA-HITE height gages make it easy to capture parallelism errors.

The NEW  
Generation

#### Featuring:

- 16" (400 mm) and 28" (700 mm) measuring range.
- Electronics completely protected against liquids or dust penetration.
- Automatic diameter measurement using TESA's patented system which determines the culmination point.
- Parallelism and perpendicularity measurements.
- TESA opto-electronic measuring system (patented).
- Compatible with TESA MICRO-HITE accessories, including measuring inserts and holder.
- SCS calibration certificate delivered with each instrument.

#### TESA-HITE plus m 400 and 700:

- Built-in air bearing.
- New ergonomically designed control panel, available with built-in printer.
- Easy-to-use, intuitive power control.
- Geometric functions for 1D or 2D measurements.
- Automatic programming and generation of the measurement cycles.
- Statistical data processing.
- Opto-electronic TESA measuring system, patented.
- A variety of accessories compatible with all other height gages made by TESA.
- SCS calibration certificate provided free of charge.
- Plus, of course, the guarantee to get a truly SWISS MADE product!

plus·m



## TESA-HITE Magna 400/700



**IP65 Compliant.**  
**Made to withstand severe workshop conditions.**

- Shop proof technology.
- Long measuring span and rugged design.

**Fully protected against:**

- Water.
- Oils.
- Dust.



## TESA-HITE 400/700



- Completely new design featuring built-in air cushion and fixed panel.
- Parallelism and perpendicularity measurements.



Technical Data	TESA-HITE MAGNA		TESA-HITE		TESA-HITE Plus m			
	400	700	400	700	400	700	400	700
Part No.	00730047	00730059	00730043	00730044	With printer 00730057	Without printer 00730045	With printer 00730058	Without printer 00730046
EDP No.	28260	28261	24675	24676	35362	35359	35363	35360
Measuring span	16 in/415 mm	28 in/715 mm	16 in/415 mm	28 in/715 mm	15.95 in/405 mm		27.75 in/715 mm	
Application range with standard insert holder 00760143	22 in/570 mm	34 in/870 mm	22 in/570 mm	34 in/870 mm	22 in/560 mm		33 in/860 mm	
Application range with insert holder 00760057	0 - 24 in / 0 - 625 mm	0 - 36 in / 0 - 925 mm	0 - 24 in / 0 - 625 mm	0 - 36 in / 0 - 925 mm	0 - 24 in / 0 - 615 mm		0 - 35 in / 0 - 915 mm	
Application range with insert holder S07001622	0-31 in / 0-795 mm	0-43 in / 0-1095 mm	0-31 in / 0-795 mm	0-43 in / 0-1095 mm	0 - 24 in / 0 - 615 mm		0-42 in / 0-1085 mm	
Max. perm. error	< 8 µm / < 0.0003 in		(2.5+4 L) µm (L in m) / (0.0001+0.000004L) in (L in in)		(2.5+3 L) µm (L in m) / (0.0001+0.000003L) in (L in in)			
Repeatability	2s=<3 µm / 2s=<0.00015 in (flat surfaces) 2s=<5 µm / 2s=<0.00020 in (inside bores)		2s=<2 µm / <0.0001 in (flat surfaces) 2s=<3 µm / <0.00015 in (inside bores)		2s=<1 µm / 2s=<0.00005 in (flat surfaces) 2s=<2 µm / 2s=<0.0001 in (inside bores)			
Resolution	.0001 / .0002 / .001 in 0.001 / 0.005 / 0.01 mm		.00001 / .0001 / .001 in .00001 / 0.001 / 0.01 mm		.00001 / .0001 / .001 in .00001 / 0.001 / 0.01 mm			
Max. deviation in perpendicularity (frontal)	—		9 µm / 0.00035 in	13 µm / 0.0005 in	8 µm / 0.00031 in		12 µm / 0.00047 in	
Displacement speed	0.5 m/s		0.5 m/s		0.6 m/s			
Measuring force	1.5 N ±0.5 N (acoustic signal)		1.5 N ±0.5 N (acoustic signal)		1.0 N ±0.5 N (acoustic signal)			
Autonomy	60 h		60 h		60 h			
Weight	14 kg	16 kg	27kg	32kg	27kg		32kg	
Air Cushion	No	No	Yes	Yes	Yes		Yes	
Battery pack	6 V battery, rechargeable		6 V battery, rechargeable		6 V battery, rechargeable			
Digital output	RS-232		RS-232		RS-232			
Degree of Protection	IP55 or IP65 for electronic unit and measuring system		IP40 for control panel / IP65 for electronic unit and measuring system		IP40 for control panel / IP65 for electronic unit and measuring system			
Motorized	No		No		Yes			
Measuring head lock	Yes		Yes		No			
Fine adjustment	Yes		Yes		No			
Storage temperature range	-10°C to 60°C		-10°C to 60°C		-10°C to 60°C			
Operating temperature range	10°C to 40°C		10°C to 40°C		10°C to 40°C			

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